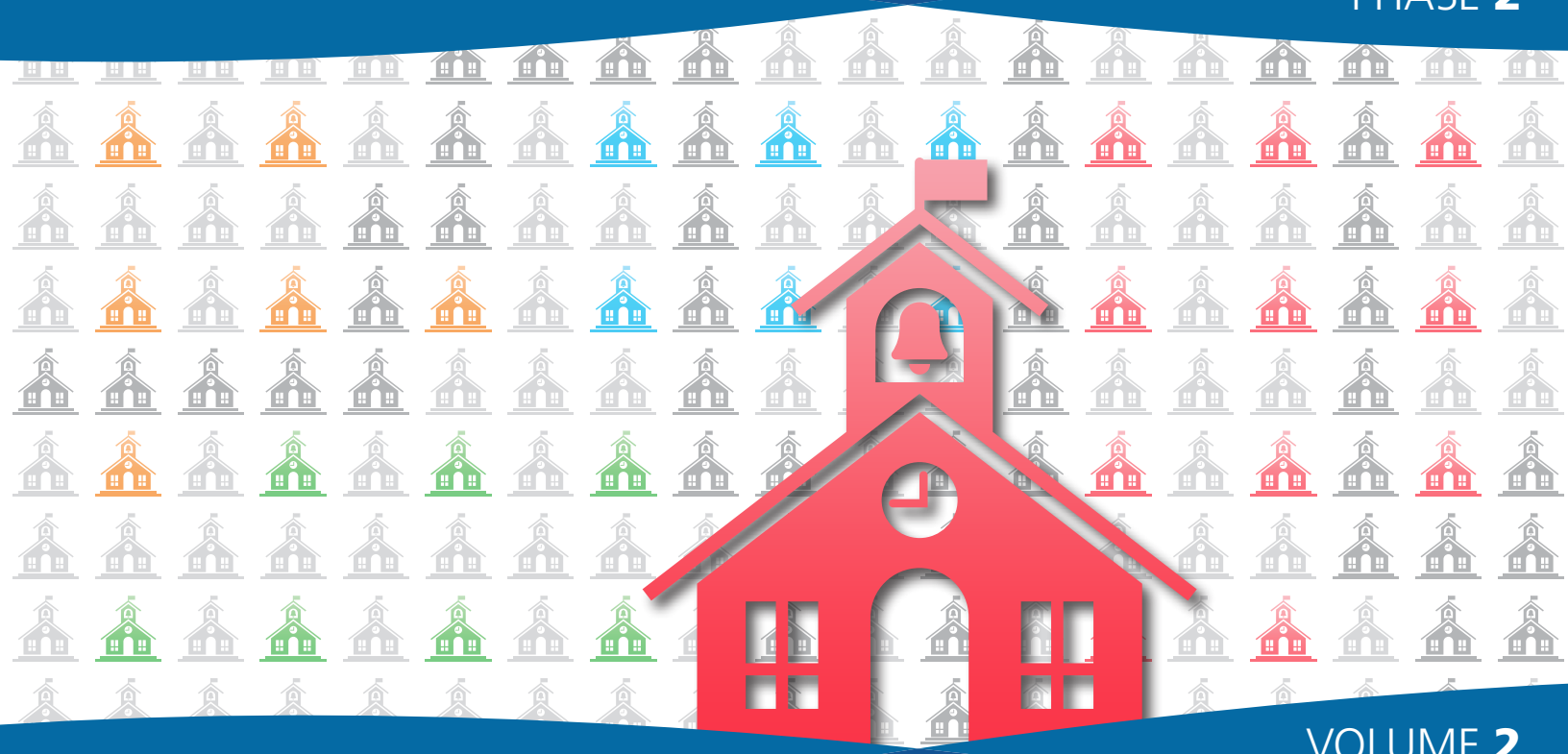
PHASE **2**



VOLUME **2**

Washington State
School Seismic Safety Assessments Project

EPAT & FEMA P-154 RVS FORMS

EPAT Worksheets & Summary Table
RVS Forms & Summary Table

June 2021

PREPARED FOR

PREPARED BY

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WASHINGTON STATE SCHOOL SEISMIC SAFETY ASSESSMENTS PROJECT

EARTHQUAKE PERFORMANCE ASSESSMENT TOOL (EPAT) AND FEMA P-154 RAPID VISUAL SCREENING (RVS) FORMS

VOLUME 2 OF 5

June 2021

Prepared for:

State of Washington
Department of Natural Resources and Office of Superintendent of Public Instruction

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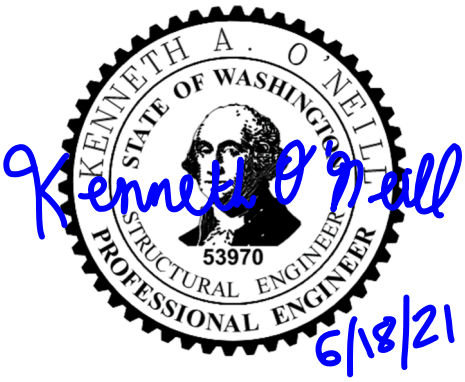
Volume 1: Seismic Assessment Report
Volume 2: EPAT and FEMA P-154 RVS Forms
Volume 3: ASCE 41-17 Screening Reports
Volume 4: Seismic Upgrades Concept Design Reports, 17 School Buildings
Volume 5: Seismic Upgrades Concept Design Reports, 2 Fire Stations



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Earthquake Performance Assessment Tool (EPAT) Summary

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					EPAT Results								
					Building Damage Estimate			Life Safety Risk Level			Most Likely Post-Earthquake Tagging		
Item Number	ICOS Building ID	Building Name	Construction Type	Date of Construction	Existing Building	Life Safety Retrofit Building	Current Code Building	Existing Building	Life Safety Retrofit Building	Current Code Building	Existing Building	Life Safety Retrofit Building	Current Code Building
1	57384	Aberdeen, A.J. West Elementary School, 1952 Building	W2	1952	63%	16%	13%	Very High	Very Low	Very Low	Red	Green	Green
2	57385	Aberdeen, A.J. West Elementary School, Annex Building	W2	1966	63%	16%	13%	Very High	Very Low	Very Low	Red	Green	Green
3	57391	Aberdeen, Central Park Elementary School, Annex Building	RM1	1966	84%	27%	22%	Very High	Low	Low	Red	Yellow	Green / Yellow
4	57392	Aberdeen, Central Park Elementary School, Main Building	W2	1956	67%	18%	15%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
5	57394	Aberdeen, Hopkins Building (Harbor High School), Hopkins Building	C2	1956	85%	24%	19%	Very High	Low	Very Low	Red	Green / Yellow	Green / Yellow
6	57378	Aberdeen, J. M. Weatherwax High School, 1964 Gymnasium Building	RM1	1964	81%	24%	19%	Very High	Low	Very Low	Red	Green / Yellow	Green / Yellow
7	57378	Aberdeen, J. M. Weatherwax High School, Main Building	S2	2005	30%	*	*	Low			Green / Yellow		
8	57397	Aberdeen, McDermoth Elementary School, Main Building	W2	1930	81%	19%	16%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
9	54084	Anacortes, Mount Erie Elementary School, 1955 Original Main Building	RM1	1955	74%	15%	11%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
10	54084	Anacortes, Mount Erie Elementary School, 1991 Gym & Classrooms Addition	W2	1955	49%	10%	7%	Moderate-High	Very Low	Very Low	Red	Green	Green
11	57407	Bainbridge Island, Bainbridge High School, 300 Building	RM1	1981	54%	23%	18%	High	Low	Very Low	Red	Green / Yellow	Green / Yellow
12	57410	Bainbridge Island, Bainbridge High School, 500 Building	PC1	1981	61%	32%	27%	High	Low-Moderate	Low	Red	Yellow	Yellow
13	57422	Bainbridge Island, Commodore Options School, Art & Classrooms	RM1	1970	80%	23%	18%	Very High	Low	Very Low	Red	Green / Yellow	Green / Yellow
14	57422	Bainbridge Island, Commodore Options School, Commodore Options School	W2	1948	67%	15%	12%	Very High	Very Low	Very Low	Red	Green	Green
15	57422	Bainbridge Island, Commodore Options School, Eagle Harbor HS	RM1	1981	44%	23%	18%	Moderate	Low	Very Low	Red	Green / Yellow	Green / Yellow
16	57416	Bainbridge Island, Ordway Elementary School, Education Pod	S2	1978	48%	28%	23%	Moderate	Low	Very Low	Red	Green / Yellow	Green / Yellow
17	57416	Bainbridge Island, Ordway Elementary School, K-4 Building	S2	1978	48%	28%	23%	Moderate	Low	Very Low	Red	Green / Yellow	Green / Yellow
18	57416	Bainbridge Island, Ordway Elementary School, Main Building	S2	1978	54%	28%	23%	Moderate-High	Low	Very Low	Red	Green / Yellow	Green / Yellow
19	57424	Bainbridge Island, Woodward Middle School, 2-Story Classroom Wing	W2	1994	27%	15%	12%	Low	Very Low	Very Low	Green / Yellow	Green	Green
20	57424	Bainbridge Island, Woodward Middle School, Gym	RM1	1994	36%	22%	18%	Low-Moderate	Low	Very Low	Yellow / Red	Green / Yellow	Green / Yellow
21	57424	Bainbridge Island, Woodward Middle School, Main Building	RM1	1994	36%	22%	18%	Low-Moderate	Low	Very Low	Yellow / Red	Green / Yellow	Green / Yellow
22	54454	Bellingham, Fairhaven Middle School, Main Building - Classrooms	W2	1994	10%	7.6%	5.8%	Very Low	Very Low	Very Low	Green	Green	Green
23	54455	Bellingham, Fairhaven Middle School, West Wing	W2	1994	10%	7.6%	5.8%	Very Low	Very Low	Very Low	Green	Green	Green
24	54493	Bellingham, Roosevelt Elementary School, Main Building	RM1	1972	75%	13%	10%	Very High	Very Low	Very Low	Red	Green	Green
25	54467	Bellingham, Whatcom Middle School, Industrial Arts Building	RM1	1978	28%	13%	10%	Low-Moderate	Very Low	Very Low	Yellow / Red	Green	Green
26	54468	Bellingham, Whatcom Middle School, Music Building	W2	1971	45%	8%	7%	Moderate-High	Very Low	Very Low	Red	Green	Green
27	57577	Bethel, Camas Prairie Elementary School, Main Building	W2	1987	27%	12%	9%	Low	Very Low	Very Low	Green / Yellow	Green	Green

					EPAT Results								
					Building Damage Estimate			Life Safety Risk Level			Most Likely Post-Earthquake Tagging		
Item Number	ICOS Building ID	Building Name	Construction Type	Date of Construction	Existing Building	Life Safety Retrofit Building	Current Code Building	Existing Building	Life Safety Retrofit Building	Current Code Building	Existing Building	Life Safety Retrofit Building	Current Code Building
28	57514	Bethel, Rocky Ridge Elementary School, Main Building	W2	1985	25%	11%	9%	Low	Very Low	Very Low	Green / Yellow	Green	Green
29	57777	Brinnon, Brinnon Elementary School, Main Building	W2	1952	71%	15%	12%	Very High	Very Low	Very Low	Red	Green	Green
30	50112	Burlington-Edison, Burlington-Edison High School, 500 Wing	RM1	1973	68%	14%	11%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
31	50118	Burlington-Edison, Burlington-Edison High School, Admin/Classroom Building	RM1	1973	68%	14%	11%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
32	50119	Burlington-Edison, Burlington-Edison High School, Art/Tiger TUB Building	C2	1958	68%	14%	11%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
33	50117	Burlington-Edison, Burlington-Edison High School, Cafeteria & 400 Wing	RM1	1970	73%	14%	11%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
34	50110	Burlington-Edison, Burlington-Edison High School, CTE	RM1	1969	68%	14%	11%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
35	50109	Burlington-Edison, Burlington-Edison High School, Fieldhouse 1953 & 1975	RM1	1953	73%	14%	11%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
36	50109	Burlington-Edison, Burlington-Edison High School, Fieldhouse 1984 Addition	RM1	1984	30%	14%	11%	Low-Moderate	Very Low	Very Low	Yellow / Red	Green / Yellow	Green
37	50095	Burlington-Edison, West View Elementary School, Main Building	W2	1950	53%	9%	7%	High	Very Low	Very Low	Red	Green	Green
38	57808	Camas, Dorothy Fox Elementary School, Main Building	RM1	1982	50%	9%	6%	Moderate-High	Very Low	Very Low	Red	Green	Green
39	51675	Cascade, Beaver Valley School, Main Building	W2	2000	7.3%	*	*	Very Low			Green		
40	51677	Cascade, Beaver Valley School, Old Winton School House	W2	1916	22%	12%	9%	Low	Very Low	Very Low	Green / Yellow	Green / Yellow	Green
41	57901	Central Kitsap, Cottonwood Elementary School, Gym, PC1	PC1	1976	64%	33%	27%	Very High	Low-Moderate	Low	Red	Yellow	Yellow
42	57901	Central Kitsap, Cottonwood Elementary School, Main, W2	W2	1976	40%	15%	12%	Moderate	Very Low	Very Low	Yellow / Red	Green	Green
43	57877	Central Kitsap, Emerald Heights Elementary, Gym	RM1	1993	26%	22%	17%	Low-Moderate	Low	Very Low	Yellow	Green / Yellow	Green / Yellow
44	57877	Central Kitsap, Emerald Heights Elementary, Main, S2	S2	1993	33%	27%	22%	Low-Moderate	Low	Very Low	Yellow / Red	Green / Yellow	Green / Yellow
45	57875	Central Kitsap, Green Mountain Elementary, Gymnasium, RM1	RM1	1992	47%	25%	20%	Moderate-High	Low	Very Low	Red	Green / Yellow	Green / Yellow
46	57875	Central Kitsap, Green Mountain Elementary, Main, S2	S2	1992	52%	31%	26%	Moderate-High	Low	Low	Red	Yellow	Green / Yellow
47	57854	Central Kitsap, Pinecrest Elementary, Gymnasium, RM1	RM1	1998	30%	25%	20%	Low-Moderate	Low	Very Low	Yellow	Green / Yellow	Green / Yellow
48	57854	Central Kitsap, Pinecrest Elementary, Main Bldg, W2	W2	1998	22%	17%	13%	Low	Very Low	Very Low	Green / Yellow	Green / Yellow	Green
49	57854	Central Kitsap, Pinecrest Elementary, Main, S2	S2	1998	37%	31%	26%	Low-Moderate	Low	Low	Yellow / Red	Yellow	Green / Yellow
50	57903	Central Kitsap, Woodlands Elementary, Main	W2	1981	34%	16%	13%	Low-Moderate	Very Low	Very Low	Green / Yellow	Green	Green
51	57953	Centralia, Centralia Middle School, Classroom Wings	W2	1958	54%	11%	9%	High	Very Low	Very Low	Red	Green	Green
52	57953	Centralia, Centralia Middle School, Gym Wing	W2	1958	54%	11%	9%	High	Very Low	Very Low	Red	Green	Green
53	57953	Centralia, Centralia Middle School, Main Building	W2	1958	54%	11%	9%	High	Very Low	Very Low	Red	Green	Green

					EPAT Results								
					Building Damage Estimate			Life Safety Risk Level			Most Likely Post-Earthquake Tagging		
Item Number	ICOS Building ID	Building Name	Construction Type	Date of Construction	Existing Building	Life Safety Retrofit Building	Current Code Building	Existing Building	Life Safety Retrofit Building	Current Code Building	Existing Building	Life Safety Retrofit Building	Current Code Building
54	57970	Centralia, Oakview Elementary School, Main Building	PC1	1928	80%	26%	21%	Very High	Low	Very Low	Red	Yellow	Green / Yellow
55	57962	Centralia, Washington Elementary School, Main Building	RM1	1950	73%	17%	14%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
56	58034	Chimacum, Chimacum High School, High School 100 Bldg A - North Wing	RM1	1979	42%	19%	15%	Moderate	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
57	58034	Chimacum, Chimacum High School, High School 100 Bldg A - South Wing	RM1	1979	42%	19%	15%	Moderate	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
58	58032	Chimacum, Chimacum Middle School, Middle School Bldg 100 B	RM1	1959	75%	19%	15%	Very High	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
59	58031	Chimacum, Chimacum Middle School, Middle School Bldg 200	RM1	1991	23%	19%	15%	Low	Very Low	Very Low	Yellow	Green / Yellow	Green / Yellow
60	50243	Clover Park, Custer Elementary School, Library - CU2	W2	1992	17%	13%	10%	Very Low	Very Low	Very Low	Green / Yellow	Green	Green
61	50240	Clover Park, Custer Elementary School, Second Classroom Building - CU1	W2	1952	57%	13%	10%	High	Very Low	Very Low	Red	Green	Green
62	50244	Clover Park, Oakbrook Elementary School, First Classroom Building - OB1	RM1	1970	77%	20%	16%	Very High	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
63	50245	Clover Park, Oakbrook Elementary School, Gym / MPR - OB2	RM1	1970	77%	20%	16%	Very High	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
64	50186	Clover Park, Tillicum Elementary School, Classroom Building - TL1	URM	1944	77%	19%	15%	Very High	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
65	58058	Dieringer, North Tapps Middle School, Main Building	W2	1992	14%	11%	8%	Very Low	Very Low	Very Low	Green	Green	Green
66	51934	Ephrata, Ephrata High School, 1937 Annex (Former Beezley Springs ES)	URM	1937	31%	17%	13%	Moderate	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
67	51932	Ephrata, Ephrata High School, Performing Arts Center PAC	URM	1951	31%	17%	13%	Moderate	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
68	51927	Ephrata, Grant Elementary School, Main Building	RM1	1957	38%	17%	13%	Moderate	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
69	51938	Ephrata, Parkway School, Main Building	W2	1947	16%	6%	5%	Low	Very Low	Very Low	Green / Yellow	Green	Green
70	54780	Everett, Jackson Elementary School, Main Building	W2	1949	54%	12%	9%	High	Very Low	Very Low	Red	Green	Green
71	54831	Everett, Madison Elementary School, Main Building	W2	1947	57%	13%	10%	High	Very Low	Very Low	Red	Green	Green
72	50844	Federal Way, Brigadoon Elementary School, Main Office Building - E	W2	1969	56%	13%	10%	High	Very Low	Very Low	Red	Green	Green
73	50838	Federal Way, Brigadoon Elementary School, Multipurpose Building - C	W2	1970	56%	13%	10%	High	Very Low	Very Low	Red	Green	Green
74	50843	Federal Way, Brigadoon Elementary School, Rooms 20-25 & Kitchen - B	W2	1969	56%	13%	10%	High	Very Low	Very Low	Red	Green	Green
75	50839	Federal Way, Brigadoon Elementary School, Rooms 30-35 - F	W2	1969	56%	13%	10%	High	Very Low	Very Low	Red	Green	Green
76	50841	Federal Way, Brigadoon Elementary School, Rooms 40-43 & Library - D	W2	1969	56%	13%	10%	High	Very Low	Very Low	Red	Green	Green
77	50842	Federal Way, Brigadoon Elementary School, Rooms 50-58 - A	W2	1969	56%	13%	10%	High	Very Low	Very Low	Red	Green	Green
78	50675	Federal Way, Camelot Elementary School, Main Building	W2	1964	61%	12%	10%	High	Very Low	Very Low	Red	Green	Green
79	50805	Federal Way, Kilo Middle School, Building A Main Office	W2	1970	55%	12%	9%	High	Very Low	Very Low	Red	Green	Green

					EPAT Results								
					Building Damage Estimate			Life Safety Risk Level			Most Likely Post-Earthquake Tagging		
Item Number	ICOS Building ID	Building Name	Construction Type	Date of Construction	Existing Building	Life Safety Retrofit Building	Current Code Building	Existing Building	Life Safety Retrofit Building	Current Code Building	Existing Building	Life Safety Retrofit Building	Current Code Building
80	50803	Federal Way, Kilo Middle School, Building B	W2	1970	55%	12%	9%	High	Very Low	Very Low	Red	Green	Green
81	50807	Federal Way, Kilo Middle School, Building C	W2	1970	55%	12%	9%	High	Very Low	Very Low	Red	Green	Green
82	50808	Federal Way, Kilo Middle School, Building D	W2	1970	55%	12%	9%	High	Very Low	Very Low	Red	Green	Green
83	50811	Federal Way, Kilo Middle School, Building E Little Theater	W2	1970	55%	12%	9%	High	Very Low	Very Low	Red	Green	Green
84	50806	Federal Way, Kilo Middle School, Building F1-F4 & Library	W2	1970	55%	12%	9%	High	Very Low	Very Low	Red	Green	Green
85	50804	Federal Way, Kilo Middle School, Building F5-F8	W2	1970	55%	12%	9%	High	Very Low	Very Low	Red	Green	Green
86	50802	Federal Way, Kilo Middle School, Building G	W2	1970	55%	12%	9%	High	Very Low	Very Low	Red	Green	Green
87	50812	Federal Way, Kilo Middle School, Building H Gymnasium	W2	1970	55%	12%	9%	High	Very Low	Very Low	Red	Green	Green
88	50809	Federal Way, Kilo Middle School, Building I Cafeteria	W2	1970	55%	12%	9%	High	Very Low	Very Low	Red	Green	Green
89	50810	Federal Way, Kilo Middle School, Building J	W2	1970	55%	12%	9%	High	Very Low	Very Low	Red	Green	Green
90	50828	Federal Way, Nautilus K-8 School, Multipurpose Rm Bldg	W2	1968	56%	13%	10%	High	Very Low	Very Low	Red	Green	Green
91	50825	Federal Way, Nautilus K-8 School, Rooms 15-20 Bldg	W2	1968	56%	13%	10%	High	Very Low	Very Low	Red	Green	Green
92	50826	Federal Way, Nautilus K-8 School, Rooms 1-6 Bldg	W2	1968	56%	13%	10%	High	Very Low	Very Low	Red	Green	Green
93	50829	Federal Way, Nautilus K-8 School, Rooms 22-25 Bldg	W2	1968	56%	13%	10%	High	Very Low	Very Low	Red	Green	Green
94	50830	Federal Way, Nautilus K-8 School, Rooms 7-14 Bldg	W2	1968	56%	13%	10%	High	Very Low	Very Low	Red	Green	Green
95	50701	Federal Way, Sacajawea Middle School, 100 Building	RM1	1966	75%	19%	15%	Very High	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
96	50706	Federal Way, Sacajawea Middle School, 300 Building/Cafeteria	RM1	1968	75%	19%	15%	Very High	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
97	50703	Federal Way, Sacajawea Middle School, 400 Building	RM1	1966	79%	19%	15%	Very High	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
98	50702	Federal Way, Sacajawea Middle School, 600/700/800 Building	RM1	1966	79%	19%	15%	Very High	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
99	50700	Federal Way, Sacajawea Middle School, 900 Building	RM1	1966	75%	19%	15%	Very High	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
100	50705	Federal Way, Sacajawea Middle School, Gym (500) Building	RM1	1966	75%	19%	15%	Very High	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
101	50704	Federal Way, Sacajawea Middle School, Main Office Building	RM1	1968	75%	19%	15%	Very High	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
102	54971	Ferndale, Central Elementary School, Main Building	W2	1920	42%	6%	5%	Moderate	Very Low	Very Low	Yellow / Red	Green	Green
103	54976	Ferndale, Custer Elementary, Main Building	W2	1936	55%	8%	7%	High	Very Low	Very Low	Red	Green	Green
104	55015	Granite Falls, Crossroads High School (form. MS), Crossroads HS, RM1	RM1	1938	8.5%	11%	8.5%	Very Low	Very Low	Very Low	Green / Yellow	Green	Green
105	55015	Granite Falls, Crossroads High School (form. MS), Crossroads HS, W2	W2	1938	6.4%	7.2%	5.5%	Very Low	Very Low	Very Low	Green	Green	Green
106	55028	Granite Falls, Granite Falls Middle School (form. HS), Main Building - Gym	RM1	1974	62%	11%	9%	High	Very Low	Very Low	Red	Green	Green
107	55028	Granite Falls, Granite Falls Middle School (form. HS), Main Building (Excl. Gym), RM1	RM1	1974	62%	11%	9%	High	Very Low	Very Low	Red	Green	Green

					EPAT Results								
					Building Damage Estimate			Life Safety Risk Level			Most Likely Post-Earthquake Tagging		
Item Number	ICOS Building ID	Building Name	Construction Type	Date of Construction	Existing Building	Life Safety Retrofit Building	Current Code Building	Existing Building	Life Safety Retrofit Building	Current Code Building	Existing Building	Life Safety Retrofit Building	Current Code Building
108	55028	Granite Falls, Granite Falls Middle School (form. HS), Main Building (Excl. Gym), W2	W2	1974	41%	7%	6%	Moderate	Very Low	Very Low	Yellow / Red	Green	Green
109	55030	Granite Falls, Granite Falls Middle School (form. HS), Multi-Purpose Building	W2	1988	20%	7%	6%	Low	Very Low	Very Low	Green / Yellow	Green	Green
110	55012	Granite Falls, Mountain Way Elementary School, Gymnasium, RM1	RM1	1988	62%	11%	9%	High	Very Low	Very Low	Red	Green	Green
111	55012	Granite Falls, Mountain Way Elementary School, Main Building, W2	W2	1988	47%	7%	6%	Moderate-High	Very Low	Very Low	Red	Green	Green
112	55096	Highline, Beverly Park @ Glendale Elementary School, Main Building A	RM1	1963	82%	25%	20%	Very High	Low	Very Low	Red	Green / Yellow	Green / Yellow
113	55097	Highline, Beverly Park @ Glendale Elementary School, Multi-Purpose Building B	RM1	1963	82%	25%	20%	Very High	Low	Very Low	Red	Green / Yellow	Green / Yellow
114	55065	Highline, Chinook Middle School, 100 Building	W2	1956	61%	15%	12%	High	Very Low	Very Low	Red	Green	Green
115	55067	Highline, Chinook Middle School, 200 Building	W2	1956	61%	15%	12%	High	Very Low	Very Low	Red	Green	Green
116	55063	Highline, Chinook Middle School, 300 Building - Gymnasium	W2	1956	61%	15%	12%	High	Very Low	Very Low	Red	Green	Green
117	55066	Highline, Chinook Middle School, 400 Building - Cafeteria	W2	1956	61%	15%	12%	High	Very Low	Very Low	Red	Green	Green
118	55064	Highline, Chinook Middle School, 800 Building	W2	1966	65%	15%	12%	Very High	Very Low	Very Low	Red	Green	Green
119	55177	Highline, Hilltop Elementary School, 100 Building - Bldg A	RM1	1957	88%	25%	20%	Very High	Low	Very Low	Red	Green / Yellow	Green / Yellow
120	55176	Highline, Hilltop Elementary School, 200 Building - Bldg B	W2	1957	64%	17%	13%	Very High	Very Low	Very Low	Red	Green	Green
121	55178	Highline, Hilltop Elementary School, 300 Building - Bldg C	W2	1958	64%	17%	13%	Very High	Very Low	Very Low	Red	Green	Green
122	55175	Highline, Hilltop Elementary School, 400 Building - Bldg D	W2	1997	22%	17%	13%	Low	Very Low	Very Low	Green / Yellow	Green	Green
123	55100	Highline, Seahurst Elementary School, Main Building	W2	1992	22%	17%	13%	Low	Very Low	Very Low	Green / Yellow	Green / Yellow	Green
124	55185	Highline, Southern Heights Elementary School, Building A	W2	1955	64%	17%	13%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
125	55186	Highline, Southern Heights Elementary School, Building B	W2	1956	64%	17%	13%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
126	55188	Highline, Southern Heights Elementary School, Building C - Admin/Multi Purpose	RM1	1964	85%	25%	20%	Very High	Low	Very Low	Red	Green / Yellow	Green / Yellow
127	55128	Highline, Sylvester Middle School, 100 Building	W2	1953	73%	16%	13%	Very High	Very Low	Very Low	Red	Green	Green
128	55131	Highline, Sylvester Middle School, 200 Building	C2	1953	82%	24%	20%	Very High	Low	Very Low	Red	Green / Yellow	Green / Yellow
129	55134	Highline, Sylvester Middle School, 300 Building - Gymnasium/Cafeteria	C2	1953	82%	24%	20%	Very High	Low	Very Low	Red	Green / Yellow	Green / Yellow
130	55130	Highline, Sylvester Middle School, 400 Building	C2	1953	85%	24%	20%	Very High	Low	Very Low	Red	Green / Yellow	Green / Yellow
131	55133	Highline, Sylvester Middle School, 500 Building - Library	C2	1969	85%	24%	20%	Very High	Low	Very Low	Red	Green / Yellow	Green / Yellow
132	55129	Highline, Sylvester Middle School, 600 Building	C2	1969	82%	24%	20%	Very High	Low	Very Low	Red	Green / Yellow	Green / Yellow
133	55132	Highline, Sylvester Middle School, 700 Building - Band/Drama	C2	1969	85%	24%	20%	Very High	Low	Very Low	Red	Green / Yellow	Green / Yellow
134	58331	Hockinson, Hockinson Heights Elementary School (East), Building 100 A	RM1	1992	31%	9%	7%	Low-Moderate	Very Low	Very Low	Red	Green	Green

					EPAT Results								
					Building Damage Estimate			Life Safety Risk Level			Most Likely Post-Earthquake Tagging		
Item Number	ICOS Building ID	Building Name	Construction Type	Date of Construction	Existing Building	Life Safety Retrofit Building	Current Code Building	Existing Building	Life Safety Retrofit Building	Current Code Building	Existing Building	Life Safety Retrofit Building	Current Code Building
135	58332	Hockinson, Hockinson Heights Elementary School (East), Building 200 C	W2	1975	20%	6%	5%	Low	Very Low	Very Low	Green / Yellow	Green	Green
136	58328	Hockinson, Hockinson Heights Elementary School (East), Building 300 D	W2	1975	37%	6%	5%	Moderate	Very Low	Very Low	Yellow / Red	Green	Green
137	58326	Hockinson, Hockinson Heights Elementary School (East), Building 400 B	W2	1992	22%	6%	5%	Low	Very Low	Very Low	Green / Yellow	Green	Green
138	58327	Hockinson, Hockinson Heights Elementary School (East), Building 500 E	W2	1980	26%	6%	5%	Low-Moderate	Very Low	Very Low	Yellow	Green	Green
139	58329	Hockinson, Hockinson Heights Elementary School (East), Building 600 F	W2	1980	26%	6%	5%	Low-Moderate	Very Low	Very Low	Yellow	Green	Green
140	58325	Hockinson, Hockinson Heights Elementary School (East), Building 800 H	W2	1975	31%	6.1%	4.7%	Low-Moderate	Very Low	Very Low	Yellow	Green	Green
141	58356	Hoquiam, Central Elementary School, Main Building	C2	1952	86%	25%	20%	Very High	Low	Very Low	Red	Green / Yellow	Green / Yellow
142	58357	Hoquiam, Emerson Elementary School, Main Building	C2	1954	91%	25%	20%	Very High	Low	Very Low	Red	Green / Yellow	Green / Yellow
143	58347	Hoquiam, Hoquiam High School, D-Business Education	W2	1966	74%	20%	16%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
144	58345	Hoquiam, Hoquiam High School, F-Humanities	W2	1966	74%	20%	16%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
145	58346	Hoquiam, Hoquiam High School, G-Little Theater	RM1	1966	85%	29%	24%	Very High	Low	Low	Red	Yellow	Green / Yellow
146	58393	Kelso, Coweeman Middle School, Main Building	W2	1961	34%	5%	4%	Low-Moderate	Very Low	Very Low	Yellow	Green	Green
147	58396	Kelso, Rose Valley Elementary School, Main Building	URM	1939	54%	9%	7%	Very High	Very Low	Very Low	Red	Green	Green
148	50901	La Center, La Center Elementary & Middle Schools, Building 300 - ES Main Building	W2	1938	48%	7%	5%	Moderate-High	Very Low	Very Low	Red	Green	Green
149	55920	Lake Washington, Emerson Campus, Emerson	W2	1982	26%	12%	9%	Low	Very Low	Very Low	Green / Yellow	Green	Green
150	55935	Lake Washington, Dickinson Elementary School, Main Building	W2	1992	15%	11%	9%	Very Low	Very Low	Very Low	Green	Green	Green
151	55836	Lake Washington, Einstein Elementary School, Main Building - S2	S2	1997	28%	22%	18%	Low	Very Low	Very Low	Yellow	Green / Yellow	Green / Yellow
152	55836	Lake Washington, Einstein Elementary School, Main Building - W2	W2	1997	15%	11%	9%	Very Low	Very Low	Very Low	Green	Green	Green
153	55846	Lake Washington, Wilder Elementary School, Main Building	W2	1989	26%	12%	9%	Low	Very Low	Very Low	Green / Yellow	Green	Green
154	55771	Lake Washington, Rockwell Elementary School, Main Building	RM1	1979	36%	18%	14%	Low-Moderate	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
155	58459	Longview, Mint Valley Elementary School, Building A - 1	RM1	1969	55%	9%	7%	High	Very Low	Very Low	Red	Green	Green
156	58458	Longview, Mint Valley Elementary School, Building B - 2	RM1	1969	55%	9%	7%	High	Very Low	Very Low	Red	Green	Green
157	58461	Longview, Mint Valley Elementary School, Building D - 4	RM1	1969	55%	9%	7%	High	Very Low	Very Low	Red	Green	Green
158	58466	Longview, Mt. Solo Middle School, Main Building	RM1	2003	7%	*	*	Very Low			Green / Yellow	Na	Na
159	58447	Longview, Northlake Elementary School, Main Building	W2	1954	39%	7%	5%	Moderate	Very Low	Very Low	Yellow / Red	Green	Green
160	58438	Longview, Olympic Elementary School, Annex Building	W2	1958	35%	6%	4%	Low-Moderate	Very Low	Very Low	Yellow	Green	Green
161	58436	Longview, Olympic Elementary School, Main Building	W2	1950	35%	6%	4%	Low-Moderate	Very Low	Very Low	Yellow	Green	Green
162	58437	Longview, Olympic Elementary School, Multipurpose Building	RM1	1958	55%	9%	6%	High	Very Low	Very Low	Red	Green	Green

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163	58432	Longview, Robert Gray Elementary School, Main Building	RM2	1997	15%	8.8%	6.7%	Very Low	Very Low	Very Low	Green / Yellow	Green	Green
164	56065	Lopez Island, Lopez Elementary School, Elementary	W2	1978	24%	11%	8%	Low	Very Low	Very Low	Green / Yellow	Green	Green
165	56067	Lopez Island, Lopez Middle High School, Gym/Tech Building	RM1	1988	34%	16%	13%	Low-Moderate	Very Low	Very Low	Yellow / Red	Green / Yellow	Green
166	56068	Lopez Island, Lopez Middle High School, Junior Senior High Building	W2	1930	52%	11%	8%	High	Very Low	Very Low	Red	Green	Green
167	50921	Mary M Knight, Mary M. Knight School, Elementary School	W2	1963	67%	18%	15%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
168	50924	Mary M Knight, Mary M. Knight School, High School Building	W2	1979	55%	19%	15%	High	Very Low	Very Low	Red	Green / Yellow	Green
169	56103	Marysville, Cascade Elementary School, Unit A	RM1	1955	69%	14%	11%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
170	56103	Marysville, Cascade Elementary School, Unit A	W2	1955	48%	10%	7%	Moderate-High	Very Low	Very Low	Red	Green	Green
171	56101	Marysville, Cascade Elementary School, Unit B	RM1	1955	69%	14%	11%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
172	56101	Marysville, Cascade Elementary School, Unit B	W2	1955	48%	10%	7%	Moderate-High	Very Low	Very Low	Red	Green	Green
173	56104	Marysville, Cascade Elementary School, Unit C	RM1	1956	69%	14%	11%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
174	56104	Marysville, Cascade Elementary School, Unit C	W2	1956	48%	10%	7%	Moderate-High	Very Low	Very Low	Red	Green	Green
175	56102	Marysville, Cascade Elementary School, Unit D	RM1	1956	69%	14%	11%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
176	56102	Marysville, Cascade Elementary School, Unit D	W2	1956	48%	10%	7%	Moderate-High	Very Low	Very Low	Red	Green	Green
177	56254	Marysville, Marysville Pilchuck Senior High School, Arts & Crafts Building - Bldg B	RM1	1970	68%	14%	11%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
178	56248	Marysville, Marysville Pilchuck Senior High School, Auditorium - Bldg K	RM1	1970	73%	14%	11%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
179	56248	Marysville, Marysville Pilchuck Senior High School, Auditorium - Bldg K C2	C2	1970	74%	14%	11%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
180	56242	Marysville, Marysville Pilchuck Senior High School, Business Ed & Home Learning - Bldg C	RM1	1970	68%	14%	11%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
181	56240	Marysville, Marysville Pilchuck Senior High School, East Building - Bldg H	RM1	1970	68%	14%	11%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
182	56246	Marysville, Marysville Pilchuck Senior High School, Gym & New Food Commons - Bldg M	RM1	1970	68%	14%	11%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
183	56244	Marysville, Marysville Pilchuck Senior High School, Library - Bldg J	RM1	1970	77%	14%	11%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
184	56253	Marysville, Marysville Pilchuck Senior High School, Life Science Building - Bldg F	RM1	1970	68%	14%	11%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
185	56235	Marysville, Marysville Pilchuck Senior High School, Mech Plant & Former Cafeteria - Bldg E	RM1	1970	68%	14%	11%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
186	56245	Marysville, Marysville Pilchuck Senior High School, Occupational Center - Bldg A	RM1	1970	68%	14%	11%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
187	56233	Marysville, Marysville Pilchuck Senior High School, Pool Building - Bldg L	RM1	1970	73%	14%	11%	Very High	Very Low	Very Low	Red	Green / Yellow	Green

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188	56247	Marysville, Marysville Pilchuck Senior High School, South Building - Bldg N	RM1	1984	31%	14%	11%	Low-Moderate	Very Low	Very Low	Yellow / Red	Green / Yellow	Green
189	56134	Marysville, Pinewood Elementary School, Bldg E	RM1	1968	69%	15%	11%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
190	56141	Marysville, Pinewood Elementary School, Bldg L (Library)	RM1	1968	69%	15%	11%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
191	56139	Marysville, Pinewood Elementary School, Bldg M (Gym)	RM1	1968	69%	15%	11%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
192	56135	Marysville, Pinewood Elementary School, Building A	RM1	1968	69%	15%	11%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
193	56142	Marysville, Pinewood Elementary School, Building D	RM1	1968	69%	15%	11%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
194	56204	Marysville, Quil Ceda Tulalip Elementary School, Main Building	W2	1997	16%	10%	8%	Very Low	Very Low	Very Low	Green / Yellow	Green	Green
195	56264	Marysville, Shoultes Elementary School, Bldg B (A Bldg in ICOS)	RM1	1958	68%	14%	11%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
196	56266	Marysville, Shoultes Elementary School, Bldg A Gym (B Bldg in ICOS)	RM1	1964	68%	14%	11%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
197	56265	Marysville, Shoultes Elementary School, Bldg D (C Bldg in ICOS)	RM1	1964	68%	14%	11%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
198	56267	Marysville, Shoultes Elementary School, Bldg C (D Bldg in ICOS) - Masonry	RM1	1965	68%	14%	11%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
199	56267	Marysville, Shoultes Elementary School, Bldg C (D Bldg in ICOS) - Wood	W2	1965	48%	9%	7%	Moderate-High	Very Low	Very Low	Red	Green	Green
200	56410	Mount Baker, Acme Elementary School, Main Building	W2	1937	53%	8%	6%	High	Very Low	Very Low	Red	Green	Green
201	58512	Napavine, Napavine Elementary School, Main Building	W2	1951	49%	10%	8%	Moderate-High	Very Low	Very Low	Red	Green	Green
202	58513	Napavine, Napavine Junior Senior High School, Annex	W2	1955	49%	10%	8%	Moderate-High	Very Low	Very Low	Red	Green	Green
203	58514	Napavine, Napavine Junior Senior High School, Main	S2	1980	36%	19%	15%	Low-Moderate	Very Low	Very Low	Yellow / Red	Green / Yellow	Green / Yellow
204	51032	Naselle-Grays River Valley, Naselle K-12 School, Elementary	W2	1952	66%	15%	12%	Very High	Very Low	Very Low	Red	Green	Green
205	51032	Naselle-Grays River Valley, Naselle K-12 School, High School/Admin	W2	1952	62%	15%	12%	Very High	Very Low	Very Low	Red	Green	Green
206	58529	North Beach, North Beach Junior/Senior High School, Main Building	RM1	1991	71%	31%	26%	Very High	Low-Moderate	Low	Red	Yellow	Yellow
207	58613	North Mason, Belfair Elementary School, Gymnasium Building	RM1	1970	84%	27%	22%	Very High	Low	Low	Red	Yellow	Green / Yellow
208	58614	North Mason, Belfair Elementary School, Main Building	RM2	1970	91%	27%	22%	Very High	Low	Low	Red	Yellow	Green / Yellow
209	58630	North River, North River School, Elementary	W2	1945	60%	14%	11%	High	Very Low	Very Low	Red	Green	Green
210	58634	North River, North River School, Gym Home Ec-Cafeteria	W2	1922	60%	14%	11%	High	Very Low	Very Low	Red	Green	Green
211	58631	North River, North River School, High School & Admin Building	W2	1922	60%	14%	11%	High	Very Low	Very Low	Red	Green	Green
212	58636	North River, North River School, Talley Building (Music/Art)	W2	1945	60%	14%	11%	High	Very Low	Very Low	Red	Green	Green
213	56750	Northshore, Canyon Creek Elementary School, Building A - Classroom/Library	W2	1977	35%	13%	10%	Low-Moderate	Very Low	Very Low	Yellow	Green / Yellow	Green / Yellow
214	56753	Northshore, Canyon Creek Elementary School, Building C - Cafeteria/Gym	RM1	1977	50%	19%	15%	Moderate-High	Very Low	Very Low	Red	Green / Yellow	Green / Yellow

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215	56775	Northshore, Crystal Springs Elementary School, Building 1 - Admin	RM1	1957	75%	18%	15%	Very High	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
216	56774	Northshore, Crystal Springs Elementary School, Building 2 - Classrooms/Kitchen	RM1	1957	75%	18%	15%	Very High	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
217	56772	Northshore, Crystal Springs Elementary School, Building 3/4 - Classrooms	RM1	1957	75%	18%	15%	Very High	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
218	56770	Northshore, Crystal Springs Elementary School, Building 5 - Classrooms	RM1	1957	75%	18%	15%	Very High	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
219	56732	Northshore, Shelton View Elementary School, Building A1/10 - Classroom	RM1	1969	79%	18%	14%	Very High	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
220	56727	Northshore, Shelton View Elementary School, Building C - Gym	RM1	1969	74%	18%	14%	Very High	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
221	51299	Oak Harbor, Clover Valley School, Main Building	W2	1951	64%	14%	11%	Very High	Very Low	Very Low	Red	Green	Green
222	51291	Oak Harbor, Oak Harbor Middle School, Band Building	RM1	1961	78%	21%	16%	Very High	Low	Very Low	Red	Green / Yellow	Green / Yellow
223	51288	Oak Harbor, Oak Harbor Middle School, Building B	W2	1961	64%	14%	11%	Very High	Very Low	Very Low	Red	Green	Green
224	51290	Oak Harbor, Oak Harbor Middle School, C Wing	W2	1961	64%	14%	11%	Very High	Very Low	Very Low	Red	Green	Green
225	51294	Oak Harbor, Oak Harbor Middle School, D Wing	W2	1948	59%	14%	11%	High	Very Low	Very Low	Red	Green	Green
226	51293	Oak Harbor, Oak Harbor Middle School, Gym	RM1	1959	78%	21%	16%	Very High	Low	Very Low	Red	Green / Yellow	Green / Yellow
227	51289	Oak Harbor, Oak Harbor Middle School, Main Building A	W2	1955	64%	14%	11%	Very High	Very Low	Very Low	Red	Green	Green
228	58644	Ocean Beach, Kaino Gym, Kaino Gym	W2	1985	56%	20%	16%	High	Very Low	Very Low	Red	Green / Yellow	Green
229	58698	Olympia, Boston Harbor Elementary School, Main Building	W2	1991	20%	15%	12%	Low	Very Low	Very Low	Green / Yellow	Green	Green
230	58671	Olympia, Thurgood Marshall Middle School, Gym Building	RM1	1994	27%	22%	18%	Low-Moderate	Low	Very Low	Yellow	Green / Yellow	Green / Yellow
231	58672	Olympia, Thurgood Marshall Middle School, Main Building	W2	1994	20%	15%	12%	Low	Very Low	Very Low	Green / Yellow	Green	Green
232	58761	Orting, Orting Primary School, Main Building	W2	1968	62%	11%	9%	Very High	Very Low	Very Low	Red	Green	Green
233	51320	Pe Ell, Pe Ell School, Fitness Center	W2	1993	32%	11%	9%	Low-Moderate	Very Low	Very Low	Yellow	Green	Green
234	51321	Pe Ell, Pe Ell School, Main Building	URM	1954	71%	17%	14%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
235	58839	Peninsula, Discovery Elementary School, Main Building	PC1	1980	52%	33%	27%	High	Low-Moderate	Low	Red	Yellow	Yellow
236	58821	Peninsula, Gig Harbor High School, Main Building	RM1	1978	61%	23%	19%	High	Low	Very Low	Red	Green / Yellow	Green / Yellow
237	58819	Peninsula, Gig Harbor High School, Two-Story Building	W2	1991	24%	15%	12%	Low	Very Low	Very Low	Green / Yellow	Green	Green
238	58820	Peninsula, Gig Harbor High School, Voc-Ed Building	RM1	1978	57%	23%	19%	High	Low	Very Low	Red	Green / Yellow	Green / Yellow
239	58834	Peninsula, Minter Creek Elementary School, Main Building	W2	1981	37%	18%	14%	Low-Moderate	Very Low	Very Low	Yellow / Red	Green / Yellow	Green
240	58793	Peninsula, Peninsula High School, 500 Building	W2	1946	66%	17%	14%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
241	58795	Peninsula, Peninsula High School, 600 Building	W2	1962	66%	17%	14%	Very High	Very Low	Very Low	Red	Green / Yellow	Green

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242	58791	Peninsula, Peninsula High School, 700 Building - Voc Ag	PC1	1978	56%	36%	31%	High	Low-Moderate	Low	Red	Yellow	Yellow
243	58792	Peninsula, Peninsula High School, 800 Building - Auditorium Area	W2	1970	66%	17%	14%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
244	58794	Peninsula, Peninsula High School, 900 Building - Pool Building	W2	1969	66%	17%	14%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
245	58796	Peninsula, Peninsula High School, Main Building (100, 200, 300, 400)	W2	1946	66%	17%	14%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
246	58817	Peninsula, Voyager Elementary School, Main Building	W2	1988	33%	15%	12%	Low-Moderate	Very Low	Very Low	Green / Yellow	Green	Green
247	58917	Port Townsend, Blue Heron Middle School, Main Building	CFS2	1995	Na	Na	Na	Na	Na	Na			
248	59062	Puyallup, Meeker Elementary School, Main Building	W2	1923	48%	9%	7%	Moderate-High	Very Low	Very Low	Red	Green	Green
249	58954	Puyallup, Mt View Elementary School, Main Building	W2	1965	53%	11%	9%	High	Very Low	Very Low	Red	Green	Green
250	58954	Puyallup, Mt View Elementary School, Multipurpose Building	RM1	1965	73%	17%	14%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
251	59011	Puyallup, Waller Road Elementary School, Main Building	URM	1936	72%	18%	14%	Very High	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
252	58921	Puyallup, Wildwood Elementary, Main Building	W2	1965	53%	11%	9%	High	Very Low	Very Low	Red	Green	Green
253	59199	Quillayute Valley, Forks Elementary School, Main Building - 1969 Portion	W2	1969	69%	20%	16%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
254	59193	Quillayute Valley, Forks Junior-Senior High School, Main Junior High Building - 1949 Portion	W2	1949	69%	20%	16%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
255	59203	Quillayute Valley, Forks Intermediate School, Main Building - 1952 Portion	W2	1952	78%	20%	16%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
256	56887	Renton, Hazen Senior High School, 700 Building	PC1	1968	87%	30%	25%	Very High	Low	Low	Red	Yellow	Yellow
257	56888	Renton, Hazen Senior High School, Bldg 1 Gym/Pool	PC1	1969	87%	30%	25%	Very High	Low	Low	Red	Yellow	Yellow
258	56888	Renton, Hazen Senior High School, Bldg 1 Main Building	PC1	1969	89%	30%	25%	Very High	Low	Low	Red	Yellow	Yellow
259	56888	Renton, Hazen Senior High School, Bldg 1 Music, Band, Cafeteria	PC1	1969	89%	30%	25%	Very High	Low	Low	Red	Yellow	Yellow
260	56885	Renton, Hazen Senior High School, Gym Addition	C2	1977	64%	21%	17%	High	Low	Very Low	Red	Green / Yellow	Green / Yellow
261	56944	Renton, Lindbergh Senior High School, Gym Addition	RM1	1979	59%	20%	16%	High	Low	Very Low	Red	Green / Yellow	Green / Yellow
262	56944	Renton, Lindbergh Senior High School, Gymnasium	RM1	1971	88%	20%	16%	Very High	Low	Very Low	Red	Green / Yellow	Green / Yellow
263	56945	Renton, Lindbergh Senior High School, Main Building - North	RM1	1971	88%	20%	16%	Very High	Low	Very Low	Red	Green / Yellow	Green / Yellow
264	56945	Renton, Lindbergh Senior High School, Main Building - South	RM1	1971	85%	20%	16%	Very High	Low	Very Low	Red	Green / Yellow	Green / Yellow
265	56901	Renton, Renton Senior High School, Cafeteria/Gym	C2	1954	86%	22%	18%	Very High	Low	Very Low	Red	Green / Yellow	Green / Yellow
266	59234	Ridgefield, South Ridge Elementary School, Main Building	S5	1961	60%	12%	9%	High	Very Low	Very Low	Red	Green / Yellow	Green
267	59377	Skamania, Skamania Elementary School, Main Building	W2	1947	31%	5%	4%	Low-Moderate	Very Low	Very Low	Yellow	Green	Green
268	57090	Snohomish, Cathcart Elementary School, 100 Building	RM1	1966	80%	19%	15%	Very High	Very Low	Very Low	Red	Green / Yellow	Green / Yellow

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269	57091	Snohomish, Cathcart Elementary School, 200 Building	RM1	1966	80%	19%	15%	Very High	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
270	57089	Snohomish, Cathcart Elementary School, 300 Building	RM1	1966	80%	19%	15%	Very High	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
271	57088	Snohomish, Cathcart Elementary School, 400 Building	RM1	1966	79%	19%	15%	Very High	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
272	57092	Snohomish, Cathcart Elementary School, 500 Building	RM1	1980	39%	19%	15%	Moderate	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
273	57094	Snohomish, Cathcart Elementary School, 600 Building	RM1	1966	80%	19%	15%	Very High	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
274	57093	Snohomish, Cathcart Elementary School, 700 Building	RM1	1970	80%	19%	15%	Very High	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
275	57085	Snohomish, Central Elementary School, Main Building - Gym (Concrete)	C2	1948	72%	16%	13%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
276	57085	Snohomish, Central Elementary School, Main Building - Wood	W2	1948	62%	11%	8%	Very High	Very Low	Very Low	Red	Green	Green
277	57133	Snohomish, Emerson Elementary School, Annex	W2	1958	51%	10%	8%	Moderate-High	Very Low	Very Low	Red	Green	Green
278	57132	Snohomish, Emerson Elementary School, Main Building	W2	1954	51%	10%	8%	Moderate-High	Very Low	Very Low	Red	Green	Green
279	51397	South Bend, South Bend Jr/Sr High School, Main Building High School	W2	1968	58%	14%	11%	High	Very Low	Very Low	Red	Green	Green
280	57247	South Whidbey, South Whidbey Grades 5 & 6 - (Formerly S. Whid. Primary), A- Classrooms	RM1	1969	79%	22%	18%	Very High	Low	Very Low	Red	Green / Yellow	Green / Yellow
281	57245	South Whidbey, South Whidbey Grades 5 & 6 - (Formerly S. Whid. Primary), C - Classrooms/Admin	RM1	1969	79%	22%	18%	Very High	Low	Very Low	Red	Green / Yellow	Green / Yellow
282	57249	South Whidbey, South Whidbey Grades 5 & 6 - (Formerly S. Whid. Primary), D - WIA Office/Classrooms	RM1	1969	79%	22%	18%	Very High	Low	Very Low	Red	Green / Yellow	Green / Yellow
283	57250	South Whidbey, South Whidbey Grades 5 & 6 - (Formerly S. Whid. Primary), E - Classrooms	RM1	1969	82%	22%	18%	Very High	Low	Very Low	Red	Green / Yellow	Green / Yellow
284	57248	South Whidbey, South Whidbey Grades 5 & 6 - (Formerly S. Whid. Primary), F - Multipurpose	W2	1969	70%	15%	12%	Very High	Very Low	Very Low	Red	Green	Green
285	53558	Spokane, Bryant Center, Main Building	RM1	1960	15%	6%	4%	Very Low	Very Low	Very Low	Green / Yellow	Green / Yellow	Green
286	53500	Spokane, Havermale (Montessori), Main Building 1928 & 1940 Areas	URM	1928	16%	6%	4%	Low	Very Low	Very Low	Green / Yellow	Green / Yellow	Green
287	53500	Spokane, Havermale (Montessori), Main Building 1928 Gym	URM	1928	13%	6%	4%	Low	Very Low	Very Low	Green / Yellow	Green / Yellow	Green
288	53500	Spokane, Havermale (Montessori), Main Building 1965 Areas	URM	1928	16%	5.8%	4.0%	Low	Very Low	Very Low	Green / Yellow	Green / Yellow	Green
289	53579	Spokane, Madison Elementary School, Main Building	URM	1948	22%	11%	8%	Low-Moderate	Very Low	Very Low	Green / Yellow	Green / Yellow	Green
290	53586	Spokane, Bancroft (The Community School), Main Building	URM	1960	13%	5.8%	4.0%	Low	Very Low	Very Low	Green / Yellow	Green / Yellow	Green
291	51456	Stanwood-Camano, Stanwood Elementary School, Main Building Unit C 1966	W2	1966	44%	8%	6%	Moderate	Very Low	Very Low	Yellow / Red	Green	Green
292	51456	Stanwood-Camano, Stanwood Elementary School, Main Building Unit C 1981	W2	1981	23%	8%	6%	Low	Very Low	Very Low	Green / Yellow	Green	Green
293	51456	Stanwood-Camano, Stanwood Elementary School, Main Building Units A, B	W2	1956	44%	8%	6%	Moderate	Very Low	Very Low	Yellow / Red	Green	Green

					EPAT Results								
					Building Damage Estimate			Life Safety Risk Level			Most Likely Post-Earthquake Tagging		
Item Number	ICOS Building ID	Building Name	Construction Type	Date of Construction	Existing Building	Life Safety Retrofit Building	Current Code Building	Existing Building	Life Safety Retrofit Building	Current Code Building	Existing Building	Life Safety Retrofit Building	Current Code Building
294	51449	Stanwood-Camano, Stanwood Middle School, Building 3 - Music (Band & Choir)	RM1	1957	64%	12%	9%	High	Very Low	Very Low	Red	Green	Green
295	51448	Stanwood-Camano, Stanwood Middle School, Main Building (Building 1) Unit D	S2	1992	20%	15%	12%	Low	Very Low	Very Low	Green / Yellow	Green / Yellow	Green
296	51448	Stanwood-Camano, Stanwood Middle School, Main Building (Building 1) Unit G	W2	1989	19%	8%	6%	Low	Very Low	Very Low	Green / Yellow	Green	Green
297	51448	Stanwood-Camano, Stanwood Middle School, Main Building (Building 1) Units E & F	RM1	1968	64%	12%	9.3%	High	Very Low	Very Low	Red	Green	Green
298	51411	Stanwood-Camano, Twin City Elementary School, Main Building	S2	1988	41%	19%	15%	Moderate	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
299	59495	Stevenson-Carson, Carson Elementary School, Main Building	W2	1951	24%	3%	2%	Low	Very Low	Very Low	Yellow	Green	Green
300	59488	Stevenson-Carson, Stevenson High School, Main Building	W2	1954	30%	4%	3%	Low-Moderate	Very Low	Very Low	Yellow	Green	Green
301	59491	Stevenson-Carson, Stevenson High School, Vocational Building	RM1	1964	48%	7%	5%	Moderate-High	Very Low	Very Low	Red	Green	Green
302	59499	Stevenson-Carson, Wind River Education Center, Main Building	PC1	1970	49%	8.2%	6.2%	Moderate-High	Very Low	Very Low	Red	Green	Green
303	59598	Tacoma, DeLong Elementary School, First Bldg-Bldg B	W2	1958	57%	13%	10%	High	Very Low	Very Low	Red	Green	Green
304	59597	Tacoma, DeLong Elementary School, Original Bldg-Bldg A	W2	1953	57%	13%	10%	High	Very Low	Very Low	Red	Green	Green
305	59747	Tacoma, Edison Elementary School, Main Building	W2	1997	20%	13%	10.0%	Low	Very Low	Very Low	Green / Yellow	Green	Green
306	59802	Tacoma, Foss High School, Gym-Pool-Cafeteria	RM1	1972	76%	20%	16%	Very High	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
307	59802	Tacoma, Foss High School, Main Building - 2003 Addition	S2	2003	22%	*	*	Low			Green / Yellow		
308	59802	Tacoma, Foss High School, Main Building - North	RM2	1972	84%	20%	16%	Very High	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
309	59802	Tacoma, Foss High School, Main Building - South	RM2	1972	80%	20%	16%	Very High	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
310	59589	Tacoma, Franklin Elementary School, Main Building	RM1	1997	24%	20%	16%	Low	Very Low	Very Low	Yellow	Green / Yellow	Green / Yellow
311	59804	Tacoma, Larchmont Elementary School, Original Building	W2	1969	55%	12%	10%	High	Very Low	Very Low	Red	Green	Green
312	59790	Tacoma, Lister Elementary School, Main Building	W2	1998	16%	12%	9.6%	Very Low	Very Low	Very Low	Green / Yellow	Green	Green
313	59601	Tacoma, Manitou Park Elementary School, Main Building	W2	1994	20%	13%	10%	Low	Very Low	Very Low	Green / Yellow	Green	Green
314	59664	Tacoma, Mann Elementary School, Main Building	W2	1952	56%	12%	10%	High	Very Low	Very Low	Red	Green	Green
315	59727	Tacoma, Willie Stewart Academy, Main Bldg	URM	1919	74%	19%	15%	Very High	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
316	59627	Tacoma, Northeast Tacoma Elementary School, Gym Bldg-Bldg 2	RM1	1993	23%	19%	15%	Low	Very Low	Very Low	Yellow	Green / Yellow	Green / Yellow
317	59626	Tacoma, Northeast Tacoma Elementary School, Main Bldg-Bldg 1	W2	1993	17%	12%	10%	Very Low	Very Low	Very Low	Green / Yellow	Green	Green
318	59730	Tacoma, Point Defiance Elementary School, Main Building	W2	1959	59%	14%	11%	High	Very Low	Very Low	Red	Green	Green
319	59628	Tacoma, Reed Elementary School, Main Building	W2	1950	56%	13%	10%	High	Very Low	Very Low	Red	Green	Green
320	59688	Tacoma, Roosevelt Elementary School, Main Bldg	W2	1972	55%	12%	10%	High	Very Low	Very Low	Red	Green	Green

					EPAT Results								
					Building Damage Estimate			Life Safety Risk Level			Most Likely Post-Earthquake Tagging		
Item Number	ICOS Building ID	Building Name	Construction Type	Date of Construction	Existing Building	Life Safety Retrofit Building	Current Code Building	Existing Building	Life Safety Retrofit Building	Current Code Building	Existing Building	Life Safety Retrofit Building	Current Code Building
321	59723	Tacoma, Sheridan Elementary School, Main Building	W2	1993	20%	12%	10%	Low	Very Low	Very Low	Green / Yellow	Green	Green
322	59636	Tacoma, Stanley Elementary School, First Bldg	W2	1989	28%	13%	10%	Low-Moderate	Very Low	Very Low	Green / Yellow	Green	Green
323	59635	Tacoma, Stanley Elementary School, Gym Bldg	RM1	1971	76%	19%	15%	Very High	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
324	59768	Tacoma, Tacoma School of the Arts-Pacific, SOTA Pacific Ave	URM	1904	74%	19%	15%	Very High	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
325	59838	Toledo, Toledo Elementary School, Main Building	RM1	1954	68%	14%	11%	Very High	Very Low	Very Low	Red	Green / Yellow	Green
326	59842	Toledo, Toledo Middle School, Classroom Bldg. (Bldg #2)	W2	1952	45%	8%	6%	Moderate-High	Very Low	Very Low	Red	Green	Green
327	59844	Toledo, Toledo Middle School, Main Building (Bldg. #1)	W2	1952	49%	8%	6%	Moderate-High	Very Low	Very Low	Red	Green	Green
328	59969	University Place, Curtis Senior High School, 500 Building	RM1	1971	77%	20%	16%	Very High	Low	Very Low	Red	Green / Yellow	Green / Yellow
329	59982	University Place, Sunset Primary School, Main Building	W2	1966	58%	13%	11%	High	Very Low	Very Low	Red	Green	Green
330	53717	Wahkiakum, Julius A. Wendt Elementary/John C. Thomas Middle School, J A Wendt Elementary School	W2	1952	49%	10%	8%	Moderate-High	Very Low	Very Low	Red	Green	Green
331	51547	West Valley (Yakima), West Valley Junior High School, WVJH (Gym Building)	PC1	1978	31%	22%	17%	Low-Moderate	Low	Low	Red	Yellow	Green / Yellow
332	51546	West Valley (Yakima), West Valley Junior High School, WVJH (Main Building)	RM2	1978	26%	17%	13%	Low	Very Low	Very Low	Green / Yellow	Green / Yellow	Green / Yellow
333	51616	White River, Mountain Meadow Elementary School, Main Building	W2	1990	16%	10%	8%	Very Low	Very Low	Very Low	Green	Green	Green
334	60150	Willapa Valley, Willapa Elementary School, Main Building	W2	1963	61%	15%	12%	High	Very Low	Very Low	Red	Green	Green
335	60193	Woodland, Woodland Middle School, Gymnasium Building	URM	1954	49%	8%	6%	High	Very Low	Very Low	Red	Green	Green
336	60193	Woodland, Woodland Middle School, Main Building	URM	1954	49%	8%	6%	High	Very Low	Very Low	Red	Green	Green
337	60193	Woodland, Woodland Middle School, Performing Arts	RM1	1954	52%	8%	6%	Moderate-High	Very Low	Very Low	Red	Green	Green
338	60192	Woodland, Woodland Middle School, Shared High School /Middle School	URM	1954	49%	8%	6%	High	Very Low	Very Low	Red	Green	Green
339	60193	Woodland, Woodland Middle School, Vocational Building	RM1	1954	52%	8%	6%	Moderate-High	Very Low	Very Low	Red	Green	Green
340	60181	Woodland, Columbia Elementary School, 1991 Addition	RM1	1993	27%	8%	6%	Low-Moderate	Very Low	Very Low	Green / Yellow	Green	Green
341	60181	Woodland, Columbia Elementary School, Main Building	RM1	1972	57%	7.7%	5.7%	High	Very Low	Very Low	Red	Green	Green
342	53952	Yakima, Adams Elementary School, 8 Plex Bldg D	URM	1971	29%	15%	12%	Moderate	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
343	53950	Yakima, Adams Elementary School, BLDG C-1	RM1	1960	32%	15%	12%	Low-Moderate	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
344	53953	Yakima, Adams Elementary School, Old Gym C	RM1	1960	32%	15%	12%	Low-Moderate	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
345	54025	Yakima, Hoover Elementary School, Area D - Annex Building	W2	1975	18%	9%	7%	Low	Very Low	Very Low	Green / Yellow	Green	Green
346	54021	Yakima, Hoover Elementary School, Classrooms - Area F	W2	1975	18%	9%	7%	Low	Very Low	Very Low	Green / Yellow	Green	Green

					EPAT Results								
					Building Damage Estimate			Life Safety Risk Level			Most Likely Post-Earthquake Tagging		
Item Number	ICOS Building ID	Building Name	Construction Type	Date of Construction	Existing Building	Life Safety Retrofit Building	Current Code Building	Existing Building	Life Safety Retrofit Building	Current Code Building	Existing Building	Life Safety Retrofit Building	Current Code Building
347	54023	Yakima, Hoover Elementary School, Main Building - Area A	W2	1948	18%	9%	7%	Low	Very Low	Very Low	Green / Yellow	Green	Green
348	54023	Yakima, Hoover Elementary School, Main Building - Area B	W2	1948	18%	9%	7%	Low	Very Low	Very Low	Green / Yellow	Green	Green
349	53961	Yakima, Nob Hill Elementary School, Main Building	URM	1951	30%	16%	12%	Moderate	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
350	53918	Yakima, Robertson Elementary School, 100 Building - Bldg "B"	RM1	1958	32%	16%	12%	Low-Moderate	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
351	53917	Yakima, Robertson Elementary School, 200 Building - Bldg "C"	RM1	1958	32%	16%	12%	Low-Moderate	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
352	53919	Yakima, Robertson Elementary School, 300 Building - Bldg "D"	RM1	1958	32%	16%	12%	Low-Moderate	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
353	53930	Yakima, Robertson Elementary School, 400 Building - Bldg "E"	RM1	1958	32%	16%	12%	Low-Moderate	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
354	53920	Yakima, Robertson Elementary School, 500 Building - Bldg "G"	RM1	1958	32%	16%	12%	Low-Moderate	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
355	53968	Yakima, Wilson Middle School, Main Building	URM	1961	30%	16%	12%	Moderate	Very Low	Very Low	Red	Green / Yellow	Green / Yellow
356	53969	Yakima, Wilson Middle School, Science Building	URM	1961	30%	16%	12%	Moderate	Very Low	Very Low	Red	Green / Yellow	Green / Yellow

Earthquake Performance Assessment Tool (EPAT) Forms

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Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Aberdeen	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	A.J. West Elementary School	
Building Name	1952 Building	Very High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1952	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	94%	Earthquake ground shaking hazard is higher than 94% of WA campuses.
Site Class (Soil or Rock Type)	E	Soft Clay Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Extremely High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	63%	60%	Very High	Red
Life Safety Retrofit Building	16%	8.1%	Very Low	Green
Current Code Building	13%	5.3%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Aberdeen	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	A.J. West Elementary School	
Building Name	Annex Building	Very High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1966	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	94%	Earthquake ground shaking hazard is higher than 94% of WA campuses.
Site Class (Soil or Rock Type)	E	Soft Clay Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Extremely High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	63%	60%	Very High	Red
Life Safety Retrofit Building	16%	8.1%	Very Low	Green
Current Code Building	13%	5.3%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Aberdeen	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Central Park Elementary School	
Building Name	Annex Building	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1966	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	96%	Earthquake ground shaking hazard is higher than 96% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	84%	84%	Very High	Red
Life Safety Retrofit Building	27%	19%	Low	Yellow
Current Code Building	22%	14%	Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Aberdeen	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Central Park Elementary School	
Building Name	Main Building	Very High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1956	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	96%	Earthquake ground shaking hazard is higher than 96% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	67%	64%	Very High	Red
Life Safety Retrofit Building	18%	9.9%	Very Low	Green/Yellow
Current Code Building	15%	6.6%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Aberdeen	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Hopkins Preschool Center	
Building Name	Hopkins Building	Very High

Building Data

HAZUS Building Type	C2	Concrete Shear Walls
Year Built	1956	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	94%	Earthquake ground shaking hazard is higher than 94% of WA campuses.
Site Class (Soil or Rock Type)	E	Soft Clay Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Extremely High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	85%	86%	Very High	Red
Life Safety Retrofit Building	24%	16%	Low	Green/Yellow
Current Code Building	19%	11%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Aberdeen	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	J.M. Weatherwax High School	
Building Name	1964 Gymnasium Building	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1964	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	93%	Earthquake ground shaking hazard is higher than 93% of WA campuses.
Site Class (Soil or Rock Type)	E	Soft Clay Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Extremely High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	81%	82%	Very High	Red
Life Safety Retrofit Building	24%	16%	Low	Green/Yellow
Current Code Building	19%	11%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Aberdeen	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	J.M. Weatherwax High School	
Building Name	Main Building	Low

Building Data

HAZUS Building Type	S2	Steel Braced Frame
Year Built	2005	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	2003 IBC	
Existing Building Code Level	High	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	93%	Earthquake ground shaking hazard is higher than 93% of WA campuses.
Site Class (Soil or Rock Type)	E	Soft Clay Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Extremely High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	30%	23%	Low	Green/Yellow
Life Safety Retrofit Building	*			
Current Code Building	*			

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Aberdeen	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	McDermoth Elementary School	
Building Name	Main Building	Very High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1930	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	Yes	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	93%	Earthquake ground shaking hazard is higher than 93% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Extremely High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	81%	80%	Very High	Red
Life Safety Retrofit Building	19%	11%	Very Low	Green/Yellow
Current Code Building	16%	7.4%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher (WSP), Michael Pauley (ASD)
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Anacortes	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Mount Erie Elementary School	
Building Name	1955 Original Main Building	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1955	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	41%	Earthquake ground shaking hazard is higher than 41% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	74%	74%	Very High	Red
Life Safety Retrofit Building	15%	7.4%	Very Low	Green/Yellow
Current Code Building	11%	4.7%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto PE SE
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Anacortes	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Mount Erie Elementary School	
Building Name	1991 Gym and Classrooms Addition	Moderate-High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1955	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	41%	Earthquake ground shaking hazard is higher than 41% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	49%	43%	Moderate-High	Red
Life Safety Retrofit Building	9.6%	3.3%	Very Low	Green
Current Code Building	7.4%	1.9%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto PE SE
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Bainbridge Island	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Bainbridge High School	
Building Name	300 Building	High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1981	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1976-1985 UBC	
Existing Building Code Level	Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	86%	Earthquake ground shaking hazard is higher than 86% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	54%	51%	High	Red
Life Safety Retrofit Building	23%	15%	Low	Green/Yellow
Current Code Building	18%	10%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Stephen Blount, Ben Fisher, Glen Tyrrell (BISD)
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Bainbridge Island	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Bainbridge High School	
Building Name	500 Building	High

Building Data

HAZUS Building Type	PC1	Precast Concrete Tilt-Up Walls
Year Built	1981	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1976-1985 UBC	
Existing Building Code Level	Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	Yes	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	86%	Earthquake ground shaking hazard is higher than 86% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	61%	57%	High	Red
Life Safety Retrofit Building	32%	24%	Low-Moderate	Yellow
Current Code Building	27%	19%	Low	Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Stephen Blount, Ben Fisher, Glen Tyrrell (BISD)
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Bainbridge Island	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Commodore Center	
Building Name	Art and Classrooms	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1970	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	86%	Earthquake ground shaking hazard is higher than 86% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	80%	80%	Very High	Red
Life Safety Retrofit Building	23%	15%	Low	Green/Yellow
Current Code Building	18%	10%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Stephen Blount, Ben Fisher, Glen Tyrrell (BISD)
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Bainbridge Island	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Commodore Center	
Building Name	Commodore Options School	Very High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1948	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	86%	Earthquake ground shaking hazard is higher than 86% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	67%	64%	Very High	Red
Life Safety Retrofit Building	15%	7.3%	Very Low	Green
Current Code Building	12%	4.7%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Stephen Blount, Ben Fisher, Glen Tyrrell (BISD)
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Bainbridge Island	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Commodore Center	
Building Name	Eagle Harbor HS	Moderate

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1981	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1976-1985 UBC	
Existing Building Code Level	Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	86%	Earthquake ground shaking hazard is higher than 86% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	44%	40%	Moderate	Red
Life Safety Retrofit Building	23%	15%	Low	Green/Yellow
Current Code Building	18%	10%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Stephen Blount, Ben Fisher, Glen Tyrrell (BISD)
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Bainbridge Island	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Ordway Elementary School	
Building Name	Education Pod	Moderate

Building Data

HAZUS Building Type	S2	Steel Braced Frame
Year Built	1978	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1976-1985 UBC	
Existing Building Code Level	Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	85%	Earthquake ground shaking hazard is higher than 85% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	48%	44%	Moderate	Red
Life Safety Retrofit Building	28%	21%	Low	Green/Yellow
Current Code Building	23%	16%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Stephen Blount, Ben Fisher, Glen Tyrrell (BISD)
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Bainbridge Island	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Ordway Elementary School	
Building Name	K-4 Building	Moderate

Building Data

HAZUS Building Type	S2	Steel Braced Frame
Year Built	1978	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1976-1985 UBC	
Existing Building Code Level	Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	85%	Earthquake ground shaking hazard is higher than 85% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	48%	44%	Moderate	Red
Life Safety Retrofit Building	28%	21%	Low	Green/Yellow
Current Code Building	23%	16%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Stephen Blount, Ben Fisher, Glen Tyrrell (BISD)
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Bainbridge Island	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Ordway Elementary School	
Building Name	Main Building	Moderate-High

Building Data

HAZUS Building Type	S2	Steel Braced Frame
Year Built	1978	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1976-1985 UBC	
Existing Building Code Level	Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	85%	Earthquake ground shaking hazard is higher than 85% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	54%	51%	Moderate-High	Red
Life Safety Retrofit Building	28%	21%	Low	Green/Yellow
Current Code Building	23%	16%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher, Stephen Blount, Glen Tyrrell (BISD)
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Bainbridge Island	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Woodward Middle School	
Building Name	2-Story Classroom Wing	Low

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1994	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1988-1991 UBC	
Existing Building Code Level	High-Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	84%	Earthquake ground shaking hazard is higher than 84% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	27%	19%	Low	Green/Yellow
Life Safety Retrofit Building	15%	7.1%	Very Low	Green
Current Code Building	12%	4.5%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher, Stephen Blount, Glen Tyrrell (BISD)
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Bainbridge Island	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Woodward Middle School	
Building Name	Gym	Low-Moderate

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1994	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1988-1991 UBC	
Existing Building Code Level	High-Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	84%	Earthquake ground shaking hazard is higher than 84% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	36%	30%	Low-Moderate	Yellow/Red
Life Safety Retrofit Building	22%	14%	Low	Green/Yellow
Current Code Building	18%	9.9%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Stephen Blount, Ben Fisher, Glen Tyrrell (BISD)
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Bainbridge Island	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Woodward Middle School	
Building Name	Main Building	Low-Moderate

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1994	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1988-1991 UBC	
Existing Building Code Level	High-Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	84%	Earthquake ground shaking hazard is higher than 84% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	36%	30%	Low-Moderate	Yellow/Red
Life Safety Retrofit Building	22%	14%	Low	Green/Yellow
Current Code Building	18%	9.9%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Stephen Blount, Ben Fisher, Glen Tyrrell (BISD)
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Bellingham	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Fairhaven Middle School	
Building Name	Main Building - Classrooms	Very Low

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1994	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1988-1991 UBC	
Existing Building Code Level	High-Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	29%	Earthquake ground shaking hazard is higher than 29% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	10%	4.6%	Very Low	Green
Life Safety Retrofit Building	7.6%	2.1%	Very Low	Green
Current Code Building	5.8%	1.1%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto, Kenny O'Neill & Noman Shafi
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Bellingham	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Fairhaven Middle School	
Building Name	West Wing	Very Low

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1994	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1988-1991 UBC	
Existing Building Code Level	High-Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	29%	Earthquake ground shaking hazard is higher than 29% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	10%	4.6%	Very Low	Green
Life Safety Retrofit Building	7.6%	2.1%	Very Low	Green
Current Code Building	5.8%	1.1%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto, Kenny O'Neill & Noman Shafi
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Bellingham	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Roosevelt Elementary School	
Building Name	Main Building	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1972	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	38%	Earthquake ground shaking hazard is higher than 38% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	75%	75%	Very High	Red
Life Safety Retrofit Building	13%	5.9%	Very Low	Green
Current Code Building	9.8%	3.6%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto, PE SE
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Bellingham	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Whatcom Middle School	
Building Name	Industrial Arts Building	Low-Moderate

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1978	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1976-1985 UBC	
Existing Building Code Level	Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	39%	Earthquake ground shaking hazard is higher than 39% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	28%	23%	Low-Moderate	Yellow/Red
Life Safety Retrofit Building	13%	6.0%	Very Low	Green
Current Code Building	10.0%	3.8%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto, Kenny O'Neil & Noman Shafi
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Bellingham	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Whatcom Middle School	
Building Name	Music Building	Moderate-High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1971	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	39%	Earthquake ground shaking hazard is higher than 39% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	45%	39%	Moderate-High	Red
Life Safety Retrofit Building	8.4%	2.6%	Very Low	Green
Current Code Building	6.5%	1.4%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto, Kenny O'Neill & Noman Shafi
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Bethel	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Camas Prairie Elementary School	
Building Name	Main Building	Low

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1987	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1976-1985 UBC	
Existing Building Code Level	Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	63%	Earthquake ground shaking hazard is higher than 63% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low to Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	27%	20%	Low	Green/Yellow
Life Safety Retrofit Building	12%	4.8%	Very Low	Green
Current Code Building	9.3%	2.9%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher, Stephen Blount
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Bethel	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Rocky Ridge Elementary School	
Building Name	Main Building	Low

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1985	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1976-1985 UBC	
Existing Building Code Level	Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	56%	Earthquake ground shaking hazard is higher than 56% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low to Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	25%	19%	Low	Green/Yellow
Life Safety Retrofit Building	11%	4.2%	Very Low	Green
Current Code Building	8.6%	2.5%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher, Stephen Blount
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Brinnon	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Brinnon Elementary School	
Building Name	Main Building	Very High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1952	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	72%	Earthquake ground shaking hazard is higher than 72% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Extremely High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	71%	68%	Very High	Red
Life Safety Retrofit Building	15%	7.1%	Very Low	Green
Current Code Building	12%	4.5%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto, PE SE
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Burlington-Edison	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Burlington-Edison High School	
Building Name	500 Wing	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1973	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	37%	Earthquake ground shaking hazard is higher than 37% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	68%	67%	Very High	Red
Life Safety Retrofit Building	14%	6.7%	Very Low	Green/Yellow
Current Code Building	11%	4.3%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Kenny O'Neill & Suzie Bauer
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Burlington-Edison	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Burlington-Edison High School	
Building Name	Admin/Classroom Building	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1973	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	37%	Earthquake ground shaking hazard is higher than 37% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	68%	67%	Very High	Red
Life Safety Retrofit Building	14%	6.7%	Very Low	Green/Yellow
Current Code Building	11%	4.3%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Kenny O'Neill & Suzie Bauer
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Burlington-Edison	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Burlington-Edison High School	
Building Name	Art/Tiger TUB Building	Very High

Building Data

HAZUS Building Type	C2	Concrete Shear Walls
Year Built	1958	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	37%	Earthquake ground shaking hazard is higher than 37% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	68%	67%	Very High	Red
Life Safety Retrofit Building	14%	6.7%	Very Low	Green/Yellow
Current Code Building	11%	4.3%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Kenny O'Neill & Suzie Bauer
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Burlington-Edison	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Burlington-Edison High School	
Building Name	Cafeteria and 400 Wing	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1970	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	37%	Earthquake ground shaking hazard is higher than 37% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	73%	73%	Very High	Red
Life Safety Retrofit Building	14%	6.7%	Very Low	Green/Yellow
Current Code Building	11%	4.3%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Kenny O'Neill & Suzie Bauer
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Burlington-Edison	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Burlington-Edison High School	
Building Name	CTE	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1969	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	37%	Earthquake ground shaking hazard is higher than 37% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	68%	67%	Very High	Red
Life Safety Retrofit Building	14%	6.7%	Very Low	Green/Yellow
Current Code Building	11%	4.3%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Kenny O'Neill & Suzie Bauer
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Burlington-Edison	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Burlington-Edison High School	
Building Name	Fieldhouse 1953 and 1975	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1953	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	37%	Earthquake ground shaking hazard is higher than 37% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	73%	73%	Very High	Red
Life Safety Retrofit Building	14%	6.7%	Very Low	Green/Yellow
Current Code Building	11%	4.3%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Kenny O'Neill & Suzie Bauer
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Burlington-Edison	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Burlington-Edison High School	
Building Name	Fieldhouse 1984 Addition	Low-Moderate

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1984	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1976-1985 UBC	
Existing Building Code Level	Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	37%	Earthquake ground shaking hazard is higher than 37% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	30%	25%	Low-Moderate	Yellow/Red
Life Safety Retrofit Building	14%	6.7%	Very Low	Green/Yellow
Current Code Building	11%	4.3%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Kenny O'Neill & Suzie Bauer
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Burlington-Edison	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	West View Elementary School	
Building Name	Main Building	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1950	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	37%	Earthquake ground shaking hazard is higher than 37% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	53%	48%	High	Red
Life Safety Retrofit Building	9.1%	3.0%	Very Low	Green
Current Code Building	7.0%	1.7%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Kenny O'Neill & Suzie Bauer
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Camas	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Dorothy Fox Elementary School	
Building Name	Main Building	Moderate-High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1982	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1976-1985 UBC	
Existing Building Code Level	Low	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate to High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	35%	Earthquake ground shaking hazard is higher than 35% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Moderate to High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	50%	48%	Moderate-High	Red
Life Safety Retrofit Building	8.5%	3.0%	Very Low	Green
Current Code Building	6.4%	1.7%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Cascade	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Beaver Valley School	
Building Name	Main Building	Very Low

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	2000	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1997 UBC	
Existing Building Code Level	Moderate	
Geographic Area	Eastern	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	23%	Earthquake ground shaking hazard is higher than 23% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low to Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Moderate	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	7.3%	3.2%	Very Low	Green
Life Safety Retrofit Building	*			
Current Code Building	*			

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Kenny O'Neill, PE, SE
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Cascade	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Beaver Valley School	
Building Name	Old Winton School House	Low

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1916	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Eastern	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	23%	Earthquake ground shaking hazard is higher than 23% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low to Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Moderate	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	22%	15%	Low	Green/Yellow
Life Safety Retrofit Building	12%	5.7%	Very Low	Green/Yellow
Current Code Building	8.9%	3.5%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Kenny O'Neill, PE, SE
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Central Kitsap	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Cottonwood Elementary School	
Building Name	Gym, PC1	Very High

Building Data

HAZUS Building Type	PC1	Precast Concrete Tilt-Up Walls
Year Built	1976	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1973 UBC	
Existing Building Code Level	Moderate-Low	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	85%	Earthquake ground shaking hazard is higher than 85% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low to Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	64%	62%	Very High	Red
Life Safety Retrofit Building	33%	25%	Low-Moderate	Yellow
Current Code Building	27%	19%	Low	Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Casey Hansen, Kenny O'Neill
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Central Kitsap	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Cottonwood Elementary School	
Building Name	Main, W2	Moderate

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1976	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1973 UBC	
Existing Building Code Level	Moderate-Low	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	85%	Earthquake ground shaking hazard is higher than 85% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low to Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	40%	34%	Moderate	Yellow/Red
Life Safety Retrofit Building	15%	7.5%	Very Low	Green
Current Code Building	12%	4.8%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Casey Hansen, Kenny O'Neill
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Central Kitsap	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Emerald Heights Elementary School	
Building Name	Gym	Low-Moderate

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1993	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1988-1991 UBC	
Existing Building Code Level	High-Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	82%	Earthquake ground shaking hazard is higher than 82% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	26%	20%	Low-Moderate	Yellow
Life Safety Retrofit Building	22%	14%	Low	Green/Yellow
Current Code Building	17%	9.5%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Casey Hansen, Kenny O'Neill
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Central Kitsap	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Emerald Heights Elementary School	
Building Name	Main, S2	Low-Moderate

Building Data

HAZUS Building Type	S2	Steel Braced Frame
Year Built	1993	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1988-1991 UBC	
Existing Building Code Level	High-Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	82%	Earthquake ground shaking hazard is higher than 82% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	33%	27%	Low-Moderate	Yellow/Red
Life Safety Retrofit Building	27%	20%	Low	Green/Yellow
Current Code Building	22%	15%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Casey Hansen, Kenny O'neill
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Central Kitsap	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Green Mountain Elementary School	
Building Name	Gymnasium, RM1	Moderate-High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1992	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1976-1985 UBC	
Existing Building Code Level	Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	89%	Earthquake ground shaking hazard is higher than 89% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	47%	43%	Moderate-High	Red
Life Safety Retrofit Building	25%	17%	Low	Green/Yellow
Current Code Building	20%	12%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Casey Hansen, Kenny O'Neill
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Central Kitsap	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Green Mountain Elementary School	
Building Name	Main, S2	Moderate-High

Building Data

HAZUS Building Type	S2	Steel Braced Frame
Year Built	1992	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1976-1985 UBC	
Existing Building Code Level	Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	89%	Earthquake ground shaking hazard is higher than 89% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	52%	48%	Moderate-High	Red
Life Safety Retrofit Building	31%	25%	Low	Yellow
Current Code Building	26%	19%	Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Casey Hansen, Kenny O'neill
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Central Kitsap	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Pinecrest Elementary School	
Building Name	Gymnasium, RM1	Low-Moderate

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1998	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1994 UBC	
Existing Building Code Level	High-Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	91%	Earthquake ground shaking hazard is higher than 91% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	30%	24%	Low-Moderate	Yellow
Life Safety Retrofit Building	25%	17%	Low	Green/Yellow
Current Code Building	20%	12%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Casey Hansen, Kenny O'Neill
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Central Kitsap	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Pinecrest Elementary School	
Building Name	Main Bldg, W2	Low

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1998	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1994 UBC	
Existing Building Code Level	High-Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	91%	Earthquake ground shaking hazard is higher than 91% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	22%	14%	Low	Green/Yellow
Life Safety Retrofit Building	17%	8.7%	Very Low	Green/Yellow
Current Code Building	13%	5.7%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Casey Hansen, Kenny O'Neill
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Central Kitsap	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Pinecrest Elementary School	
Building Name	Main, S2	Low-Moderate

Building Data

HAZUS Building Type	S2	Steel Braced Frame
Year Built	1998	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1994 UBC	
Existing Building Code Level	High-Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	91%	Earthquake ground shaking hazard is higher than 91% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	37%	32%	Low-Moderate	Yellow/Red
Life Safety Retrofit Building	31%	24%	Low	Yellow
Current Code Building	26%	19%	Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Casey Hansen, Kenny O'Neill
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Central Kitsap	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Woodlands Elementary School	
Building Name	Main	Low-Moderate

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1981	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1976-1985 UBC	
Existing Building Code Level	Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	88%	Earthquake ground shaking hazard is higher than 88% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	34%	28%	Low-Moderate	Green/Yellow
Life Safety Retrofit Building	16%	8.0%	Very Low	Green
Current Code Building	13%	5.2%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Casey Hansen, Kenny O'Neill
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Centralia	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Centralia Middle School	
Building Name	Classroom Wings	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1958	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	52%	Earthquake ground shaking hazard is higher than 52% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	54%	49%	High	Red
Life Safety Retrofit Building	11%	4.5%	Very Low	Green
Current Code Building	9.0%	2.7%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Centralia	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Centralia Middle School	
Building Name	Gym Wing	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1958	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	52%	Earthquake ground shaking hazard is higher than 52% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	54%	49%	High	Red
Life Safety Retrofit Building	11%	4.5%	Very Low	Green
Current Code Building	9.0%	2.7%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Centralia	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Centralia Middle School	
Building Name	Main Building	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1958	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	52%	Earthquake ground shaking hazard is higher than 52% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	54%	49%	High	Red
Life Safety Retrofit Building	11%	4.5%	Very Low	Green
Current Code Building	9.0%	2.7%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Centralia	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Oakview Elementary School	
Building Name	Main Building	Very High

Building Data

HAZUS Building Type	PC1	Precast Concrete Tilt-Up Walls
Year Built	1928	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	52%	Earthquake ground shaking hazard is higher than 52% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	80%	80%	Very High	Red
Life Safety Retrofit Building	26%	18%	Low	Yellow
Current Code Building	21%	13%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Centralia	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Washington Elementary School	
Building Name	Main Building	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1950	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	47%	Earthquake ground shaking hazard is higher than 47% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	73%	73%	Very High	Red
Life Safety Retrofit Building	17%	9.6%	Very Low	Green/Yellow
Current Code Building	14%	6.4%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Chimacum	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Chimacum High School	
Building Name	High School 100 Bldg A - North Wing	Moderate

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1979	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1976-1985 UBC	
Existing Building Code Level	Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	62%	Earthquake ground shaking hazard is higher than 62% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	42%	38%	Moderate	Red
Life Safety Retrofit Building	19%	11%	Very Low	Green/Yellow
Current Code Building	15%	7.3%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Chimacum	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Chimacum High School	
Building Name	High School 100 Bldg A - South Wing	Moderate

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1979	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1976-1985 UBC	
Existing Building Code Level	Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	62%	Earthquake ground shaking hazard is higher than 62% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	42%	38%	Moderate	Red
Life Safety Retrofit Building	19%	11%	Very Low	Green/Yellow
Current Code Building	15%	7.3%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Chimacum	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Chimacum Middle School	
Building Name	Middle School Bldg 100 B	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1959	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	68%	Earthquake ground shaking hazard is higher than 68% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	75%	76%	Very High	Red
Life Safety Retrofit Building	19%	11%	Very Low	Green/Yellow
Current Code Building	15%	7.5%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Chimacum	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Chimacum Middle School	
Building Name	Middle School Bldg 200	Low

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1991	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1988-1991 UBC	
Existing Building Code Level	High-Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	68%	Earthquake ground shaking hazard is higher than 68% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	23%	17%	Low	Yellow
Life Safety Retrofit Building	19%	11%	Very Low	Green/Yellow
Current Code Building	15%	7.5%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Clover Park	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Custer Elementary School	
Building Name	Library - CU2	Very Low

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1992	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1988-1991 UBC	
Existing Building Code Level	High-Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	73%	Earthquake ground shaking hazard is higher than 73% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	17%	10%	Very Low	Green/Yellow
Life Safety Retrofit Building	13%	5.6%	Very Low	Green
Current Code Building	10%	3.5%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Clover Park	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Custer Elementary School	
Building Name	Second Classroom Building - CU1	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1952	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	73%	Earthquake ground shaking hazard is higher than 73% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	57%	53%	High	Red
Life Safety Retrofit Building	13%	5.6%	Very Low	Green
Current Code Building	10%	3.5%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Clover Park	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Oakbrook Elementary School	
Building Name	First Classroom Building - OB1	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1970	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	74%	Earthquake ground shaking hazard is higher than 74% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	77%	77%	Very High	Red
Life Safety Retrofit Building	20%	12%	Very Low	Green/Yellow
Current Code Building	16%	8.1%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Clover Park	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Oakbrook Elementary School	
Building Name	Gym / MPR - OB2	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1970	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	74%	Earthquake ground shaking hazard is higher than 74% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	77%	77%	Very High	Red
Life Safety Retrofit Building	20%	12%	Very Low	Green/Yellow
Current Code Building	16%	8.1%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Clover Park	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Tillicum Elementary School	
Building Name	Classroom Building - TL1	Very High

Building Data

HAZUS Building Type	URM	Unreinforced Masonry Bearing Walls
Year Built	1944	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	71%	Earthquake ground shaking hazard is higher than 71% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	77%	76%	Very High	Red
Life Safety Retrofit Building	19%	11%	Very Low	Green/Yellow
Current Code Building	15%	7.8%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Dieringer	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	North Tapps Middle School	
Building Name	Main Building	Very Low

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1992	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1988-1991 UBC	
Existing Building Code Level	High-Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	50%	Earthquake ground shaking hazard is higher than 50% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	14%	7.7%	Very Low	Green
Life Safety Retrofit Building	11%	4.0%	Very Low	Green
Current Code Building	8.3%	2.3%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Ephrata	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Ephrata High School	
Building Name	1937 Annex (Former Beezley Springs ES)	Moderate

Building Data

HAZUS Building Type	URM	Unreinforced Masonry Bearing Walls
Year Built	1937	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Eastern	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	19%	Earthquake ground shaking hazard is higher than 19% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Moderate	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	31%	27%	Moderate	Red
Life Safety Retrofit Building	17%	12%	Very Low	Green/Yellow
Current Code Building	13%	8.3%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Dylan Larson
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Ephrata	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Ephrata High School	
Building Name	Performing Arts Center PAC	Moderate

Building Data

HAZUS Building Type	URM	Unreinforced Masonry Bearing Walls
Year Built	1951	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Eastern	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	19%	Earthquake ground shaking hazard is higher than 19% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Moderate	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	31%	27%	Moderate	Red
Life Safety Retrofit Building	17%	12%	Very Low	Green/Yellow
Current Code Building	13%	8.3%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Dylan Larson
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Ephrata	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Grant Elementary School	
Building Name	Main Building	Moderate

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1957	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Eastern	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	19%	Earthquake ground shaking hazard is higher than 19% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Moderate	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	38%	35%	Moderate	Red
Life Safety Retrofit Building	17%	12%	Very Low	Green/Yellow
Current Code Building	13%	8.3%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Dylan Larson
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Ephrata	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Parkway School	
Building Name	Main Building	Low

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1947	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Eastern	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	19%	Earthquake ground shaking hazard is higher than 19% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Moderate	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	16%	9.5%	Low	Green/Yellow
Life Safety Retrofit Building	6.4%	2.2%	Very Low	Green
Current Code Building	4.6%	1.2%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Dylan Larson
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Everett	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Jackson Elementary School	
Building Name	Main Building	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1949	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	85%	Earthquake ground shaking hazard is higher than 85% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Very Low to Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	54%	50%	High	Red
Life Safety Retrofit Building	12%	4.8%	Very Low	Green
Current Code Building	9.3%	2.9%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Paul Crocker & Noman Shafi
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Everett	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Madison Elementary School	
Building Name	Main Building	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1947	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	90%	Earthquake ground shaking hazard is higher than 90% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	57%	52%	High	Red
Life Safety Retrofit Building	13%	5.4%	Very Low	Green
Current Code Building	10%	3.3%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Paul Crocker & Noman Shafi
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Federal Way	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Brigadoon Elementary School	
Building Name	Main Office Building - E	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1969	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	67%	Earthquake ground shaking hazard is higher than 67% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	56%	52%	High	Red
Life Safety Retrofit Building	13%	5.4%	Very Low	Green
Current Code Building	9.9%	3.3%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Federal Way	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Brigadoon Elementary School	
Building Name	Multipurpose Building - C	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1970	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	67%	Earthquake ground shaking hazard is higher than 67% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	56%	52%	High	Red
Life Safety Retrofit Building	13%	5.4%	Very Low	Green
Current Code Building	9.9%	3.3%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Federal Way	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Brigadoon Elementary School	
Building Name	Rooms 20-25 and Kitchen - B	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1969	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	67%	Earthquake ground shaking hazard is higher than 67% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	56%	52%	High	Red
Life Safety Retrofit Building	13%	5.4%	Very Low	Green
Current Code Building	9.9%	3.3%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Federal Way	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Brigadoon Elementary School	
Building Name	Rooms 30-35 - F	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1969	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	67%	Earthquake ground shaking hazard is higher than 67% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	56%	52%	High	Red
Life Safety Retrofit Building	13%	5.4%	Very Low	Green
Current Code Building	9.9%	3.3%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Federal Way	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Brigadoon Elementary School	
Building Name	Rooms 40-43 and Library - D	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1969	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	67%	Earthquake ground shaking hazard is higher than 67% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	56%	52%	High	Red
Life Safety Retrofit Building	13%	5.4%	Very Low	Green
Current Code Building	9.9%	3.3%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Federal Way	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Brigadoon Elementary School	
Building Name	Rooms 50-58 - A	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1969	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	67%	Earthquake ground shaking hazard is higher than 67% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	56%	52%	High	Red
Life Safety Retrofit Building	13%	5.4%	Very Low	Green
Current Code Building	9.9%	3.3%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Federal Way	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Camelot Elementary School	
Building Name	Main Building	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1964	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	68%	Earthquake ground shaking hazard is higher than 68% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	61%	57%	High	Red
Life Safety Retrofit Building	12%	5.0%	Very Low	Green
Current Code Building	9.5%	3.0%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher, Darwin Valenzuale
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Federal Way	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Kilo Middle School	
Building Name	Building A Main Office	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1970	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	66%	Earthquake ground shaking hazard is higher than 66% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	55%	50%	High	Red
Life Safety Retrofit Building	12%	4.9%	Very Low	Green
Current Code Building	9.4%	3.0%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher, Darwin Valenzuela
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Federal Way	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Kilo Middle School	
Building Name	Building B	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1970	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	66%	Earthquake ground shaking hazard is higher than 66% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	55%	50%	High	Red
Life Safety Retrofit Building	12%	4.9%	Very Low	Green
Current Code Building	9.4%	3.0%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher, Darwin Valenzuela
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Federal Way	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Kilo Middle School	
Building Name	Building C	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1970	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	66%	Earthquake ground shaking hazard is higher than 66% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	55%	50%	High	Red
Life Safety Retrofit Building	12%	4.9%	Very Low	Green
Current Code Building	9.4%	3.0%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher, Darwin Valenzuela
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Federal Way	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Kilo Middle School	
Building Name	Building D	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1970	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	66%	Earthquake ground shaking hazard is higher than 66% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	55%	50%	High	Red
Life Safety Retrofit Building	12%	4.9%	Very Low	Green
Current Code Building	9.4%	3.0%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher, Darwin Valenzuela
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Federal Way	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Kilo Middle School	
Building Name	Building E Little Theater	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1970	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	66%	Earthquake ground shaking hazard is higher than 66% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	55%	50%	High	Red
Life Safety Retrofit Building	12%	4.9%	Very Low	Green
Current Code Building	9.4%	3.0%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher, Darwin Valenzuela
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Federal Way	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Kilo Middle School	
Building Name	Building F1-F4 and Library	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1970	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	66%	Earthquake ground shaking hazard is higher than 66% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	55%	50%	High	Red
Life Safety Retrofit Building	12%	4.9%	Very Low	Green
Current Code Building	9.4%	3.0%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher, Darwin Valenzuela
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Federal Way	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Kilo Middle School	
Building Name	Building F5-F8	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1970	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	66%	Earthquake ground shaking hazard is higher than 66% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	55%	50%	High	Red
Life Safety Retrofit Building	12%	4.9%	Very Low	Green
Current Code Building	9.4%	3.0%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher, Darwin Valenzuela
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Federal Way	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Kilo Middle School	
Building Name	Building G	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1970	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	66%	Earthquake ground shaking hazard is higher than 66% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	55%	50%	High	Red
Life Safety Retrofit Building	12%	4.9%	Very Low	Green
Current Code Building	9.4%	3.0%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher, Darwin Valenzuela
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Federal Way	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Kilo Middle School	
Building Name	Building H Gymnasium	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1970	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	66%	Earthquake ground shaking hazard is higher than 66% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	55%	50%	High	Red
Life Safety Retrofit Building	12%	4.9%	Very Low	Green
Current Code Building	9.4%	3.0%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher, Darwin Valenzuela
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Federal Way	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Kilo Middle School	
Building Name	Building I Cafeteria	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1970	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	66%	Earthquake ground shaking hazard is higher than 66% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	55%	50%	High	Red
Life Safety Retrofit Building	12%	4.9%	Very Low	Green
Current Code Building	9.4%	3.0%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher, Darwin Valenzuela
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Federal Way	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Kilo Middle School	
Building Name	Building J	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1970	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	66%	Earthquake ground shaking hazard is higher than 66% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	55%	50%	High	Red
Life Safety Retrofit Building	12%	4.9%	Very Low	Green
Current Code Building	9.4%	3.0%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher, Darwin Valenzuela
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Federal Way	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Nautilus K-8 School	
Building Name	Multipurpose Rm Bldg	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1968	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	76%	Earthquake ground shaking hazard is higher than 76% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	56%	52%	High	Red
Life Safety Retrofit Building	13%	5.3%	Very Low	Green
Current Code Building	9.9%	3.3%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Federal Way	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Nautilus K-8 School	
Building Name	Rooms 1-6 Bldg	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1968	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	76%	Earthquake ground shaking hazard is higher than 76% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	56%	52%	High	Red
Life Safety Retrofit Building	13%	5.3%	Very Low	Green
Current Code Building	9.9%	3.3%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Federal Way	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Nautilus K-8 School	
Building Name	Rooms 7-14 Bldg	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1968	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	76%	Earthquake ground shaking hazard is higher than 76% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	56%	52%	High	Red
Life Safety Retrofit Building	13%	5.3%	Very Low	Green
Current Code Building	9.9%	3.3%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Federal Way	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Nautilus K-8 School	
Building Name	Rooms 15-20 Bldg	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1968	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	76%	Earthquake ground shaking hazard is higher than 76% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	56%	52%	High	Red
Life Safety Retrofit Building	13%	5.3%	Very Low	Green
Current Code Building	9.9%	3.3%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Federal Way	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Nautilus K-8 School	
Building Name	Rooms 22-25 Bldg	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1968	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	76%	Earthquake ground shaking hazard is higher than 76% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	56%	52%	High	Red
Life Safety Retrofit Building	13%	5.3%	Very Low	Green
Current Code Building	9.9%	3.3%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Federal Way	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Sacajawea Middle School	
Building Name	100 Building	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1966	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	74%	Earthquake ground shaking hazard is higher than 74% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	75%	76%	Very High	Red
Life Safety Retrofit Building	19%	11%	Very Low	Green/Yellow
Current Code Building	15%	7.5%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Federal Way	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Sacajawea Middle School	
Building Name	300 Building/Cafeteria	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1968	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	74%	Earthquake ground shaking hazard is higher than 74% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	75%	76%	Very High	Red
Life Safety Retrofit Building	19%	11%	Very Low	Green/Yellow
Current Code Building	15%	7.5%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Federal Way	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Sacajawea Middle School	
Building Name	400 Building	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1966	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	74%	Earthquake ground shaking hazard is higher than 74% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	79%	79%	Very High	Red
Life Safety Retrofit Building	19%	11%	Very Low	Green/Yellow
Current Code Building	15%	7.5%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Federal Way	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Sacajawea Middle School	
Building Name	600/700/800 Building	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1966	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	74%	Earthquake ground shaking hazard is higher than 74% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	79%	79%	Very High	Red
Life Safety Retrofit Building	19%	11%	Very Low	Green/Yellow
Current Code Building	15%	7.5%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Federal Way	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Sacajawea Middle School	
Building Name	900 Building	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1966	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	74%	Earthquake ground shaking hazard is higher than 74% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	75%	76%	Very High	Red
Life Safety Retrofit Building	19%	11%	Very Low	Green/Yellow
Current Code Building	15%	7.5%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Federal Way	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Sacajawea Middle School	
Building Name	Gym (500) Building	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1966	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	74%	Earthquake ground shaking hazard is higher than 74% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	75%	76%	Very High	Red
Life Safety Retrofit Building	19%	11%	Very Low	Green/Yellow
Current Code Building	15%	7.5%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Federal Way	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Sacajawea Middle School	
Building Name	Main Office Building	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1968	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	74%	Earthquake ground shaking hazard is higher than 74% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	75%	76%	Very High	Red
Life Safety Retrofit Building	19%	11%	Very Low	Green/Yellow
Current Code Building	15%	7.5%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Ferndale	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Central Elementary School	
Building Name	Main Building	Moderate

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1920	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate to High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	33%	Earthquake ground shaking hazard is higher than 33% of WA campuses.
Site Class (Soil or Rock Type)	E	Soft Clay Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	42%	36%	Moderate	Yellow/Red
Life Safety Retrofit Building	6.0%	1.4%	Very Low	Green
Current Code Building	4.6%	0.7%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Kenny O'Neill, PE, SE, Brian Matsumoto, PE, SE, Noman Shafi
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Ferndale	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Custer Elementary	
Building Name	Main Building	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1936	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	33%	Earthquake ground shaking hazard is higher than 33% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	55%	51%	High	Red
Life Safety Retrofit Building	8.4%	2.5%	Very Low	Green
Current Code Building	6.5%	1.4%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Kenny O'Neill, PE, SE, Brian Matsumoto, PE, SE, Noman Shafi
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Granite Falls	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Crossroads Alternative High School	
Building Name	Main Building, RM1	Very Low

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1938	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1997 UBC	
Existing Building Code Level	High	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	36%	Earthquake ground shaking hazard is higher than 36% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	10%	4.8%	Very Low	Green/Yellow
Life Safety Retrofit Building	13%	6.1%	Very Low	Green
Current Code Building	10%	3.8%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Casey Hansen, Brian Matsumoto
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Granite Falls	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Crossroads Alternative High School	
Building Name	Main Building, W2	Very Low

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1938	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1997 UBC	
Existing Building Code Level	High	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	36%	Earthquake ground shaking hazard is higher than 36% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	7.5%	2.4%	Very Low	Green
Life Safety Retrofit Building	8.5%	2.6%	Very Low	Green
Current Code Building	6.5%	1.5%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Casey Hansen, Brian Matsumoto
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Granite Falls	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Granite Falls Middle School	
Building Name	Main Building - Gym	High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1974	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	36%	Earthquake ground shaking hazard is higher than 36% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	62%	61%	High	Red
Life Safety Retrofit Building	11%	4.9%	Very Low	Green
Current Code Building	8.7%	3.0%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Casey Hansen, Brian Matsumoto
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Granite Falls	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Granite Falls Middle School	
Building Name	Main Building (Excl. Gym), RM1	High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1973	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	36%	Earthquake ground shaking hazard is higher than 36% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	62%	61%	High	Red
Life Safety Retrofit Building	11%	4.9%	Very Low	Green
Current Code Building	8.7%	3.0%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Casey Hansen, Brian Matsumoto
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Granite Falls	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Granite Falls Middle School	
Building Name	Main Building (Excl. Gym), W2	Moderate

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1974	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	36%	Earthquake ground shaking hazard is higher than 36% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	42%	36%	Moderate	Yellow/Red
Life Safety Retrofit Building	7.4%	2.0%	Very Low	Green
Current Code Building	5.7%	1.1%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Casey Hansen, Brian Matsumoto
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Granite Falls	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Granite Falls Middle School	
Building Name	Multi-Purpose Building	Low

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1988	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1976-1985 UBC	
Existing Building Code Level	Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	36%	Earthquake ground shaking hazard is higher than 36% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	20%	14%	Low	Green/Yellow
Life Safety Retrofit Building	7.4%	2.0%	Very Low	Green
Current Code Building	5.7%	1.1%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Casey Hansen, Brian Matsumoto
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Granite Falls	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Mountain Way Elementary School	
Building Name	Gymnasium, RM1	High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1988	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	36%	Earthquake ground shaking hazard is higher than 36% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	62%	61%	High	Red
Life Safety Retrofit Building	11%	4.9%	Very Low	Green
Current Code Building	8.7%	3.0%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Casey Hansen, Brian Matsumoto
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Granite Falls	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Mountain Way Elementary School	
Building Name	Main Building, W2	Moderate-High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1988	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	36%	Earthquake ground shaking hazard is higher than 36% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	47%	42%	Moderate-High	Red
Life Safety Retrofit Building	7.4%	2.0%	Very Low	Green
Current Code Building	5.7%	1.1%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Casey Hansen, Brian Matsumoto
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Highline	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Beverly Park Elem at Glendale	
Building Name	Main Building A	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1963	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	97%	Earthquake ground shaking hazard is higher than 97% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	82%	83%	Very High	Red
Life Safety Retrofit Building	25%	17%	Low	Green/Yellow
Current Code Building	20%	12%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Stephen Blount, Noli Torres, Ben Fisher
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Highline	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Beverly Park Elem at Glendale	
Building Name	Multi-Purpose Building B	Very High

Building Data		
HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1963	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data		
Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	97%	Earthquake ground shaking hazard is higher than 97% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	82%	83%	Very High	Red
Life Safety Retrofit Building	25%	17%	Low	Green/Yellow
Current Code Building	20%	12%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool	
Building Evaluated By:	Stephen Blount, Noli Torres, Ben Fisher
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Highline	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Chinook Middle School	
Building Name	100 Building	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1956	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	89%	Earthquake ground shaking hazard is higher than 89% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	61%	57%	High	Red
Life Safety Retrofit Building	15%	7.0%	Very Low	Green
Current Code Building	12%	4.5%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Stephen Blount, Noli Torres, Ben Fisher
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Highline	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Chinook Middle School	
Building Name	200 Building	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1956	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	89%	Earthquake ground shaking hazard is higher than 89% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	61%	57%	High	Red
Life Safety Retrofit Building	15%	7.0%	Very Low	Green
Current Code Building	12%	4.5%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Stephen Blount, Noli Torres, Ben Fisher
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Highline	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Chinook Middle School	
Building Name	300 Building - Gymnasium	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1956	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	89%	Earthquake ground shaking hazard is higher than 89% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	61%	57%	High	Red
Life Safety Retrofit Building	15%	7.0%	Very Low	Green
Current Code Building	12%	4.5%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Stephen Blount, Noli Torres, Ben Fisher
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Highline	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Chinook Middle School	
Building Name	400 Building - Cafeteria	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1956	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	89%	Earthquake ground shaking hazard is higher than 89% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	61%	57%	High	Red
Life Safety Retrofit Building	15%	7.0%	Very Low	Green
Current Code Building	12%	4.5%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Stephen Blount, Noli Torres, Ben Fisher
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Highline	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Chinook Middle School	
Building Name	800 Building	Very High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1966	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	89%	Earthquake ground shaking hazard is higher than 89% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	65%	62%	Very High	Red
Life Safety Retrofit Building	15%	7.0%	Very Low	Green
Current Code Building	12%	4.5%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Stephen Blount, Noli Torres, Ben Fisher
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Highline	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Hilltop Elementary School	
Building Name	100 Building - Bldg A	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1957	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	96%	Earthquake ground shaking hazard is higher than 96% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	88%	89%	Very High	Red
Life Safety Retrofit Building	25%	16%	Low	Green/Yellow
Current Code Building	20%	12%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher, Stephen Blount, Noli Torres
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Highline	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Hilltop Elementary School	
Building Name	200 Building - Bldg B	Very High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1957	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	96%	Earthquake ground shaking hazard is higher than 96% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	64%	61%	Very High	Red
Life Safety Retrofit Building	17%	8.5%	Very Low	Green
Current Code Building	13%	5.5%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher, Stephen Blount, Noli Torres
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Highline	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Hilltop Elementary School	
Building Name	300 Building - Bldg C	Very High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1958	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	96%	Earthquake ground shaking hazard is higher than 96% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	64%	61%	Very High	Red
Life Safety Retrofit Building	17%	8.5%	Very Low	Green
Current Code Building	13%	5.5%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher, Stephen Blount, Noli Torres
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Highline	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Hilltop Elementary School	
Building Name	400 Building - Bldg D	Low

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1997	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1994 UBC	
Existing Building Code Level	High-Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	96%	Earthquake ground shaking hazard is higher than 96% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	22%	14%	Low	Green/Yellow
Life Safety Retrofit Building	17%	8.5%	Very Low	Green
Current Code Building	13%	5.5%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher, Stephen Blount, Noli Torres
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Highline	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Seahurst Elementary School	
Building Name	Main Building	Low

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1992	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1988-1991 UBC	
Existing Building Code Level	High-Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	97%	Earthquake ground shaking hazard is higher than 97% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	22%	15%	Low	Green/Yellow
Life Safety Retrofit Building	17%	8.8%	Very Low	Green/Yellow
Current Code Building	13%	5.7%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Stephen Blount, Noli Torres, Ben Fisher
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Highline	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Southern Heights Elementary School	
Building Name	Building A	Very High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1955	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	97%	Earthquake ground shaking hazard is higher than 97% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	64%	61%	Very High	Red
Life Safety Retrofit Building	17%	8.7%	Very Low	Green/Yellow
Current Code Building	13%	5.7%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher, Stephen Blount, Noli Torres
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Highline	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Southern Heights Elementary School	
Building Name	Building B	Very High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1956	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	97%	Earthquake ground shaking hazard is higher than 97% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	64%	61%	Very High	Red
Life Safety Retrofit Building	17%	8.7%	Very Low	Green/Yellow
Current Code Building	13%	5.7%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher, Stephen Blount, Noli Torres
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Highline	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Southern Heights Elementary School	
Building Name	Building C - Admin/Multi Purpose	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1964	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	97%	Earthquake ground shaking hazard is higher than 97% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	85%	85%	Very High	Red
Life Safety Retrofit Building	25%	17%	Low	Green/Yellow
Current Code Building	20%	12%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher, Stephen Blount, Noli Torres
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Highline	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Sylvester Middle School	
Building Name	100 Building	Very High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1953	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	85%	Earthquake ground shaking hazard is higher than 85% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	73%	71%	Very High	Red
Life Safety Retrofit Building	16%	8.4%	Very Low	Green
Current Code Building	13%	5.5%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher, Stephen Blount, Noli Torres
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Highline	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Sylvester Middle School	
Building Name	200 Building	Very High

Building Data

HAZUS Building Type	C2	Concrete Shear Walls
Year Built	1953	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	85%	Earthquake ground shaking hazard is higher than 85% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	82%	82%	Very High	Red
Life Safety Retrofit Building	24%	16%	Low	Green/Yellow
Current Code Building	20%	12%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher, Stephen Blount, Noli Torres
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Highline	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Sylvester Middle School	
Building Name	300 Building - Gymnasium/Cafeteria	Very High

Building Data

HAZUS Building Type	C2	Concrete Shear Walls
Year Built	1953	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	85%	Earthquake ground shaking hazard is higher than 85% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	82%	82%	Very High	Red
Life Safety Retrofit Building	24%	16%	Low	Green/Yellow
Current Code Building	20%	12%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher, Stephen Blount, Noli Torres
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Highline	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Sylvester Middle School	
Building Name	400 Building	Very High

Building Data

HAZUS Building Type	C2	Concrete Shear Walls
Year Built	1953	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	85%	Earthquake ground shaking hazard is higher than 85% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	85%	85%	Very High	Red
Life Safety Retrofit Building	24%	16%	Low	Green/Yellow
Current Code Building	20%	12%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher, Stephen Blount, Noli Torres
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Highline	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Sylvester Middle School	
Building Name	500 Building - Library	Very High

Building Data

HAZUS Building Type	C2	Concrete Shear Walls
Year Built	1969	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	85%	Earthquake ground shaking hazard is higher than 85% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	85%	86%	Very High	Red
Life Safety Retrofit Building	24%	16%	Low	Green/Yellow
Current Code Building	20%	12%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher, Stephen Blount, Noli Torres
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Highline	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Sylvester Middle School	
Building Name	600 Building	Very High

Building Data

HAZUS Building Type	C2	Concrete Shear Walls
Year Built	1969	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	85%	Earthquake ground shaking hazard is higher than 85% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	82%	82%	Very High	Red
Life Safety Retrofit Building	24%	16%	Low	Green/Yellow
Current Code Building	20%	12%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher, Stephen Blount, Noli Torres
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Highline	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Sylvester Middle School	
Building Name	700 Building - Band/Drama	Very High

Building Data

HAZUS Building Type	C2	Concrete Shear Walls
Year Built	1969	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	85%	Earthquake ground shaking hazard is higher than 85% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	85%	86%	Very High	Red
Life Safety Retrofit Building	24%	16%	Low	Green/Yellow
Current Code Building	20%	12%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher, Stephen Blount, Noli Torres
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Hockinson	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Hockinson Heights Primary School	
Building Name	Building 100 A	Low-Moderate

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1992	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1988-1991 UBC	
Existing Building Code Level	Moderate-Low	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	30%	Earthquake ground shaking hazard is higher than 30% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	31%	27%	Low-Moderate	Red
Life Safety Retrofit Building	9.4%	3.6%	Very Low	Green
Current Code Building	7.1%	2.1%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Hockinson	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Hockinson Heights Primary School	
Building Name	Building 200 C	Low

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1975	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1988-1991 UBC	
Existing Building Code Level	Moderate-Low	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	30%	Earthquake ground shaking hazard is higher than 30% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	20%	13%	Low	Green/Yellow
Life Safety Retrofit Building	6.1%	1.4%	Very Low	Green
Current Code Building	4.7%	0.7%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Hockinson	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Hockinson Heights Primary School	
Building Name	Building 300 D	Moderate

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1975	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	30%	Earthquake ground shaking hazard is higher than 30% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	37%	31%	Moderate	Yellow/Red
Life Safety Retrofit Building	6.1%	1.4%	Very Low	Green
Current Code Building	4.7%	0.7%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Hockinson	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Hockinson Heights Primary School	
Building Name	Building 400 B	Low

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1992	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1988-1991 UBC	
Existing Building Code Level	Moderate-Low	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	30%	Earthquake ground shaking hazard is higher than 30% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	22%	15%	Low	Green/Yellow
Life Safety Retrofit Building	6.1%	1.4%	Very Low	Green
Current Code Building	4.7%	0.7%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Hockinson	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Hockinson Heights Primary School	
Building Name	Building 500 E	Low-Moderate

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1980	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1976-1985 UBC	
Existing Building Code Level	Low	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	30%	Earthquake ground shaking hazard is higher than 30% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	26%	18%	Low-Moderate	Yellow
Life Safety Retrofit Building	6.1%	1.4%	Very Low	Green
Current Code Building	4.7%	0.7%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Hockinson	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Hockinson Heights Primary School	
Building Name	Building 600 F	Low-Moderate

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1980	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1976-1985 UBC	
Existing Building Code Level	Low	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	30%	Earthquake ground shaking hazard is higher than 30% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	26%	18%	Low-Moderate	Yellow
Life Safety Retrofit Building	6.1%	1.4%	Very Low	Green
Current Code Building	4.7%	0.7%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Hockinson	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Hockinson Heights Primary School	
Building Name	Building 800 H	Low-Moderate

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1975	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1973 UBC	
Existing Building Code Level	Low-Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	30%	Earthquake ground shaking hazard is higher than 30% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	31%	24%	Low-Moderate	Yellow
Life Safety Retrofit Building	6.1%	1.4%	Very Low	Green
Current Code Building	4.7%	0.7%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Hoquiam	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Central Elementary School	
Building Name	Main Building	Very High

Building Data

HAZUS Building Type	C2	Concrete Shear Walls
Year Built	1952	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	95%	Earthquake ground shaking hazard is higher than 95% of WA campuses.
Site Class (Soil or Rock Type)	E	Soft Clay Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Extremely High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	86%	86%	Very High	Red
Life Safety Retrofit Building	25%	16%	Low	Green/Yellow
Current Code Building	20%	12%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Hoquiam	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Emerson Elementary School	
Building Name	Main Building	Very High

Building Data

HAZUS Building Type	C2	Concrete Shear Walls
Year Built	1954	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	Yes	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	95%	Earthquake ground shaking hazard is higher than 95% of WA campuses.
Site Class (Soil or Rock Type)	E	Soft Clay Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Extremely High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	91%	91%	Very High	Red
Life Safety Retrofit Building	25%	16%	Low	Green/Yellow
Current Code Building	20%	12%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Hoquiam	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Hoquiam High School	
Building Name	D-Business Education	Very High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1966	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	95%	Earthquake ground shaking hazard is higher than 95% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Extremely High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	74%	72%	Very High	Red
Life Safety Retrofit Building	20%	12%	Very Low	Green/Yellow
Current Code Building	16%	7.9%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Hoquiam	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Hoquiam High School	
Building Name	F-Humanities	Very High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1966	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	95%	Earthquake ground shaking hazard is higher than 95% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Extremely High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	74%	72%	Very High	Red
Life Safety Retrofit Building	20%	12%	Very Low	Green/Yellow
Current Code Building	16%	7.9%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Hoquiam	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Hoquiam High School	
Building Name	G-Little Theater	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1966	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	95%	Earthquake ground shaking hazard is higher than 95% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Extremely High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	85%	86%	Very High	Red
Life Safety Retrofit Building	29%	21%	Low	Yellow
Current Code Building	24%	16%	Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Kelso	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Coweeman Middle School	
Building Name	Main Building	Low-Moderate

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1961	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate to High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	35%	Earthquake ground shaking hazard is higher than 35% of WA campuses.
Site Class (Soil or Rock Type)	E	Soft Clay Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	34%	27%	Low-Moderate	Yellow
Life Safety Retrofit Building	5.3%	1.0%	Very Low	Green
Current Code Building	4.0%	0.5%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Kelso	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Rose Valley Elementary School	
Building Name	Main Building	Very High

Building Data

HAZUS Building Type	URM	Unreinforced Masonry Bearing Walls
Year Built	1939	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	30%	Earthquake ground shaking hazard is higher than 30% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	54%	51%	Very High	Red
Life Safety Retrofit Building	9.3%	3.5%	Very Low	Green
Current Code Building	7.1%	2.1%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	La Center	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	La Center Elementary School	
Building Name	Building 300 - ES Main Building	Moderate-High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1938	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	Yes	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	33%	Earthquake ground shaking hazard is higher than 33% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	48%	42%	Moderate-High	Red
Life Safety Retrofit Building	6.7%	1.6%	Very Low	Green
Current Code Building	5.1%	0.9%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Lake Washington	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Dickinson Elementary School	
Building Name	Main Building	Very Low

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1992	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1988-1991 UBC	
Existing Building Code Level	High-Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	63%	Earthquake ground shaking hazard is higher than 63% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	15%	8.5%	Very Low	Green
Life Safety Retrofit Building	11%	4.5%	Very Low	Green
Current Code Building	9.0%	2.7%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto & Noman Shafi
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Lake Washington	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Einstein Elementary School	
Building Name	Main Building - S2	Low

Building Data

HAZUS Building Type	S2	Steel Braced Frame
Year Built	1997	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1988-1991 UBC	
Existing Building Code Level	High-Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	59%	Earthquake ground shaking hazard is higher than 59% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	28%	22%	Low	Yellow
Life Safety Retrofit Building	22%	15%	Very Low	Green/Yellow
Current Code Building	18%	11%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto & Noman Shafi
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Lake Washington	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Einstein Elementary School	
Building Name	Main Building - W2	Very Low

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1997	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1988-1991 UBC	
Existing Building Code Level	High-Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	59%	Earthquake ground shaking hazard is higher than 59% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	15%	8.6%	Very Low	Green
Life Safety Retrofit Building	11%	4.5%	Very Low	Green
Current Code Building	9.0%	2.7%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto & Noman Shafi
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Lake Washington	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Best Night School	
Building Name	Emerson	Low

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1982	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1976-1985 UBC	
Existing Building Code Level	Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	68%	Earthquake ground shaking hazard is higher than 68% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	26%	20%	Low	Green/Yellow
Life Safety Retrofit Building	12%	4.7%	Very Low	Green
Current Code Building	9.2%	2.8%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Noman Shafi
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Lake Washington	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Rockwell Elementary School	
Building Name	Main Building	Low-Moderate

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1979	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1976-1985 UBC	
Existing Building Code Level	Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	58%	Earthquake ground shaking hazard is higher than 58% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	36%	31%	Low-Moderate	Red
Life Safety Retrofit Building	18%	9.8%	Very Low	Green/Yellow
Current Code Building	14%	6.6%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto & Noman Shafi
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Lake Washington	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Laura Ingalls Wilder Elementary School	
Building Name	Main Building	Low

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1989	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1976-1985 UBC	
Existing Building Code Level	Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	62%	Earthquake ground shaking hazard is higher than 62% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	26%	20%	Low	Green/Yellow
Life Safety Retrofit Building	12%	4.7%	Very Low	Green
Current Code Building	9.2%	2.8%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto & Noman Shafi
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Longview	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Mint Valley Elementary School	
Building Name	Building A - 1	High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1969	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate to High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	37%	Earthquake ground shaking hazard is higher than 37% of WA campuses.
Site Class (Soil or Rock Type)	E	Soft Clay Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	55%	54%	High	Red
Life Safety Retrofit Building	8.7%	3.1%	Very Low	Green
Current Code Building	6.6%	1.8%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Longview	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Mint Valley Elementary School	
Building Name	Building B - 2	High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1969	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate to High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	37%	Earthquake ground shaking hazard is higher than 37% of WA campuses.
Site Class (Soil or Rock Type)	E	Soft Clay Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	55%	54%	High	Red
Life Safety Retrofit Building	8.7%	3.1%	Very Low	Green
Current Code Building	6.6%	1.8%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Longview	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Mint Valley Elementary School	
Building Name	Building D - 4	High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1969	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate to High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	37%	Earthquake ground shaking hazard is higher than 37% of WA campuses.
Site Class (Soil or Rock Type)	E	Soft Clay Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	55%	54%	High	Red
Life Safety Retrofit Building	8.7%	3.1%	Very Low	Green
Current Code Building	6.6%	1.8%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Longview	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Mt. Solo Middle School	
Building Name	Main Building	Very Low

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	2003	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1997 UBC	
Existing Building Code Level	High	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate to High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	37%	Earthquake ground shaking hazard is higher than 37% of WA campuses.
Site Class (Soil or Rock Type)	E	Soft Clay Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	6.9%	2.7%	Very Low	Green/Yellow
Life Safety Retrofit Building	*			
Current Code Building	*			

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Longview	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Northlake Elementary School	
Building Name	Main Building	Moderate

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1954	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	36%	Earthquake ground shaking hazard is higher than 36% of WA campuses.
Site Class (Soil or Rock Type)	D-E	Stiff Soil to Soft Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	39%	33%	Moderate	Yellow/Red
Life Safety Retrofit Building	6.7%	1.7%	Very Low	Green
Current Code Building	5.1%	0.9%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Longview	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Olympic Elementary School	
Building Name	Annex Building	Low-Moderate

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1958	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate to High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	36%	Earthquake ground shaking hazard is higher than 36% of WA campuses.
Site Class (Soil or Rock Type)	E	Soft Clay Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	35%	28%	Low-Moderate	Yellow
Life Safety Retrofit Building	5.5%	1.1%	Very Low	Green
Current Code Building	4.2%	0.6%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Longview	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Olympic Elementary School	
Building Name	Main Building	Low-Moderate

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1950	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate to High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	36%	Earthquake ground shaking hazard is higher than 36% of WA campuses.
Site Class (Soil or Rock Type)	E	Soft Clay Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	35%	28%	Low-Moderate	Yellow
Life Safety Retrofit Building	5.5%	1.1%	Very Low	Green
Current Code Building	4.2%	0.6%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Longview	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Olympic Elementary School	
Building Name	Multipurpose Building	High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1958	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate to High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	36%	Earthquake ground shaking hazard is higher than 36% of WA campuses.
Site Class (Soil or Rock Type)	E	Soft Clay Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	55%	53%	High	Red
Life Safety Retrofit Building	8.5%	3.0%	Very Low	Green
Current Code Building	6.4%	1.7%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Longview	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Robert Gray Elementary School	
Building Name	Main Building	Very Low

Building Data

HAZUS Building Type	RM2	Reinf. Masonry Bearing Walls w/ Precast Concrete Diaphragms
Year Built	1997	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1994 UBC	
Existing Building Code Level	High-Moderate	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate to High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	34%	Earthquake ground shaking hazard is higher than 34% of WA campuses.
Site Class (Soil or Rock Type)	E	Soft Clay Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	15%	9.1%	Very Low	Green/Yellow
Life Safety Retrofit Building	8.8%	3.2%	Very Low	Green
Current Code Building	6.7%	1.8%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Lopez Island	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Lopez Elementary School	
Building Name	Elementary	Low

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1978	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1976-1985 UBC	
Existing Building Code Level	Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	45%	Earthquake ground shaking hazard is higher than 45% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	24%	18%	Low	Green/Yellow
Life Safety Retrofit Building	11%	4.0%	Very Low	Green
Current Code Building	8.3%	2.4%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Lopez Island	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Lopez Middle High School	
Building Name	Gym/Tech Building	Low-Moderate

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1988	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1976-1985 UBC	
Existing Building Code Level	Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	45%	Earthquake ground shaking hazard is higher than 45% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	34%	29%	Low-Moderate	Yellow/Red
Life Safety Retrofit Building	16%	8.8%	Very Low	Green/Yellow
Current Code Building	13%	5.7%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Lopez Island	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Lopez Middle High School	
Building Name	Junior Senior High Building	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1930	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	45%	Earthquake ground shaking hazard is higher than 45% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	52%	47%	High	Red
Life Safety Retrofit Building	11%	4.0%	Very Low	Green
Current Code Building	8.3%	2.4%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Mary M. Knight	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Mary M Knight Elementary School	
Building Name	Elementary School	Very High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1963	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	93%	Earthquake ground shaking hazard is higher than 93% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	67%	64%	Very High	Red
Life Safety Retrofit Building	18%	9.9%	Very Low	Green/Yellow
Current Code Building	15%	6.6%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Mary M. Knight	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Mary M Knight High School	
Building Name	High School Building	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1979	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1976-1985 UBC	
Existing Building Code Level	Low	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	94%	Earthquake ground shaking hazard is higher than 94% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	55%	49%	High	Red
Life Safety Retrofit Building	19%	10%	Very Low	Green/Yellow
Current Code Building	15%	6.9%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	BSF
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Marysville	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Cascade Elementary School	
Building Name	Unit A	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1955	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	41%	Earthquake ground shaking hazard is higher than 41% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	69%	68%	Very High	Red
Life Safety Retrofit Building	14%	7.2%	Very Low	Green/Yellow
Current Code Building	11%	4.6%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto, PE, SE, Drew Nielson, PE
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Marysville	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Cascade Elementary School	
Building Name	Unit A	Moderate-High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1955	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	41%	Earthquake ground shaking hazard is higher than 41% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	48%	43%	Moderate-High	Red
Life Safety Retrofit Building	9.5%	3.2%	Very Low	Green
Current Code Building	7.3%	1.8%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto, PE, SE, Drew Nielson, PE
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Marysville	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Cascade Elementary School	
Building Name	Unit B	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1955	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	41%	Earthquake ground shaking hazard is higher than 41% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	69%	68%	Very High	Red
Life Safety Retrofit Building	14%	7.2%	Very Low	Green/Yellow
Current Code Building	11%	4.6%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto, PE, SE, Drew Nielson, PE
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Marysville	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Cascade Elementary School	
Building Name	Unit B	Moderate-High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1955	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	41%	Earthquake ground shaking hazard is higher than 41% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	48%	43%	Moderate-High	Red
Life Safety Retrofit Building	9.5%	3.2%	Very Low	Green
Current Code Building	7.3%	1.8%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto, PE, SE, Drew Nielson, PE
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Marysville	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Cascade Elementary School	
Building Name	Unit C	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1956	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	41%	Earthquake ground shaking hazard is higher than 41% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	69%	68%	Very High	Red
Life Safety Retrofit Building	14%	7.2%	Very Low	Green/Yellow
Current Code Building	11%	4.6%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto, PE, SE, Drew Nielson, PE
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Marysville	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Cascade Elementary School	
Building Name	Unit C	Moderate-High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1956	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	41%	Earthquake ground shaking hazard is higher than 41% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	48%	43%	Moderate-High	Red
Life Safety Retrofit Building	9.5%	3.2%	Very Low	Green
Current Code Building	7.3%	1.8%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto, PE, SE, Drew Nielson, PE
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Marysville	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Cascade Elementary School	
Building Name	Unit D	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1956	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	41%	Earthquake ground shaking hazard is higher than 41% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	69%	68%	Very High	Red
Life Safety Retrofit Building	14%	7.2%	Very Low	Green/Yellow
Current Code Building	11%	4.6%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto, PE, SE, Drew Nielson, PE
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Marysville	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Cascade Elementary School	
Building Name	Unit D	Moderate-High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1956	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	41%	Earthquake ground shaking hazard is higher than 41% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	48%	43%	Moderate-High	Red
Life Safety Retrofit Building	9.5%	3.2%	Very Low	Green
Current Code Building	7.3%	1.8%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto, PE, SE, Drew Nielson, PE
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Marysville	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Marysville Pilchuck High School	
Building Name	Arts and Crafts Building - Bldg B	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1970	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	40%	Earthquake ground shaking hazard is higher than 40% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	68%	68%	Very High	Red
Life Safety Retrofit Building	14%	7.1%	Very Low	Green/Yellow
Current Code Building	11%	4.5%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto, Drew Nielson & Suzie Bauer
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Marysville	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Marysville Pilchuck High School	
Building Name	Auditorium - Bldg K C2	Very High

Building Data

HAZUS Building Type	C2	Concrete Shear Walls
Year Built	1970	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	40%	Earthquake ground shaking hazard is higher than 40% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	74%	73%	Very High	Red
Life Safety Retrofit Building	14%	7.1%	Very Low	Green/Yellow
Current Code Building	11%	4.5%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto, Drew Nielson & Suzie Bauer
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Marysville	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Marysville Pilchuck High School	
Building Name	Auditorium - Bldg K	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1970	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	40%	Earthquake ground shaking hazard is higher than 40% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	73%	73%	Very High	Red
Life Safety Retrofit Building	14%	7.1%	Very Low	Green/Yellow
Current Code Building	11%	4.5%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto, Drew Nielson & Suzie Bauer
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Marysville	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Marysville Pilchuck High School	
Building Name	Business Ed and Home Learning - Bldg C	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1970	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	40%	Earthquake ground shaking hazard is higher than 40% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	68%	68%	Very High	Red
Life Safety Retrofit Building	14%	7.1%	Very Low	Green/Yellow
Current Code Building	11%	4.5%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto, Drew Nielson & Suzie Bauer
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Marysville	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Marysville Pilchuck High School	
Building Name	East Building - Bldg H	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1970	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	40%	Earthquake ground shaking hazard is higher than 40% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	68%	68%	Very High	Red
Life Safety Retrofit Building	14%	7.1%	Very Low	Green/Yellow
Current Code Building	11%	4.5%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto, Drew Nielson & Suzie Bauer
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Marysville	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Marysville Pilchuck High School	
Building Name	Gym & New Food Commons - Bldg M	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1970	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	40%	Earthquake ground shaking hazard is higher than 40% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	68%	68%	Very High	Red
Life Safety Retrofit Building	14%	7.1%	Very Low	Green/Yellow
Current Code Building	11%	4.5%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto, Drew Nielson & Suzie Bauer
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Marysville	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Marysville Pilchuck High School	
Building Name	Library - Bldg J	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1970	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	40%	Earthquake ground shaking hazard is higher than 40% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	77%	77%	Very High	Red
Life Safety Retrofit Building	14%	7.1%	Very Low	Green/Yellow
Current Code Building	11%	4.5%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto, Drew Nielson & Suzie Bauer
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Marysville	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Marysville Pilchuck High School	
Building Name	Life Science Building - Bldg F	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1970	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	40%	Earthquake ground shaking hazard is higher than 40% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	68%	68%	Very High	Red
Life Safety Retrofit Building	14%	7.1%	Very Low	Green/Yellow
Current Code Building	11%	4.5%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto, Drew Nielson & Suzie Bauer
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Marysville	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Marysville Pilchuck High School	
Building Name	Mech Plant and Former Cafteria - Bldg E	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1970	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	40%	Earthquake ground shaking hazard is higher than 40% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	68%	68%	Very High	Red
Life Safety Retrofit Building	14%	7.1%	Very Low	Green/Yellow
Current Code Building	11%	4.5%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto, Drew Nielson & Suzie Bauer
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Marysville	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Marysville Pilchuck High School	
Building Name	Occupational Center - Bldg A	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1970	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	40%	Earthquake ground shaking hazard is higher than 40% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	68%	68%	Very High	Red
Life Safety Retrofit Building	14%	7.1%	Very Low	Green/Yellow
Current Code Building	11%	4.5%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto, Drew Nielson & Suzie Bauer
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Marysville	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Marysville Pilchuck High School	
Building Name	Pool Building - Bldg L	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1970	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	40%	Earthquake ground shaking hazard is higher than 40% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	73%	73%	Very High	Red
Life Safety Retrofit Building	14%	7.1%	Very Low	Green/Yellow
Current Code Building	11%	4.5%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto, Drew Nielson & Suzie Bauer
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Marysville	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Marysville Pilchuck High School	
Building Name	South Building - Bldg N	Low-Moderate

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1984	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1976-1985 UBC	
Existing Building Code Level	Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	40%	Earthquake ground shaking hazard is higher than 40% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	31%	26%	Low-Moderate	Yellow/Red
Life Safety Retrofit Building	14%	7.1%	Very Low	Green/Yellow
Current Code Building	11%	4.5%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto, Drew Nielson & Suzie Bauer
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Marysville	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Pinewood Elementary School	
Building Name	Bldg E	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1968	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	43%	Earthquake ground shaking hazard is higher than 43% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	69%	69%	Very High	Red
Life Safety Retrofit Building	15%	7.4%	Very Low	Green/Yellow
Current Code Building	11%	4.7%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto, PE, SE, Drew Nielson, PE
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Marysville	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Pinewood Elementary School	
Building Name	Bldg L (Library)	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1968	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	43%	Earthquake ground shaking hazard is higher than 43% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	69%	69%	Very High	Red
Life Safety Retrofit Building	15%	7.4%	Very Low	Green/Yellow
Current Code Building	11%	4.7%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto, PE, SE, Drew Nielson, PE
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Marysville	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Pinewood Elementary School	
Building Name	Bldg M (Gym)	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1968	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	43%	Earthquake ground shaking hazard is higher than 43% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	69%	69%	Very High	Red
Life Safety Retrofit Building	15%	7.4%	Very Low	Green/Yellow
Current Code Building	11%	4.7%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto, PE, SE, Drew Nielson, PE
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Marysville	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Pinewood Elementary School	
Building Name	Building A	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1968	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	43%	Earthquake ground shaking hazard is higher than 43% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	69%	69%	Very High	Red
Life Safety Retrofit Building	15%	7.4%	Very Low	Green/Yellow
Current Code Building	11%	4.7%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto, PE, SE, Drew Nielson, PE
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Marysville	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Pinewood Elementary School	
Building Name	Building D	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1968	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	43%	Earthquake ground shaking hazard is higher than 43% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	69%	69%	Very High	Red
Life Safety Retrofit Building	15%	7.4%	Very Low	Green/Yellow
Current Code Building	11%	4.7%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto, PE, SE, Drew Nielson, PE
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Marysville	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Quil Ceda Elementary School	
Building Name	Main Building	Very Low

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1997	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1988-1991 UBC	
Existing Building Code Level	High-Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	45%	Earthquake ground shaking hazard is higher than 45% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	16%	9.3%	Very Low	Green/Yellow
Life Safety Retrofit Building	10.0%	3.5%	Very Low	Green
Current Code Building	7.7%	2.0%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto, PE, SE, Drew Nielson, PE
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Marysville	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Shoultes Elementary School	
Building Name	Bldg A Gym (B Bldg in ICOS)	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1964	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	39%	Earthquake ground shaking hazard is higher than 39% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	68%	68%	Very High	Red
Life Safety Retrofit Building	14%	7.0%	Very Low	Green/Yellow
Current Code Building	11%	4.4%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto, PE, SE, Drew Nielson, PE
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Marysville	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Shoultes Elementary School	
Building Name	Bldg B (A Bldg in ICOS)	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1958	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	39%	Earthquake ground shaking hazard is higher than 39% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	68%	68%	Very High	Red
Life Safety Retrofit Building	14%	7.0%	Very Low	Green/Yellow
Current Code Building	11%	4.4%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto, PE, SE, Drew Nielson, PE
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Marysville	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Shoultes Elementary School	
Building Name	Bldg C (D Bldg in ICOS) - Masonry	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1965	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	39%	Earthquake ground shaking hazard is higher than 39% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	68%	68%	Very High	Red
Life Safety Retrofit Building	14%	7.0%	Very Low	Green/Yellow
Current Code Building	11%	4.4%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto, PE, SE, Drew Nielson, PE
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Marysville	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Shoultes Elementary School	
Building Name	Bldg C (D Bldg in ICOS) - Wood	Moderate-High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1965	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	39%	Earthquake ground shaking hazard is higher than 39% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	48%	42%	Moderate-High	Red
Life Safety Retrofit Building	9.2%	3.1%	Very Low	Green
Current Code Building	7.2%	1.7%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto, PE, SE, Drew Nielson, PE
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Marysville	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Shoultes Elementary School	
Building Name	Bldg D (C Bldg in ICOS)	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1964	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	39%	Earthquake ground shaking hazard is higher than 39% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	68%	68%	Very High	Red
Life Safety Retrofit Building	14%	7.0%	Very Low	Green/Yellow
Current Code Building	11%	4.4%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto, PE, SE, Drew Nielson, PE
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Morton	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Morton Elementary School	
Building Name	Main Building	Very High

Building Data

HAZUS Building Type	C2	Concrete Shear Walls
Year Built	1948	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	40%	Earthquake ground shaking hazard is higher than 40% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	66%	65%	Very High	Red
Life Safety Retrofit Building	13%	6.0%	Very Low	Green
Current Code Building	10.0%	3.7%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	DNR, Reid Middleton
Person(s) Who Entered Data in EPAT:	Brian Matsumoto, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Latitude, Longitude, Site Class, Liquefaction, Geographic Region

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Mount Baker	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Acme Elementary School	
Building Name	Main Building	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1937	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	37%	Earthquake ground shaking hazard is higher than 37% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	53%	48%	High	Red
Life Safety Retrofit Building	7.7%	2.2%	Very Low	Green
Current Code Building	5.9%	1.2%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto PE SE
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Napavine	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Napavine Elementary School	
Building Name	Main Building	Moderate-High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1951	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	48%	Earthquake ground shaking hazard is higher than 48% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	49%	44%	Moderate-High	Red
Life Safety Retrofit Building	9.7%	3.4%	Very Low	Green
Current Code Building	7.5%	1.9%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Napavine	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Napavine Junior Senior High School	
Building Name	Annex	Moderate-High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1955	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	48%	Earthquake ground shaking hazard is higher than 48% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	49%	43%	Moderate-High	Red
Life Safety Retrofit Building	9.7%	3.3%	Very Low	Green
Current Code Building	7.5%	1.9%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Latitude, Longitude, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Napavine	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Napavine Junior Senior High School	
Building Name	Main	Low-Moderate

Building Data

HAZUS Building Type	S2	Steel Braced Frame
Year Built	1980	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1976-1985 UBC	
Existing Building Code Level	Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	48%	Earthquake ground shaking hazard is higher than 48% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	36%	31%	Low-Moderate	Yellow/Red
Life Safety Retrofit Building	19%	12%	Very Low	Green/Yellow
Current Code Building	15%	8.4%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Naselle-Grays River Valley	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Naselle Elementary School	
Building Name	Elementary	Very High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1952	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	88%	Earthquake ground shaking hazard is higher than 88% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Very Low to Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	66%	63%	Very High	Red
Life Safety Retrofit Building	15%	7.6%	Very Low	Green
Current Code Building	12%	4.9%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Naselle-Grays River Valley	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Naselle Junior Senior High Schools	
Building Name	High School/Admin	Very High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1952	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	88%	Earthquake ground shaking hazard is higher than 88% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Very Low to Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	62%	58%	Very High	Red
Life Safety Retrofit Building	15%	7.6%	Very Low	Green
Current Code Building	12%	4.9%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	North Beach	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	North Beach Senior High School	
Building Name	Main Building	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1991	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1988-1991 UBC	
Existing Building Code Level	Moderate-Low	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	100%	Earthquake ground shaking hazard is higher than 100% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Extremely High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	71%	70%	Very High	Red
Life Safety Retrofit Building	31%	23%	Low-Moderate	Yellow
Current Code Building	26%	18%	Low	Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	North Mason	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Belfair Elementary School	
Building Name	Gymnasium Building	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1970	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	89%	Earthquake ground shaking hazard is higher than 89% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low to Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	84%	85%	Very High	Red
Life Safety Retrofit Building	27%	19%	Low	Yellow
Current Code Building	22%	14%	Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Justin Cook, Joshua Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	North Mason	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Belfair Elementary School	
Building Name	Main Building	Very High

Building Data

HAZUS Building Type	RM2	Reinf. Masonry Bearing Walls w/ Precast Concrete Diaphragms
Year Built	1970	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	89%	Earthquake ground shaking hazard is higher than 89% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low to Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	91%	93%	Very High	Red
Life Safety Retrofit Building	27%	19%	Low	Yellow
Current Code Building	22%	14%	Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Justin Cook, Joshua Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	North River	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	North River School	
Building Name	Elementary	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1945	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	82%	Earthquake ground shaking hazard is higher than 82% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	60%	56%	High	Red
Life Safety Retrofit Building	14%	6.8%	Very Low	Green
Current Code Building	11%	4.3%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	North River	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	North River School	
Building Name	Gym Home Ec-Cafeteria	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1922	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	82%	Earthquake ground shaking hazard is higher than 82% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	60%	56%	High	Red
Life Safety Retrofit Building	14%	6.8%	Very Low	Green
Current Code Building	11%	4.3%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	North River	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	North River School	
Building Name	High School & Admin Building	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1922	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	82%	Earthquake ground shaking hazard is higher than 82% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	60%	56%	High	Red
Life Safety Retrofit Building	14%	6.8%	Very Low	Green
Current Code Building	11%	4.3%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	North River	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	North River School	
Building Name	Talley Building (Music/Art)	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1945	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	82%	Earthquake ground shaking hazard is higher than 82% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Very Low to Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	60%	56%	High	Red
Life Safety Retrofit Building	14%	6.8%	Very Low	Green
Current Code Building	11%	4.3%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Northshore	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Canyon Creek Elementary School	
Building Name	Building A - Classroom/Library	Moderate-High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1977	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1973 UBC	
Existing Building Code Level	Moderate-Low	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	80%	Earthquake ground shaking hazard is higher than 80% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	50%	48%	Moderate-High	Red
Life Safety Retrofit Building	19%	11%	Very Low	Green/Yellow
Current Code Building	15%	7.5%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto & Sabina Surana
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Northshore	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Canyon Creek Elementary School	
Building Name	Building C - Cafeteria/Gym	Moderate-High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1977	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1973 UBC	
Existing Building Code Level	Moderate-Low	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	80%	Earthquake ground shaking hazard is higher than 80% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	50%	48%	Moderate-High	Red
Life Safety Retrofit Building	19%	11%	Very Low	Green/Yellow
Current Code Building	15%	7.5%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto & Sabina Surana
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Northshore	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Crystal Springs Elementary School	
Building Name	Building 1 - Admin	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1957	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	78%	Earthquake ground shaking hazard is higher than 78% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Very Low to Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	75%	75%	Very High	Red
Life Safety Retrofit Building	18%	11%	Very Low	Green/Yellow
Current Code Building	15%	7.2%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto, PE SE
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Northshore	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Crystal Springs Elementary School	
Building Name	Building 2 - Classrooms/Kitchen	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1957	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	78%	Earthquake ground shaking hazard is higher than 78% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Very Low to Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	75%	75%	Very High	Red
Life Safety Retrofit Building	18%	11%	Very Low	Green/Yellow
Current Code Building	15%	7.2%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto, PE SE
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Northshore	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Crystal Springs Elementary School	
Building Name	Building 3/4 - Classrooms	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1957	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	78%	Earthquake ground shaking hazard is higher than 78% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Very Low to Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	75%	75%	Very High	Red
Life Safety Retrofit Building	18%	11%	Very Low	Green/Yellow
Current Code Building	15%	7.2%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto, PE SE
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Northshore	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Crystal Springs Elementary School	
Building Name	Building 5 - Classrooms	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1957	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	78%	Earthquake ground shaking hazard is higher than 78% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Very Low to Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	75%	75%	Very High	Red
Life Safety Retrofit Building	18%	11%	Very Low	Green/Yellow
Current Code Building	15%	7.2%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto, PE SE
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Northshore	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Shelton View Elementary School	
Building Name	Building A1/10 - Classroom	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1969	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	68%	Earthquake ground shaking hazard is higher than 68% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	79%	79%	Very High	Red
Life Safety Retrofit Building	18%	10%	Very Low	Green/Yellow
Current Code Building	14%	6.8%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto and Sabina Surana
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Northshore	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Shelton View Elementary School	
Building Name	Building C - Gym	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1969	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	68%	Earthquake ground shaking hazard is higher than 68% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	74%	74%	Very High	Red
Life Safety Retrofit Building	18%	10%	Very Low	Green/Yellow
Current Code Building	14%	6.8%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Matsumoto and Sabina Surana
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Oak Harbor	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Hillcrest Elementary School	
Building Name	Main Building	Very High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1951	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	83%	Earthquake ground shaking hazard is higher than 83% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	64%	61%	Very High	Red
Life Safety Retrofit Building	14%	6.2%	Very Low	Green
Current Code Building	11%	3.9%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Rami Sabra, Erik Bishop
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Oak Harbor	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Oak Harbor Middle School	
Building Name	Band Building	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1961	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	84%	Earthquake ground shaking hazard is higher than 84% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	78%	78%	Very High	Red
Life Safety Retrofit Building	21%	13%	Low	Green/Yellow
Current Code Building	16%	8.7%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Rami Sabra, Erik Bishop
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Oak Harbor	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Oak Harbor Middle School	
Building Name	Building B	Very High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1961	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	84%	Earthquake ground shaking hazard is higher than 84% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	64%	61%	Very High	Red
Life Safety Retrofit Building	14%	6.2%	Very Low	Green
Current Code Building	11%	3.8%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Rami Sabra, Erik Bishop
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Oak Harbor	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Oak Harbor Middle School	
Building Name	C Wing	Very High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1961	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	84%	Earthquake ground shaking hazard is higher than 84% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	64%	61%	Very High	Red
Life Safety Retrofit Building	14%	6.2%	Very Low	Green
Current Code Building	11%	3.8%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Rami Sabra, Erik Bishop
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Oak Harbor	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Oak Harbor Middle School	
Building Name	D Wing	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1948	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	84%	Earthquake ground shaking hazard is higher than 84% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	59%	54%	High	Red
Life Safety Retrofit Building	14%	6.2%	Very Low	Green
Current Code Building	11%	3.8%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Rami Sabra, Erik Bishop
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Oak Harbor	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Oak Harbor Middle School	
Building Name	Gym	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1959	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	84%	Earthquake ground shaking hazard is higher than 84% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	78%	78%	Very High	Red
Life Safety Retrofit Building	21%	13%	Low	Green/Yellow
Current Code Building	16%	8.7%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Rami Sabra, Erik Bishop
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Oak Harbor	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Oak Harbor Middle School	
Building Name	Main Building A	Very High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1955	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	84%	Earthquake ground shaking hazard is higher than 84% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	64%	61%	Very High	Red
Life Safety Retrofit Building	14%	6.2%	Very Low	Green
Current Code Building	11%	3.8%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Rami Sabra, Erik Bishop
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Ocean Beach	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Ilwaco Middle High School	
Building Name	Kaino Gym	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1985	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1976-1985 UBC	
Existing Building Code Level	Low	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	98%	Earthquake ground shaking hazard is higher than 98% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	56%	51%	High	Red
Life Safety Retrofit Building	20%	11%	Very Low	Green/Yellow
Current Code Building	16%	7.6%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Olympia	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Boston Harbor Elementary School	
Building Name	Main Building	Low

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1991	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1988-1991 UBC	
Existing Building Code Level	High-Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	81%	Earthquake ground shaking hazard is higher than 81% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	20%	12%	Low	Green/Yellow
Life Safety Retrofit Building	15%	7.2%	Very Low	Green
Current Code Building	12%	4.6%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Olympia	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Thurgood Marshall Middle School	
Building Name	Gym Building	Low-Moderate

Building Data		
HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1994	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1988-1991 UBC	
Existing Building Code Level	High-Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data		
Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	81%	Earthquake ground shaking hazard is higher than 81% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	27%	21%	Low-Moderate	Yellow
Life Safety Retrofit Building	22%	14%	Low	Green/Yellow
Current Code Building	18%	9.9%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool	
Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Olympia	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Thurgood Marshall Middle School	
Building Name	Main Building	Low

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1994	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1988-1991 UBC	
Existing Building Code Level	High-Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	81%	Earthquake ground shaking hazard is higher than 81% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	20%	12%	Low	Green/Yellow
Life Safety Retrofit Building	15%	7.1%	Very Low	Green
Current Code Building	12%	4.5%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby LItzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Orting	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Orting Primary School	
Building Name	Main Building	Very High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1968	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	46%	Earthquake ground shaking hazard is higher than 46% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	62%	59%	Very High	Red
Life Safety Retrofit Building	11%	4.1%	Very Low	Green
Current Code Building	8.5%	2.4%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Pe Ell	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Pe Ell School	
Building Name	Fitness Center	Low-Moderate

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1993	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1988-1991 UBC	
Existing Building Code Level	Moderate-Low	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	52%	Earthquake ground shaking hazard is higher than 52% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	32%	25%	Low-Moderate	Yellow
Life Safety Retrofit Building	11%	4.4%	Very Low	Green
Current Code Building	8.8%	2.6%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Pe Ell	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Pe Ell School	
Building Name	Main Building	Very High

Building Data

HAZUS Building Type	URM	Unreinforced Masonry Bearing Walls
Year Built	1954	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	52%	Earthquake ground shaking hazard is higher than 52% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	71%	69%	Very High	Red
Life Safety Retrofit Building	17%	9.5%	Very Low	Green/Yellow
Current Code Building	14%	6.3%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Peninsula	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Discovery Elementary School	
Building Name	Main Building	High

Building Data

HAZUS Building Type	PC1	Precast Concrete Tilt-Up Walls
Year Built	1980	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1976-1985 UBC	
Existing Building Code Level	Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	78%	Earthquake ground shaking hazard is higher than 78% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	52%	48%	High	Red
Life Safety Retrofit Building	33%	25%	Low-Moderate	Yellow
Current Code Building	27%	19%	Low	Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Joshua Comfort, Justin Cook, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Peninsula	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Gig Harbor High School	
Building Name	Main Building	High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1978	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1973 UBC	
Existing Building Code Level	Moderate-Low	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	78%	Earthquake ground shaking hazard is higher than 78% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	61%	59%	High	Red
Life Safety Retrofit Building	23%	15%	Low	Green/Yellow
Current Code Building	19%	11%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Justin Cook, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Peninsula	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Gig Harbor High School	
Building Name	Two-Story Building	Low

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1991	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1988-1991 UBC	
Existing Building Code Level	High-Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	78%	Earthquake ground shaking hazard is higher than 78% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	24%	17%	Low	Green/Yellow
Life Safety Retrofit Building	15%	7.5%	Very Low	Green
Current Code Building	12%	4.8%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Justin Cook, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Peninsula	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Gig Harbor High School	
Building Name	Voc-Ed Building	High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1978	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1973 UBC	
Existing Building Code Level	Moderate-Low	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	78%	Earthquake ground shaking hazard is higher than 78% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	57%	54%	High	Red
Life Safety Retrofit Building	23%	15%	Low	Green/Yellow
Current Code Building	19%	11%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Justin Cook, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Peninsula	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Minter Creek Elementary School	
Building Name	Main Building	Low-Moderate

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1981	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1976-1985 UBC	
Existing Building Code Level	Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	83%	Earthquake ground shaking hazard is higher than 83% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	37%	31%	Low-Moderate	Yellow/Red
Life Safety Retrofit Building	18%	9.4%	Very Low	Green/Yellow
Current Code Building	14%	6.2%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Peninsula	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Peninsula High School	
Building Name	500 Building	Very High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1946	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	83%	Earthquake ground shaking hazard is higher than 83% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	66%	62%	Very High	Red
Life Safety Retrofit Building	17%	9.3%	Very Low	Green/Yellow
Current Code Building	14%	6.2%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Justin Cook, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Peninsula	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Peninsula High School	
Building Name	600 Building	Very High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1962	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	83%	Earthquake ground shaking hazard is higher than 83% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	66%	62%	Very High	Red
Life Safety Retrofit Building	17%	9.3%	Very Low	Green/Yellow
Current Code Building	14%	6.2%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Justin Cook, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Peninsula	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Peninsula High School	
Building Name	700 Building - Voc Ag	High

Building Data

HAZUS Building Type	PC1	Precast Concrete Tilt-Up Walls
Year Built	1978	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1976-1985 UBC	
Existing Building Code Level	Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	83%	Earthquake ground shaking hazard is higher than 83% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	56%	52%	High	Red
Life Safety Retrofit Building	36%	29%	Low-Moderate	Yellow
Current Code Building	31%	22%	Low	Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Justin Cook, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Peninsula	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Peninsula High School	
Building Name	800 Building - Auditorium Area	Very High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1970	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	83%	Earthquake ground shaking hazard is higher than 83% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	66%	62%	Very High	Red
Life Safety Retrofit Building	17%	9.3%	Very Low	Green/Yellow
Current Code Building	14%	6.2%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Justin Cook, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Peninsula	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Peninsula High School	
Building Name	900 Building - Pool Building	Very High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1969	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	83%	Earthquake ground shaking hazard is higher than 83% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	66%	62%	Very High	Red
Life Safety Retrofit Building	17%	9.3%	Very Low	Green/Yellow
Current Code Building	14%	6.2%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Justin Cook, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Peninsula	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Peninsula High School	
Building Name	Main Building (100, 200, 300, 400)	Very High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1946	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	83%	Earthquake ground shaking hazard is higher than 83% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	66%	62%	Very High	Red
Life Safety Retrofit Building	17%	9.3%	Very Low	Green/Yellow
Current Code Building	14%	6.2%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Justin Cook, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Peninsula	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Voyager Elementary School	
Building Name	Main Building	Low-Moderate

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1988	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1976-1985 UBC	
Existing Building Code Level	Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	80%	Earthquake ground shaking hazard is higher than 80% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	33%	27%	Low-Moderate	Green/Yellow
Life Safety Retrofit Building	15%	7.5%	Very Low	Green
Current Code Building	12%	4.8%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Port Townsend	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Blue Heron Middle School	
Building Name	Main Building	

Building Data

HAZUS Building Type	CFS2	#N/A
Year Built	1995	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1988-1991 UBC	
Existing Building Code Level	High-Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	82%	Earthquake ground shaking hazard is higher than 82% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building				
Life Safety Retrofit Building	*			
Current Code Building	*			

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Puyallup	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Meeker Elementary School	
Building Name	Main Building	Moderate-High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1923	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	49%	Earthquake ground shaking hazard is higher than 49% of WA campuses.
Site Class (Soil or Rock Type)	E	Soft Clay Soil
Liquefaction Potential	High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	48%	42%	Moderate-High	Red
Life Safety Retrofit Building	9.3%	3.1%	Very Low	Green
Current Code Building	7.2%	1.8%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Puyallup	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Mt View Elementary School	
Building Name	Main Building	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1965	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	53%	Earthquake ground shaking hazard is higher than 53% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	53%	48%	High	Red
Life Safety Retrofit Building	11%	4.4%	Very Low	Green
Current Code Building	8.9%	2.6%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Puyallup	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Mt View Elementary School	
Building Name	Multipurpose Building	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1965	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	53%	Earthquake ground shaking hazard is higher than 53% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	73%	73%	Very High	Red
Life Safety Retrofit Building	17%	9.5%	Very Low	Green/Yellow
Current Code Building	14%	6.3%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Puyallup	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Waller Road Elementary School	
Building Name	Main Building	Very High

Building Data

HAZUS Building Type	URM	Unreinforced Masonry Bearing Walls
Year Built	1936	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	58%	Earthquake ground shaking hazard is higher than 58% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	72%	71%	Very High	Red
Life Safety Retrofit Building	18%	10%	Very Low	Green/Yellow
Current Code Building	14%	7.0%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Puyallup	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Wildwood Elementary School	
Building Name	Main Building	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1965	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	58%	Earthquake ground shaking hazard is higher than 58% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	53%	48%	High	Red
Life Safety Retrofit Building	11%	4.3%	Very Low	Green
Current Code Building	8.7%	2.6%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Quillayute Valley	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Forks Elementary School	
Building Name	Main Building - 1969 Portion	Very High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1969	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	95%	Earthquake ground shaking hazard is higher than 95% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	69%	66%	Very High	Red
Life Safety Retrofit Building	20%	11%	Very Low	Green/Yellow
Current Code Building	16%	7.6%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher (WSP), Bill Henderson (QVSD)
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Quillayute Valley	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Forks Middle School	
Building Name	Main Building - 1952 Portion	Very High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1952	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	95%	Earthquake ground shaking hazard is higher than 95% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	78%	76%	Very High	Red
Life Safety Retrofit Building	20%	11%	Very Low	Green/Yellow
Current Code Building	16%	7.7%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Quillayute Valley	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Forks High School	
Building Name	Main Junior High Building - 1949 Portion	Very High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1949	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	95%	Earthquake ground shaking hazard is higher than 95% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	69%	66%	Very High	Red
Life Safety Retrofit Building	20%	11%	Very Low	Green/Yellow
Current Code Building	16%	7.7%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher (WSP), Bill Henderson (QVSD)
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Renton	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Hazen Senior High School	
Building Name	700 Building	Very High

Building Data

HAZUS Building Type	PC1	Precast Concrete Tilt-Up Walls
Year Built	1968	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	86%	Earthquake ground shaking hazard is higher than 86% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	87%	87%	Very High	Red
Life Safety Retrofit Building	30%	22%	Low	Yellow
Current Code Building	25%	17%	Low	Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Rami Sabra, Brian Matsumoto
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Renton	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Hazen Senior High School	
Building Name	Bldg 1 Gym/Pool	Very High

Building Data

HAZUS Building Type	PC1	Precast Concrete Tilt-Up Walls
Year Built	1969	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	86%	Earthquake ground shaking hazard is higher than 86% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	87%	87%	Very High	Red
Life Safety Retrofit Building	30%	22%	Low	Yellow
Current Code Building	25%	17%	Low	Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Rami Sabra, Brain Matsumoto
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Renton	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Hazen Senior High School	
Building Name	Bldg 1 Main Building	Very High

Building Data

HAZUS Building Type	PC1	Precast Concrete Tilt-Up Walls
Year Built	1969	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	86%	Earthquake ground shaking hazard is higher than 86% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	89%	90%	Very High	Red
Life Safety Retrofit Building	30%	22%	Low	Yellow
Current Code Building	25%	17%	Low	Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Rami Sabra, Brain Matsumoto
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Renton	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Hazen Senior High School	
Building Name	Bldg 1 Music, Band, Cafeteria	Very High

Building Data

HAZUS Building Type	PC1	Precast Concrete Tilt-Up Walls
Year Built	1969	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	86%	Earthquake ground shaking hazard is higher than 86% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	89%	90%	Very High	Red
Life Safety Retrofit Building	30%	22%	Low	Yellow
Current Code Building	25%	17%	Low	Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Rami Sabra, Brian Matsumoto
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Renton	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Hazen Senior High School	
Building Name	Gym Addition	High

Building Data

HAZUS Building Type	C2	Concrete Shear Walls
Year Built	1977	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1973 UBC	
Existing Building Code Level	Moderate-Low	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	86%	Earthquake ground shaking hazard is higher than 86% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	64%	62%	High	Red
Life Safety Retrofit Building	21%	13%	Low	Green/Yellow
Current Code Building	17%	8.9%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Rami Sabra, Brian Matsumoto
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Renton	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Lindbergh Senior High School	
Building Name	Gym Addition	High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1979	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1973 UBC	
Existing Building Code Level	Moderate-Low	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	85%	Earthquake ground shaking hazard is higher than 85% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	59%	57%	High	Red
Life Safety Retrofit Building	20%	12%	Low	Green/Yellow
Current Code Building	16%	8.6%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Rami Sabra, Brain Matsumoto
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Renton	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Lindbergh Senior High School	
Building Name	Gymnasium	Very High

Building Data		
HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1971	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	Yes	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data		
Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	85%	Earthquake ground shaking hazard is higher than 85% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	88%	88%	Very High	Red
Life Safety Retrofit Building	20%	12%	Low	Green/Yellow
Current Code Building	16%	8.6%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool	
Building Evaluated By:	Rami Sabra, Brian Matsumoto
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Renton	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Lindbergh Senior High School	
Building Name	Main Building - North	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1971	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	Yes	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	85%	Earthquake ground shaking hazard is higher than 85% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	88%	88%	Very High	Red
Life Safety Retrofit Building	20%	12%	Low	Green/Yellow
Current Code Building	16%	8.6%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Rami Sabra, Brian Matsumoto
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Renton	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Renton Senior High School	
Building Name	Cafeteria/Gym	Very High

Building Data

HAZUS Building Type	C2	Concrete Shear Walls
Year Built	1954	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	85%	Earthquake ground shaking hazard is higher than 85% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Extremely High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	86%	87%	Very High	Red
Life Safety Retrofit Building	22%	14%	Low	Green/Yellow
Current Code Building	18%	9.9%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Rami Sabra, Brian Matsumoto
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Ridgefield	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	South Ridge Elementary School	
Building Name	Main Building	High

Building Data

HAZUS Building Type	S5	Steel Frame with Unreinforced Masonry Infill Walls
Year Built	1961	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate to High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	30%	Earthquake ground shaking hazard is higher than 30% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Moderate to High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	60%	58%	High	Red
Life Safety Retrofit Building	12%	6.6%	Very Low	Green/Yellow
Current Code Building	9.1%	4.2%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Skamania	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Skamania Elementary School	
Building Name	Main Building	Low-Moderate

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1947	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate to High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	29%	Earthquake ground shaking hazard is higher than 29% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Moderate to High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	31%	24%	Low-Moderate	Yellow
Life Safety Retrofit Building	4.7%	0.8%	Very Low	Green
Current Code Building	3.5%	0.4%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	0
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Snohomish	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Cathcart Elementary School	
Building Name	100 Building	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1966	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	83%	Earthquake ground shaking hazard is higher than 83% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	80%	81%	Very High	Red
Life Safety Retrofit Building	19%	11%	Very Low	Green/Yellow
Current Code Building	15%	7.6%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Kenny O'Neill & Suzie Bauer
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Snohomish	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Cathcart Elementary School	
Building Name	200 Building	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1966	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	83%	Earthquake ground shaking hazard is higher than 83% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	80%	81%	Very High	Red
Life Safety Retrofit Building	19%	11%	Very Low	Green/Yellow
Current Code Building	15%	7.6%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Kenny O'Neill & Suzie Bauer
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Snohomish	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Cathcart Elementary School	
Building Name	300 Building	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1966	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	83%	Earthquake ground shaking hazard is higher than 83% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	80%	81%	Very High	Red
Life Safety Retrofit Building	19%	11%	Very Low	Green/Yellow
Current Code Building	15%	7.6%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Kenny O'Neill & Suzie Bauer
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Snohomish	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Cathcart Elementary School	
Building Name	400 Building	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1966	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	83%	Earthquake ground shaking hazard is higher than 83% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	79%	79%	Very High	Red
Life Safety Retrofit Building	19%	11%	Very Low	Green/Yellow
Current Code Building	15%	7.6%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Kenny O'Neill & Suzie Bauer
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Snohomish	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Cathcart Elementary School	
Building Name	500 Building	Moderate

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1980	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1976-1985 UBC	
Existing Building Code Level	Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	83%	Earthquake ground shaking hazard is higher than 83% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	39%	34%	Moderate	Red
Life Safety Retrofit Building	19%	11%	Very Low	Green/Yellow
Current Code Building	15%	7.6%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Kenny O'Neill & Suzie Bauer
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Snohomish	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Cathcart Elementary School	
Building Name	600 Building	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1966	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	83%	Earthquake ground shaking hazard is higher than 83% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	80%	81%	Very High	Red
Life Safety Retrofit Building	19%	11%	Very Low	Green/Yellow
Current Code Building	15%	7.6%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Kenny O'Neill & Suzie Bauer
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Snohomish	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Cathcart Elementary School	
Building Name	700 Building	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1970	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	83%	Earthquake ground shaking hazard is higher than 83% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	80%	81%	Very High	Red
Life Safety Retrofit Building	19%	11%	Very Low	Green/Yellow
Current Code Building	15%	7.6%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Kenny O'Neill & Suzie Bauer
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Snohomish	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Central Elementary School	
Building Name	Main Building - Gym (Concrete)	Very High

Building Data

HAZUS Building Type	C2	Concrete Shear Walls
Year Built	1948	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	77%	Earthquake ground shaking hazard is higher than 77% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	72%	72%	Very High	Red
Life Safety Retrofit Building	16%	8.8%	Very Low	Green/Yellow
Current Code Building	13%	5.8%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Kenny O'Neill & Suzie Bauer
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Snohomish	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Central Elementary School	
Building Name	Main Building - Wood	Very High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1948	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	77%	Earthquake ground shaking hazard is higher than 77% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	62%	58%	Very High	Red
Life Safety Retrofit Building	11%	4.0%	Very Low	Green
Current Code Building	8.4%	2.4%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Kenny O'Neill & Suzie Bauer
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Snohomish	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Emerson Elementary School	
Building Name	Annex	Moderate-High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1958	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	66%	Earthquake ground shaking hazard is higher than 66% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low to Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	51%	46%	Moderate-High	Red
Life Safety Retrofit Building	10%	3.8%	Very Low	Green
Current Code Building	8.1%	2.2%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Kenny O'Neill & Suzie Bauer
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Snohomish	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Emerson Elementary School	
Building Name	Main Building	Moderate-High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1954	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	66%	Earthquake ground shaking hazard is higher than 66% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low to Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	51%	46%	Moderate-High	Red
Life Safety Retrofit Building	10%	3.8%	Very Low	Green
Current Code Building	8.1%	2.2%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Kenny O'Neill & Suzie Bauer
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	South Bend	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	South Bend High School	
Building Name	Main Building High School	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1968	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	90%	Earthquake ground shaking hazard is higher than 90% of WA campuses.
Site Class (Soil or Rock Type)	E	Soft Clay Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Extremely High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	58%	54%	High	Red
Life Safety Retrofit Building	14%	6.1%	Very Low	Green
Current Code Building	11%	3.8%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	South Whidbey	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	South Whidbey Elementary School	
Building Name	A- Classrooms	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1969	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	98%	Earthquake ground shaking hazard is higher than 98% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	79%	80%	Very High	Red
Life Safety Retrofit Building	22%	14%	Low	Green/Yellow
Current Code Building	18%	9.8%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Rami Sabra, Erik Bishop
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	South Whidbey	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	South Whidbey Elementary School	
Building Name	C - Classrooms/Admin	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1969	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	98%	Earthquake ground shaking hazard is higher than 98% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	79%	80%	Very High	Red
Life Safety Retrofit Building	22%	14%	Low	Green/Yellow
Current Code Building	18%	9.8%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Rami Sabra, Erik Bishop
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	South Whidbey	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	South Whidbey Elementary School	
Building Name	D - WIA Office/Classrooms	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1969	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	98%	Earthquake ground shaking hazard is higher than 98% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	79%	80%	Very High	Red
Life Safety Retrofit Building	22%	14%	Low	Green/Yellow
Current Code Building	18%	9.8%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Rami Sabra, Erik Bishop
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	South Whidbey	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	South Whidbey Elementary School	
Building Name	E - Classrooms	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1969	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	98%	Earthquake ground shaking hazard is higher than 98% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	82%	83%	Very High	Red
Life Safety Retrofit Building	22%	14%	Low	Green/Yellow
Current Code Building	18%	9.8%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Rami Sabra, Erik Bishop
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	South Whidbey	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	South Whidbey Elementary School	
Building Name	F - Multipurpose	Very High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1969	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	98%	Earthquake ground shaking hazard is higher than 98% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	70%	68%	Very High	Red
Life Safety Retrofit Building	15%	7.0%	Very Low	Green
Current Code Building	12%	4.4%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Rami Sabra, Erik Bishop
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Spokane	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Alternative Bancroft School	
Building Name	Main Building	Low

Building Data

HAZUS Building Type	URM	Unreinforced Masonry Bearing Walls
Year Built	1960	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Eastern	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Low	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	1%	Earthquake ground shaking hazard is higher than 1% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Low	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	13%	9.8%	Low	Green/Yellow
Life Safety Retrofit Building	5.8%	3.0%	Very Low	Green/Yellow
Current Code Building	4.0%	1.7%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfor
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Spokane	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Bryant Center	
Building Name	Main Building	Very Low

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1960	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Eastern	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Low	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	1%	Earthquake ground shaking hazard is higher than 1% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Low	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	15%	12%	Very Low	Green/Yellow
Life Safety Retrofit Building	5.8%	3.0%	Very Low	Green/Yellow
Current Code Building	3.9%	1.7%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Dylan Larson
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Spokane	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Havermale High School	
Building Name	Main Building 1928 and 1940 Areas	Low

Building Data

HAZUS Building Type	URM	Unreinforced Masonry Bearing Walls
Year Built	1928	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Eastern	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Low	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	4%	Earthquake ground shaking hazard is higher than 4% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Low	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	16%	12%	Low	Green/Yellow
Life Safety Retrofit Building	5.8%	3.0%	Very Low	Green/Yellow
Current Code Building	4.0%	1.7%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Dylan Larson
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Spokane	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Havermale High School	
Building Name	Main Building 1928 Gym	Low

Building Data

HAZUS Building Type	URM	Unreinforced Masonry Bearing Walls
Year Built	1928	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Eastern	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Low	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	4%	Earthquake ground shaking hazard is higher than 4% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Low	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	13%	9.8%	Low	Green/Yellow
Life Safety Retrofit Building	5.8%	3.0%	Very Low	Green/Yellow
Current Code Building	4.0%	1.7%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Dylan Larson
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Spokane	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Havermale High School	
Building Name	Main Building 1965 Areas	Low

Building Data

HAZUS Building Type	URM	Unreinforced Masonry Bearing Walls
Year Built	1965	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Eastern	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Low	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	4%	Earthquake ground shaking hazard is higher than 4% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Low	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	16%	12%	Low	Green/Yellow
Life Safety Retrofit Building	5.8%	3.0%	Very Low	Green/Yellow
Current Code Building	4.0%	1.7%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Dylan Larson
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Spokane	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Madison Elementary School	
Building Name	Main Building	Low-Moderate

Building Data

HAZUS Building Type	URM	Unreinforced Masonry Bearing Walls
Year Built	1948	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Eastern	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	5%	Earthquake ground shaking hazard is higher than 5% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Moderate	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	22%	18%	Low-Moderate	Green/Yellow
Life Safety Retrofit Building	11%	6.8%	Very Low	Green/Yellow
Current Code Building	7.8%	4.3%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Dylan Larson
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Stanwood-Camano	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Stanwood Elementary School	
Building Name	Main Building Unit C 1966	Moderate

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1966	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	44%	Earthquake ground shaking hazard is higher than 44% of WA campuses.
Site Class (Soil or Rock Type)	E	Soft Clay Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	44%	38%	Moderate	Yellow/Red
Life Safety Retrofit Building	8.0%	2.3%	Very Low	Green
Current Code Building	6.2%	1.3%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Casey Hansen, Brian Matsumoto
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Stanwood-Camano	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Stanwood Elementary School	
Building Name	Main Building Unit C 1981	Low

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1981	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1976-1985 UBC	
Existing Building Code Level	Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	44%	Earthquake ground shaking hazard is higher than 44% of WA campuses.
Site Class (Soil or Rock Type)	E	Soft Clay Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	23%	16%	Low	Green/Yellow
Life Safety Retrofit Building	8.0%	2.3%	Very Low	Green
Current Code Building	6.2%	1.3%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Casey Hansen, Brian Matsumoto
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Stanwood-Camano	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Stanwood Elementary School	
Building Name	Main Building Units A, B	Moderate

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1956	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	44%	Earthquake ground shaking hazard is higher than 44% of WA campuses.
Site Class (Soil or Rock Type)	E	Soft Clay Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	44%	38%	Moderate	Yellow/Red
Life Safety Retrofit Building	8.0%	2.3%	Very Low	Green
Current Code Building	6.2%	1.3%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Casey Hansen, Brian Matsumoto
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Stanwood-Camano	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Stanwood Middle School	
Building Name	Building 3 - Music (Band and Choir)	High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1957	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	44%	Earthquake ground shaking hazard is higher than 44% of WA campuses.
Site Class (Soil or Rock Type)	E	Soft Clay Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	64%	63%	High	Red
Life Safety Retrofit Building	12%	5.4%	Very Low	Green
Current Code Building	9.3%	3.3%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Casey Hansen, Brian Matsumoto
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Stanwood-Camano	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Stanwood Middle School	
Building Name	Main Building (Building 1) Unit D	Low

Building Data

HAZUS Building Type	S2	Steel Braced Frame
Year Built	1992	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1988-1991 UBC	
Existing Building Code Level	High-Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	44%	Earthquake ground shaking hazard is higher than 44% of WA campuses.
Site Class (Soil or Rock Type)	E	Soft Clay Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	20%	14%	Low	Green/Yellow
Life Safety Retrofit Building	15%	9.1%	Very Low	Green/Yellow
Current Code Building	12%	6.0%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Casey Hansen, Brian Matsumoto
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Stanwood-Camano	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Stanwood Middle School	
Building Name	Main Building (Building 1) Unit G	Low

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1989	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1976-1985 UBC	
Existing Building Code Level	Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	44%	Earthquake ground shaking hazard is higher than 44% of WA campuses.
Site Class (Soil or Rock Type)	E	Soft Clay Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	19%	12%	Low	Green/Yellow
Life Safety Retrofit Building	7.8%	2.2%	Very Low	Green
Current Code Building	6.0%	1.2%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Casey Hansen, Brian Matsumoto
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Stanwood-Camano	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Stanwood Middle School	
Building Name	Main Building (Building 1) Units E and F	High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1968	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	44%	Earthquake ground shaking hazard is higher than 44% of WA campuses.
Site Class (Soil or Rock Type)	E	Soft Clay Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	64%	63%	High	Red
Life Safety Retrofit Building	12%	5.4%	Very Low	Green
Current Code Building	9.3%	3.3%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Casey Hansen, Brian Matsumoto
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Stanwood-Camano	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Twin City Elementary School	
Building Name	Main Building	Moderate

Building Data

HAZUS Building Type	S2	Steel Braced Frame
Year Built	1988	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1976-1985 UBC	
Existing Building Code Level	Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	52%	Earthquake ground shaking hazard is higher than 52% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	41%	36%	Moderate	Red
Life Safety Retrofit Building	19%	13%	Very Low	Green/Yellow
Current Code Building	15%	8.7%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Casey Hansen, Brian Matsumoto
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Stevenson-Carson	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Carson Elementary School	
Building Name	Main Building	Low

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1951	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate to High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	20%	Earthquake ground shaking hazard is higher than 20% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Moderate to High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	24%	17%	Low	Yellow
Life Safety Retrofit Building	3.2%	0.4%	Very Low	Green
Current Code Building	2.4%	0.2%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Stevenson-Carson	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Stevenson High School	
Building Name	Main Building	Low-Moderate

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1954	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate to High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	21%	Earthquake ground shaking hazard is higher than 21% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Moderate to High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	30%	23%	Low-Moderate	Yellow
Life Safety Retrofit Building	4.3%	0.7%	Very Low	Green
Current Code Building	3.2%	0.3%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Stevenson-Carson	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Stevenson High School	
Building Name	Vocational Building	Moderate-High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1964	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate to High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	21%	Earthquake ground shaking hazard is higher than 21% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Moderate to High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	48%	46%	Moderate-High	Red
Life Safety Retrofit Building	6.6%	2.0%	Very Low	Green
Current Code Building	4.9%	1.1%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Stevenson-Carson	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Wind River Middle School	
Building Name	Main Building	Moderate-High

Building Data

HAZUS Building Type	PC1	Precast Concrete Tilt-Up Walls
Year Built	1970	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate to High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	20%	Earthquake ground shaking hazard is higher than 20% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Moderate to High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	49%	47%	Moderate-High	Red
Life Safety Retrofit Building	8.2%	2.8%	Very Low	Green
Current Code Building	6.2%	1.6%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Tacoma	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	DeLong Elementary School	
Building Name	First Bldg-Bldg B	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1958	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	68%	Earthquake ground shaking hazard is higher than 68% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	57%	53%	High	Red
Life Safety Retrofit Building	13%	5.7%	Very Low	Green
Current Code Building	10%	3.6%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Tacoma	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	DeLong Elementary School	
Building Name	Original Bldg-Bldg A	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1953	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	68%	Earthquake ground shaking hazard is higher than 68% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	57%	53%	High	Red
Life Safety Retrofit Building	13%	5.7%	Very Low	Green
Current Code Building	10%	3.6%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Tacoma	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Edison Elementary School	
Building Name	Main Building	Low

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1997	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1994 UBC	
Existing Building Code Level	High-Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	70%	Earthquake ground shaking hazard is higher than 70% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	20%	13%	Low	Green/Yellow
Life Safety Retrofit Building	13%	5.4%	Very Low	Green
Current Code Building	10.0%	3.3%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Tacoma	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Foss High School	
Building Name	Gym-Pool-Cafeteria	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1972	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	67%	Earthquake ground shaking hazard is higher than 67% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	76%	77%	Very High	Red
Life Safety Retrofit Building	20%	12%	Very Low	Green/Yellow
Current Code Building	16%	8.0%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Tacoma	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Foss High School	
Building Name	Main Building - 2003 Addition	Low

Building Data

HAZUS Building Type	S2	Steel Braced Frame
Year Built	2003	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1997 UBC	
Existing Building Code Level	High	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	67%	Earthquake ground shaking hazard is higher than 67% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	22%	15%	Low	Green/Yellow
Life Safety Retrofit Building	*			
Current Code Building	*			

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Tacoma	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Foss High School	
Building Name	Main Building - North	Very High

Building Data

HAZUS Building Type	RM2	Reinf. Masonry Bearing Walls w/ Precast Concrete Diaphragms
Year Built	1972	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	67%	Earthquake ground shaking hazard is higher than 67% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	84%	85%	Very High	Red
Life Safety Retrofit Building	20%	12%	Very Low	Green/Yellow
Current Code Building	16%	8.0%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Tacoma	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Foss High School	
Building Name	Main Building - South	Very High

Building Data

HAZUS Building Type	RM2	Reinf. Masonry Bearing Walls w/ Precast Concrete Diaphragms
Year Built	1972	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	67%	Earthquake ground shaking hazard is higher than 67% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	80%	80%	Very High	Red
Life Safety Retrofit Building	20%	12%	Very Low	Green/Yellow
Current Code Building	16%	8.0%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Tacoma	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Franklin Elementary School	
Building Name	Main Building	Low

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1997	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1988-1991 UBC	
Existing Building Code Level	High-Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	67%	Earthquake ground shaking hazard is higher than 67% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	24%	18%	Low	Yellow
Life Safety Retrofit Building	20%	12%	Very Low	Green/Yellow
Current Code Building	16%	8.0%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Tacoma	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Larchmont Elementary School	
Building Name	Original Building	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1969	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	59%	Earthquake ground shaking hazard is higher than 59% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Low to Moderate	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	55%	51%	High	Red
Life Safety Retrofit Building	12%	5.0%	Very Low	Green
Current Code Building	9.6%	3.1%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Tacoma	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Lister Elementary School	
Building Name	Main Building	Very Low

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1998	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1994 UBC	
Existing Building Code Level	High-Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	66%	Earthquake ground shaking hazard is higher than 66% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	16%	9.3%	Very Low	Green/Yellow
Life Safety Retrofit Building	12%	5.0%	Very Low	Green
Current Code Building	9.6%	3.1%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Tacoma	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Manitou Park Elementary School	
Building Name	Main Building	Low

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1994	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1988-1991 UBC	
Existing Building Code Level	High-Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	71%	Earthquake ground shaking hazard is higher than 71% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	20%	13%	Low	Green/Yellow
Life Safety Retrofit Building	13%	5.5%	Very Low	Green
Current Code Building	10%	3.4%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Tacoma	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Mann Elementary School	
Building Name	Main Building	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1952	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	62%	Earthquake ground shaking hazard is higher than 62% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	56%	51%	High	Red
Life Safety Retrofit Building	12%	5.3%	Very Low	Green
Current Code Building	9.8%	3.2%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Tacoma	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Northeast Tacoma Elementary School	
Building Name	Gym Bldg-Bldg 2	Low

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1993	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1988-1991 UBC	
Existing Building Code Level	High-Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	65%	Earthquake ground shaking hazard is higher than 65% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	23%	17%	Low	Yellow
Life Safety Retrofit Building	19%	11%	Very Low	Green/Yellow
Current Code Building	15%	7.4%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Tacoma	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Northeast Tacoma Elementary School	
Building Name	Main Bldg-Bldg 1	Very Low

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1993	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1988-1991 UBC	
Existing Building Code Level	High-Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	65%	Earthquake ground shaking hazard is higher than 65% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	17%	9.6%	Very Low	Green/Yellow
Life Safety Retrofit Building	12%	5.2%	Very Low	Green
Current Code Building	9.8%	3.2%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Tacoma	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Point Defiance Elementary School	
Building Name	Main Building	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1959	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	74%	Earthquake ground shaking hazard is higher than 74% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	59%	55%	High	Red
Life Safety Retrofit Building	14%	6.2%	Very Low	Green
Current Code Building	11%	3.9%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Tacoma	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Reed Elementary School	
Building Name	Main Building	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1950	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	64%	Earthquake ground shaking hazard is higher than 64% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	56%	52%	High	Red
Life Safety Retrofit Building	13%	5.4%	Very Low	Green
Current Code Building	10.0%	3.3%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Tacoma	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Roosevelt Elementary School	
Building Name	Main Bldg	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1972	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	60%	Earthquake ground shaking hazard is higher than 60% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	55%	51%	High	Red
Life Safety Retrofit Building	12%	5.1%	Very Low	Green
Current Code Building	9.6%	3.1%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Tacoma	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Sheridan Elementary School	
Building Name	Main Building	Low

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1993	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1988-1991 UBC	
Existing Building Code Level	High-Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	61%	Earthquake ground shaking hazard is higher than 61% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	20%	12%	Low	Green/Yellow
Life Safety Retrofit Building	12%	5.1%	Very Low	Green
Current Code Building	9.7%	3.1%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Tacoma	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Stanley Elementary School	
Building Name	First Bldg	Low-Moderate

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1989	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1976-1985 UBC	
Existing Building Code Level	Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	65%	Earthquake ground shaking hazard is higher than 65% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	28%	22%	Low-Moderate	Green/Yellow
Life Safety Retrofit Building	13%	5.5%	Very Low	Green
Current Code Building	10%	3.4%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Tacoma	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Stanley Elementary School	
Building Name	Gym Bldg	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1971	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	65%	Earthquake ground shaking hazard is higher than 65% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	76%	76%	Very High	Red
Life Safety Retrofit Building	19%	11%	Very Low	Green/Yellow
Current Code Building	15%	7.8%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Tacoma	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Tacoma School of the Arts	
Building Name	SOTA Pacific Ave	Very High

Building Data

HAZUS Building Type	URM	Unreinforced Masonry Bearing Walls
Year Built	1904	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	70%	Earthquake ground shaking hazard is higher than 70% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	74%	72%	Very High	Red
Life Safety Retrofit Building	19%	11%	Very Low	Green/Yellow
Current Code Building	15%	7.6%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Tacoma	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	McCarver Elementary School	
Building Name	Main Bldg	Very High

Building Data

HAZUS Building Type	URM	Unreinforced Masonry Bearing Walls
Year Built	1919	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	64%	Earthquake ground shaking hazard is higher than 64% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	74%	72%	Very High	Red
Life Safety Retrofit Building	19%	11%	Very Low	Green/Yellow
Current Code Building	15%	7.7%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort, Colby Litzenberger
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Toledo	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Toledo Elementary School	
Building Name	Main Building	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1954	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	38%	Earthquake ground shaking hazard is higher than 38% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	68%	67%	Very High	Red
Life Safety Retrofit Building	14%	6.9%	Very Low	Green/Yellow
Current Code Building	11%	4.4%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Toledo	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Toledo Middle School	
Building Name	Classroom Bldg. (Bldg #2)	Moderate-High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1952	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	38%	Earthquake ground shaking hazard is higher than 38% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	45%	39%	Moderate-High	Red
Life Safety Retrofit Building	8.3%	2.5%	Very Low	Green
Current Code Building	6.4%	1.4%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Toledo	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Toledo Middle School	
Building Name	Main Building (Bldg. #1)	Moderate-High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1952	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	38%	Earthquake ground shaking hazard is higher than 38% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	49%	44%	Moderate-High	Red
Life Safety Retrofit Building	8.3%	2.5%	Very Low	Green
Current Code Building	6.4%	1.4%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	University Place	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Curtis Senior High School	
Building Name	500 Building	Very High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1971	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	70%	Earthquake ground shaking hazard is higher than 70% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	77%	77%	Very High	Red
Life Safety Retrofit Building	20%	12%	Low	Green/Yellow
Current Code Building	16%	8.3%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	University Place	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Sunset Primary School	
Building Name	Main Building	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1966	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	71%	Earthquake ground shaking hazard is higher than 71% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	58%	54%	High	Red
Life Safety Retrofit Building	13%	5.9%	Very Low	Green
Current Code Building	11%	3.7%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Josh Comfort
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Wahkiakum	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Julius A Wendt Elementary/John C Thomas Middl	
Building Name	J A Wendt Elementary School	Moderate-High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1952	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	53%	Earthquake ground shaking hazard is higher than 53% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	49%	44%	Moderate-High	Red
Life Safety Retrofit Building	9.7%	3.4%	Very Low	Green
Current Code Building	7.5%	1.9%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	0
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	West Valley (Yakima)	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	West Valley Junior High School	
Building Name	WVJH (Gym Building)	Low-Moderate

Building Data

HAZUS Building Type	PC1	Precast Concrete Tilt-Up Walls
Year Built	1978	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1976-1985 UBC	
Existing Building Code Level	Low	
Geographic Area	Eastern	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	26%	Earthquake ground shaking hazard is higher than 26% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Moderate to High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	31%	28%	Low-Moderate	Red
Life Safety Retrofit Building	22%	17%	Low	Yellow
Current Code Building	17%	12%	Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	0
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	West Valley (Yakima)	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	West Valley Junior High School	
Building Name	WVJH (Main Building)	Low

Building Data

HAZUS Building Type	RM2	Reinf. Masonry Bearing Walls w/ Precast Concrete Diaphragms
Year Built	1978	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1976-1985 UBC	
Existing Building Code Level	Low	
Geographic Area	Eastern	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	26%	Earthquake ground shaking hazard is higher than 26% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Moderate to High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	26%	23%	Low	Green/Yellow
Life Safety Retrofit Building	17%	12%	Very Low	Green/Yellow
Current Code Building	13%	8.0%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	0
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	White River	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Mountain Meadow Elementary School	
Building Name	Main Building	Very Low

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1990	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1988-1991 UBC	
Existing Building Code Level	High-Moderate	
Geographic Area	Puget Sound	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	Yes	

Seismic Data

Earthquake Ground Shaking Hazard Level	High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	45%	Earthquake ground shaking hazard is higher than 45% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	**Building Damage Estimate[2]**	**Probability Building is not Repairable[3]**	**Life Safety[4] Risk Level**	**Most Likely Post-Earthquake Tagging[5]**
Existing Building	16%	9.1%	Very Low	Green
Life Safety Retrofit Building	9.8%	3.4%	Very Low	Green
Current Code Building	7.6%	2.0%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Ben Fisher, Marty Brewer (WRSD)
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Willapa Valley	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Willapa Elementary School	
Building Name	Main Building	High

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1963	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Very High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	91%	Earthquake ground shaking hazard is higher than 91% of WA campuses.
Site Class (Soil or Rock Type)	D	Stiff Soil
Liquefaction Potential	Very Low to Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Very High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	61%	57%	High	Red
Life Safety Retrofit Building	15%	7.2%	Very Low	Green
Current Code Building	12%	4.6%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	0
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Woodland	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Woodland Primary School	
Building Name	1991 Addition	Low-Moderate

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1993	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	1988-1991 UBC	
Existing Building Code Level	Moderate-Low	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate to High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	34%	Earthquake ground shaking hazard is higher than 34% of WA campuses.
Site Class (Soil or Rock Type)	E	Soft Clay Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	27%	23%	Low-Moderate	Green/Yellow
Life Safety Retrofit Building	7.7%	2.5%	Very Low	Green
Current Code Building	5.7%	1.4%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Woodland	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Woodland Primary School	
Building Name	Main Building	High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1972	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	Yes	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate to High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	34%	Earthquake ground shaking hazard is higher than 34% of WA campuses.
Site Class (Soil or Rock Type)	E	Soft Clay Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	57%	55%	High	Red
Life Safety Retrofit Building	7.7%	2.5%	Very Low	Green
Current Code Building	5.7%	1.4%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Woodland	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Woodland Middle School	
Building Name	Gymnasium Building	High

Building Data

HAZUS Building Type	URM	Unreinforced Masonry Bearing Walls
Year Built	1954	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate to High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	34%	Earthquake ground shaking hazard is higher than 34% of WA campuses.
Site Class (Soil or Rock Type)	E	Soft Clay Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	49%	45%	High	Red
Life Safety Retrofit Building	7.7%	2.5%	Very Low	Green
Current Code Building	5.7%	1.4%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Woodland	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Woodland Middle School	
Building Name	Main Building	High

Building Data

HAZUS Building Type	URM	Unreinforced Masonry Bearing Walls
Year Built	1954	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate to High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	34%	Earthquake ground shaking hazard is higher than 34% of WA campuses.
Site Class (Soil or Rock Type)	E	Soft Clay Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	49%	45%	High	Red
Life Safety Retrofit Building	7.7%	2.5%	Very Low	Green
Current Code Building	5.7%	1.4%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Woodland	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Woodland Middle School	
Building Name	Performing Arts	Moderate-High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1954	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate to High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	34%	Earthquake ground shaking hazard is higher than 34% of WA campuses.
Site Class (Soil or Rock Type)	E	Soft Clay Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	52%	50%	Moderate-High	Red
Life Safety Retrofit Building	7.7%	2.5%	Very Low	Green
Current Code Building	5.7%	1.4%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Woodland	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Woodland Middle School	
Building Name	Shared High School /Middle School	High

Building Data

HAZUS Building Type	URM	Unreinforced Masonry Bearing Walls
Year Built	1954	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate to High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	34%	Earthquake ground shaking hazard is higher than 34% of WA campuses.
Site Class (Soil or Rock Type)	E	Soft Clay Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	49%	45%	High	Red
Life Safety Retrofit Building	7.7%	2.5%	Very Low	Green
Current Code Building	5.7%	1.4%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Woodland	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Woodland Middle School	
Building Name	Vocational Building	Moderate-High

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1954	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Coastal	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate to High	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	34%	Earthquake ground shaking hazard is higher than 34% of WA campuses.
Site Class (Soil or Rock Type)	E	Soft Clay Soil
Liquefaction Potential	Moderate to High	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	High	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	52%	50%	Moderate-High	Red
Life Safety Retrofit Building	7.7%	2.5%	Very Low	Green
Current Code Building	5.7%	1.4%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Yakima	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Adams Elementary School	
Building Name	8 Plex Bldg D	Moderate

Building Data

HAZUS Building Type	URM	Unreinforced Masonry Bearing Walls
Year Built	1971	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Eastern	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	18%	Earthquake ground shaking hazard is higher than 18% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low to Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Moderate	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	29%	24%	Moderate	Red
Life Safety Retrofit Building	15%	11%	Very Low	Green/Yellow
Current Code Building	12%	7.2%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	0
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Yakima	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Adams Elementary School	
Building Name	BLDG C-1	Low-Moderate

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1960	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Eastern	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	18%	Earthquake ground shaking hazard is higher than 18% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low to Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Moderate	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	32%	28%	Low-Moderate	Red
Life Safety Retrofit Building	15%	11%	Very Low	Green/Yellow
Current Code Building	12%	7.2%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	0
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Yakima	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Adams Elementary School	
Building Name	Old Gym C	Low-Moderate

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1960	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Eastern	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	18%	Earthquake ground shaking hazard is higher than 18% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low to Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Moderate	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	32%	28%	Low-Moderate	Red
Life Safety Retrofit Building	15%	11%	Very Low	Green/Yellow
Current Code Building	12%	7.2%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Yakima	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Hoover Elementary School	
Building Name	Area D - Annex Building	Low

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1975	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Eastern	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	18%	Earthquake ground shaking hazard is higher than 18% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low to Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Moderate	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	18%	11%	Low	Green/Yellow
Life Safety Retrofit Building	8.8%	3.6%	Very Low	Green
Current Code Building	6.5%	2.1%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Yakima	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Hoover Elementary School	
Building Name	Classrooms - Area F	Low

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1975	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Eastern	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	18%	Earthquake ground shaking hazard is higher than 18% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low to Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Moderate	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	18%	11%	Low	Green/Yellow
Life Safety Retrofit Building	8.8%	3.6%	Very Low	Green
Current Code Building	6.5%	2.1%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	0
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Yakima	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Hoover Elementary School	
Building Name	Main Building - Area A	Low

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1948	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Eastern	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	18%	Earthquake ground shaking hazard is higher than 18% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low to Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Moderate	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	18%	11%	Low	Green/Yellow
Life Safety Retrofit Building	8.8%	3.6%	Very Low	Green
Current Code Building	6.5%	2.1%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	Brian Knight
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Yakima	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Hoover Elementary School	
Building Name	Main Building - Area B	Low

Building Data

HAZUS Building Type	W2	Wood, Commercial & Industrial (>5,000 SF)
Year Built	1948	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Eastern	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	18%	Earthquake ground shaking hazard is higher than 18% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low to Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Moderate	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	18%	11%	Low	Green/Yellow
Life Safety Retrofit Building	8.8%	3.6%	Very Low	Green
Current Code Building	6.5%	2.1%	Very Low	Green

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	0
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Yakima	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Nob Hill Elementary School	
Building Name	Main Building	Moderate

Building Data

HAZUS Building Type	URM	Unreinforced Masonry Bearing Walls
Year Built	1951	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Eastern	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	15%	Earthquake ground shaking hazard is higher than 15% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Moderate	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	30%	25%	Moderate	Red
Life Safety Retrofit Building	16%	11%	Very Low	Green/Yellow
Current Code Building	12%	7.7%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	0
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Yakima	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Robertson Elementary School	
Building Name	100 Building - Bldg "B"	Low-Moderate

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1958	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Eastern	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	15%	Earthquake ground shaking hazard is higher than 15% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Moderate	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	32%	29%	Low-Moderate	Red
Life Safety Retrofit Building	16%	11%	Very Low	Green/Yellow
Current Code Building	12%	7.7%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	0
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Yakima	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Robertson Elementary School	
Building Name	200 Building - Bldg "C"	Low-Moderate

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1958	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Eastern	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	15%	Earthquake ground shaking hazard is higher than 15% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Moderate	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	32%	29%	Low-Moderate	Red
Life Safety Retrofit Building	16%	11%	Very Low	Green/Yellow
Current Code Building	12%	7.7%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	0
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Yakima	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Robertson Elementary School	
Building Name	300 Building - Bldg "D"	Low-Moderate

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1958	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Eastern	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	15%	Earthquake ground shaking hazard is higher than 15% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Moderate	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	32%	29%	Low-Moderate	Red
Life Safety Retrofit Building	16%	11%	Very Low	Green/Yellow
Current Code Building	12%	7.7%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	0
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Yakima	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Robertson Elementary School	
Building Name	400 Building - Bldg "E"	Low-Moderate

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1958	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Eastern	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	15%	Earthquake ground shaking hazard is higher than 15% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Moderate	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	32%	29%	Low-Moderate	Red
Life Safety Retrofit Building	16%	11%	Very Low	Green/Yellow
Current Code Building	12%	7.7%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	0
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Yakima	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Robertson Elementary School	
Building Name	500 Building - Bldg "G"	Low-Moderate

Building Data

HAZUS Building Type	RM1	Reinforced Masonry Bearing Walls w/ Wood or Metal Diaphragms
Year Built	1958	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Eastern	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	15%	Earthquake ground shaking hazard is higher than 15% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Moderate	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	32%	29%	Low-Moderate	Red
Life Safety Retrofit Building	16%	11%	Very Low	Green/Yellow
Current Code Building	12%	7.7%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	0
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Yakima	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Wilson Middle School	
Building Name	Main Building	Moderate

Building Data

HAZUS Building Type	URM	Unreinforced Masonry Bearing Walls
Year Built	1961	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Eastern	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	15%	Earthquake ground shaking hazard is higher than 15% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Moderate	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	30%	26%	Moderate	Red
Life Safety Retrofit Building	16%	11%	Very Low	Green/Yellow
Current Code Building	12%	7.8%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	0
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

Washington Schools Earthquake Performance Assessment Tool (EPAT)
RESULTS SUMMARY

District Name	Yakima	**Existing Building Life Safety Risk & Priority for Retrofit or Replacement**
School Name	Wilson Middle School	
Building Name	Science Building	Moderate

Building Data

HAZUS Building Type	URM	Unreinforced Masonry Bearing Walls
Year Built	1961	These parameters determine the capacity of the existing building to withstand earthquake forces.
Building Design Code	<1973 UBC	
Existing Building Code Level	Pre	
Geographic Area	Eastern	
Severe Vertical Irregularity	No	Buildings with irregularities have greater earthquake damage than otherwise similar buildings that are regular.
Moderate Vertical Irregularity	No	
Plan Irregularity	No	

Seismic Data

Earthquake Ground Shaking Hazard Level	Moderate	Frequency and severity of earthquakes at this site
Percentile S_s Among WA K-12 Campuses	15%	Earthquake ground shaking hazard is higher than 15% of WA campuses.
Site Class (Soil or Rock Type)	C	Very Dense Soil and Soft Rock
Liquefaction Potential	Very Low	Liquefaction increases the risk of major damage to a building
Combined Earthquake Hazard Level	Moderate	Earthquake ground shaking and liquefaction potential

Severe Earthquake Event (Design Basis Earthquake Ground Motion)[1]

Building State	Building Damage Estimate[2]	Probability Building is not Repairable[3]	Life Safety[4] Risk Level	Most Likely Post-Earthquake Tagging[5]
Existing Building	30%	26%	Moderate	Red
Life Safety Retrofit Building	16%	11%	Very Low	Green/Yellow
Current Code Building	12%	7.8%	Very Low	Green/Yellow

1. 2/3rds of the 2% in 50 year ground motion
2. Percentage of building replacement value.
3. Probability building is in the Extensive or Complete damage states. For existing buildings, the probability that the building is not economically repairable may be higher: some buildings in the Moderate Damage state are also likely to be demolished.
4. Based on probability of Complete Damage State.
5. Most likely post-earthquake damage state per ATC-20.

Source for the Data Entered into the Tool

Building Evaluated By:	0
Person(s) Who Entered Data in EPAT:	Rami Sabra, Reid Middleton
User Overrides of Default Parameters:	Building Design Code Year, Site Class, Liquefaction

FEMA P-154 Rapid Visual Screening (RVS) Summary

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District Name	Facility Name	Building Name	Latitude	Longitude	FEMA Const. Type	# of Floors	Gross Sq Ft	Year Built	Struct. Dwgs Available	Ss BSE - 2N	S1 BSE - 2N	ASCE 41 Lvl. of Seismicity	Soil Type	FEMA 154 RVS Seismicity Level	Calc. Lvl. 1 Score	Lvl. 1 Score Minimum	Final Lvl. 1 Score
Aberdeen	A.J. West Elementary School	1952 Building	46.972278	-123.837765	W2	1	22630	1952	Yes	1.518	0.696	High	E	Very High	1.1	0.7	1.1
Aberdeen	A.J. West Elementary School	Annex Building	46.972278	-123.837765	W2	1	16400	1966	Yes	1.518	0.696	High	E	Very High	1.4	0.7	1.4
Aberdeen	Central Park Elementary School	Annex Building	46.96766	-123.697506	RM1	1	5895	1966	No	1.49	0.663	High	D	Very High	1.1	0.3	1.1
Aberdeen	Central Park Elementary School	Main Building	46.96766	-123.697506	W2	1	15375	1956	No	1.49	0.663	High	D	Very High	1.8	0.7	1.8
Aberdeen	Hopkins Building (Harbor High School)	Hopkins Building	46.972483	-123.831786	C2	1	53604	1956	Yes	1.517	0.694	High	E	Very High	0.5	0.3	0.5
Aberdeen	J. M. Weatherwax High School	1964 Gymnasium Building	46.979939	-123.81815	RM1	1	26930	1964	No	1.518	0.692	High	E	Very High	0.9	0.3	0.9
Aberdeen	J. M. Weatherwax High School	Main Building	46.979939	-123.81815	S2	1	200420	1964	No	1.518	0.692	High	E	Very High	0.8	0.5	0.8
Aberdeen	McDermoth Elementary School	Main Building	46.977157	-123.82348	W2	3	61867	1930	Yes	1.518	0.693	High	D	Very High	0.0	0.7	0.7
Anacortes	Mount Erie Elementary School	1955 Original Main Building	48.487422	-122.618536	RM1	1	41796	1955	Yes	1.148	0.408	High	C	High	1.0	0.3	1.0
Anacortes	Mount Erie Elementary School	1991 Gym & Classrooms Addition	48.487422	-122.618536	W2	1	41796	1955	Yes	1.148	0.408	High	C	High	2.9	0.7	2.9
Bainbridge Island	Bainbridge High School	300 Building	47.636703	-122.52533	RM1	2	19200	1981	Yes	1.464	0.514	High	D	High	0.5	0.3	0.5
Bainbridge Island	Bainbridge High School	500 Building	47.636703	-122.52533	PC1	1	29000	1981	Yes	1.464	0.514	High	D	High	0.6	0.2	0.6
Bainbridge Island	Commodore Options School	Art & Classrooms	47.636688	-122.521656	RM1	1	7488	1970	Yes	1.462	0.513	High	D	High	1.7	0.3	1.7
Bainbridge Island	Commodore Options School	Commodore Options School	47.636688	-122.521656	W2	1	8300	1948	Yes	1.462	0.513	High	D	High	1.0	0.7	1.0
Bainbridge Island	Commodore Options School	Eagle Harbor HS	47.636688	-122.521656	RM1	1	13600	1981	Yes	1.462	0.513	High	D	High	1.7	0.3	1.7
Bainbridge Island	Ordway Elementary School	Education Pod	47.639669	-122.52201	S2	1	15750	1978	Yes	1.454	0.51	High	D	High	2.0	0.5	2.0
Bainbridge Island	Ordway Elementary School	K-4 Building	47.639669	-122.52201	S2	1	11800	1978	Yes	1.454	0.51	High	D	High	2.0	0.5	2.0
Bainbridge Island	Ordway Elementary School	Main Building	47.639669	-122.52201	S2	1	17300	1978	Yes	1.454	0.51	High	D	High	1.3	0.5	1.3
Bainbridge Island	Woodward Middle School	2-Story Classroom Wing	47.645078	-122.52921	W2	2	35200	1994	Yes	1.444	0.507	High	C	High	3.4	0.7	3.4
Bainbridge Island	Woodward Middle School	Gym	47.645078	-122.52921	RM1	1	12400	1994	Yes	1.444	0.507	High	C	High	0.5	0.3	0.5
Bainbridge Island	Woodward Middle School	Main Building	47.645078	-122.52921	RM1	1	44850	1994	Yes	1.444	0.507	High	C	High	0.5	0.3	0.5
Bellingham	Fairhaven Middle School	Main Building - Classrooms	48.714623	-122.50258	W2	2	23865	1994	Yes	1.016	0.357	High	C	High	5.1	0.7	5.1
Bellingham	Fairhaven Middle School	West Wing	48.714623	-122.50258	W2	2	60600	1994	Yes	1.016	0.357	High	C	High	5.1	0.7	5.1
Bellingham	Roosevelt Elementary School	Main Building	48.7679	-122.4416	RM1	1	43061	1972	Yes	0.987	0.347	High	D	Moderately High	0.5	0.3	0.5
Bellingham	Whatcom Middle School	Industrial Arts Building	48.759	-122.48	RM1	1	8350	1978	Yes	0.999	0.351	High	D	Moderately High	1.8	0.3	1.8
Bellingham	Whatcom Middle School	Music Building	48.759	-122.48	W2	1	4011	1971	Yes	0.999	0.351	High	D	Moderately High	3.2	0.8	3.2
Bethel	Camas Prairie Elementary School	Main Building	47.096579	-122.427471	W2	1	44728	1987	Yes	1.296	0.452	High	C	High	5.1	0.7	5.1
Bethel	Rocky Ridge Elementary School	Main Building	47.020012	-122.345543	W2	1	43864	1985	Yes	1.243	0.435	High	C	High	5.1	0.7	5.1
Brinnon	Brinnon Elementary School	Main Building	47.697418	-122.903055	W2	1	13737	1952	No	1.452	0.528	High	C	High	0.3	0.7	0.7
Burlington-Edison	Burlington-Edison High School	500 Wing	48.478157	-122.337203	RM1	1	9171	1973	Yes	1.053	0.374	High	D	High	1.7	0.3	1.7
Burlington-Edison	Burlington-Edison High School	Admin/Classroom Building	48.478157	-122.337203	RM1	1	13296	1973	Yes	1.052	0.374	High	D	High	1.7	0.3	1.7
Burlington-Edison	Burlington-Edison High School	Art/Tiger TUB Building	48.478157	-122.337203	C2	1	15665	1958	Yes	1.052	0.374	High	D	High	2.0	0.3	2.0
Burlington-Edison	Burlington-Edison High School	Cafeteria & 400 Wing	48.478157	-122.337203	RM1	1	18668	1970	Yes	1.053	0.375	High	D	High	1.0	0.3	1.0
Burlington-Edison	Burlington-Edison High School	CTE	48.478157	-122.337203	RM1	1	5003	1969	Yes	1.053	0.374	High	D	High	1.7	0.3	1.7
Burlington-Edison	Burlington-Edison High School	Fieldhouse 1953 & 1975	48.478157	-122.337203	RM1	1	36097	1953	Yes	1.053	0.375	High	D	High	0.5	0.3	0.5

District Name	Facility Name	Building Name	Latitude	Longitude	FEMA Const. Type	# of Floors	Gross Sq Ft	Year Built	Struct. Dwgs Available	Ss BSE - 2N	S1 BSE - 2N	ASCE 41 Lvl. of Seismicity	Soil Type	FEMA 154 RVS Seismicity Level	Calc. Lvl. 1 Score	Lvl. 1 Score Minimum	Final Lvl. 1 Score
Burlington-Edison	Burlington-Edison High School	Fieldhouse 1984 Addition	48.47704	-122.337601	RM1	1	14036	1984	Yes	1.053	0.375	High	D	High	1.7	0.3	1.7
Burlington-Edison	West View Elementary School	Main Building	48.476939	-122.341184	W2	1	43537	1950	Yes	1.055	0.375	High	D	High	1.0	0.7	1.0
Camas	Dorothy Fox Elementary School	Main Building	45.598716	-122.430054	RM1	1	38124	1982	Yes	0.819	0.354	High	C	Moderately High	1.1	0.3	1.1
Cascade	Beaver Valley School	Main Building	47.769747	-120.665182	W2	1	3141	2000	Yes	0.558	0.217	High	C	Moderately High	5.5	0.8	5.5
Cascade	Beaver Valley School	Old Winton School House	47.769747	-120.665182	W2	1	750	1916	No	0.558	0.217	High	C	Moderately High	2.3	0.8	2.3
Central Kitsap	Cottonwood Elementary School	Gym, PC1	47.642702	-122.64602	PC1	1	54150	1976	No	1.479	0.523	High	C	High	1.6	0.2	1.6
Central Kitsap	Cottonwood Elementary School	Main, W2	47.642702	-122.64602	W2	1	54150	1976	No	1.479	0.523	High	C	High	5.1	0.7	5.1
Central Kitsap	Emerald Heights Elementary	Gym	47.674956	-122.66483	RM1	1	56000	1993	Yes	1.433	0.507	High	C	High	1.7	0.3	1.7
Central Kitsap	Emerald Heights Elementary	Main, S2	47.674956	-122.66483	S2	1	56000	1993	Yes	1.433	0.507	High	C	High	2.0	0.5	2.0
Central Kitsap	Green Mountain Elementary	Gymnasium, RM1	47.598533	-122.81993	RM1	1	43360	1992	Yes	1.552	0.558	High	C	Very High	1.1	0.3	1.1
Central Kitsap	Green Mountain Elementary	Main, S2	47.598533	-122.81993	S2	1	43360	1992	Yes	1.552	0.558	High	C	Very High	1.4	0.5	1.4
Central Kitsap	Pinecrest Elementary	Gymnasium, RM1	47.613079	-122.63632	RM1	2	56181	1998	Yes	1.544	0.545	High	C	Very High	1.1	0.3	1.1
Central Kitsap	Pinecrest Elementary	Main Bldg, W2	47.613079	-122.63632	W2	2	56181	1998	Yes	1.544	0.545	High	C	Very High	3.8	0.7	3.8
Central Kitsap	Pinecrest Elementary	Main, S2	47.613079	-122.63632	S2	2	56181	1998	Yes	1.544	0.545	High	C	Very High	1.4	0.5	1.4
Central Kitsap	Woodlands Elementary	Main	47.629824	-122.64765	W2	1	54243	1981	Yes	1.507	0.533	High	D	Very High	3.8	0.7	3.8
Centralia	Centralia Middle School	Classroom Wings	46.726079	-122.982241	W2	1	88504	1958	Yes	1.226	0.496	High	C	High	2.9	0.7	2.9
Centralia	Centralia Middle School	Gym Wing	46.726079	-122.982241	W2	1	88504	1958	Yes	1.226	0.496	High	C	High	2.9	0.7	2.9
Centralia	Centralia Middle School	Main Building	46.726079	-122.982241	W2	1	88504	1958	Yes	1.226	0.496	High	C	High	2.9	0.7	2.9
Centralia	Oakview Elementary School	Main Building	46.742741	-122.952026	PC1	1	38046	1928	Yes	1.234	0.494	High	C	High	1.1	0.2	1.1
Centralia	Washington Elementary School	Main Building	46.708534	-122.953839	RM1	1	51063	1950	No	1.209	0.489	High	D	High	1.2	0.3	1.2
Chimacum	Chimacum High School	High School 100 Bldg A - North Wing	48.012446	-122.778205	RM1	1	36609	1979	Yes	1.317	0.479	High	D	High	1.2	0.3	1.2
Chimacum	Chimacum High School	High School 100 Bldg A - South Wing	48.012446	-122.778205	RM1	1	32231	1979	Yes	1.317	0.479	High	D	High	1.2	0.3	1.2
Chimacum	Chimacum Middle School	Middle School Bldg 100 B	48.011563	-122.777624	RM1	1	27245	1959	Yes	1.317	0.479	High	D	High	1.7	0.3	1.7
Chimacum	Chimacum Middle School	Middle School Bldg 200	48.011563	-122.777624	RM1	1	38005	1991	Yes	1.317	0.479	High	D	High	1.7	0.3	1.7
Clover Park	Custer Elementary School	Library - CU2	47.180577	-122.540396	W2	1	3264	1992	Yes	1.363	0.475	High	D	High	5.1	0.7	5.1
Clover Park	Custer Elementary School	Second Classroom Building - CU1	47.180577	-122.540396	W2	1	40304	1952	Yes	1.363	0.475	High	D	High	2.0	0.7	2.0
Clover Park	Oakbrook Elementary School	First Classroom Building - OB1	47.185916	-122.548519	RM1	1	38000	1970	Yes	1.368	0.477	High	C	High	1.7	0.3	1.7
Clover Park	Oakbrook Elementary School	Gym / MPR - OB2	47.185916	-122.548519	RM1	1	11760	1970	Yes	1.368	0.477	High	C	High	1.7	0.3	1.7
Clover Park	Tillicum Elementary School	Classroom Building - TL1	47.125239	-122.553491	URM	1	37468	1944	Yes	1.348	0.473	High	C	High	0.6	0.2	0.6
Dieringer	North Tapps Middle School	Main Building	47.248751	-122.16117	W2	1	75128	1992	Yes	1.226	0.42	High	C	High	5.1	0.7	5.1
Ephrata	Ephrata High School	1937 Annex (Former Beezley Springs ES)	47.325756	-119.55105	URM	1	23619	1937	Yes	0.398	0.159	High	D	Moderate	1.6	0.2	1.6
Ephrata	Ephrata High School	Performing Arts Center PAC	47.325756	-119.55105	URM	1	32125	1951	Yes	0.398	0.159	High	D	Moderate	1.6	0.2	1.6
Ephrata	Grant Elementary School	Main Building	47.325836	-119.554528	RM1	1	31612	1957	Yes	0.399	0.159	High	D	Moderate	1.4	0.3	1.4
Ephrata	Parkway School	Main Building	47.312661	-119.56069	W2	1	27288	1947	Yes	0.399	0.159	Moderate	C	Moderate	2.3	0.9	2.3
Everett	Jackson Elementary School	Main Building	47.967612	-122.217939	W2	2	51652	1949	Yes	1.276	0.453	High	D	High	2.0	0.7	2.0

District Name	Facility Name	Building Name	Latitude	Longitude	FEMA Const. Type	# of Floors	Gross Sq Ft	Year Built	Struct. Dwgs Available	Ss BSE - 2N	S1 BSE - 2N	ASCE 41 Lvl. of Seismicity	Soil Type	FEMA 154 RVS Seismicity Level	Calc. Lvl. 1 Score	Lvl. 1 Score Minimum	Final Lvl. 1 Score
Everett	Madison Elementary School	Main Building	47.941618	-122.223808	W2	1	41835	1947	Yes	1.324	0.469	High	C	High	2.0	0.7	2.0
Federal Way	Brigadoon Elementary School	Main Office Building - E	47.30004	-122.377902	W2	1	3681	1969	Yes	1.349	0.464	High	C	High	2.9	0.7	2.9
Federal Way	Brigadoon Elementary School	Multipurpose Building - C	47.30004	-122.377902	W2	1	4823	1970	Yes	1.349	0.464	High	C	High	2.9	0.7	2.9
Federal Way	Brigadoon Elementary School	Rooms 20-25 & Kitchen - B	47.30004	-122.377902	W2	1	6704	1969	Yes	1.349	0.464	High	C	High	2.9	0.7	2.9
Federal Way	Brigadoon Elementary School	Rooms 30-35 - F	47.30004	-122.377902	W2	1	6704	1969	Yes	1.349	0.464	High	C	High	2.9	0.7	2.9
Federal Way	Brigadoon Elementary School	Rooms 40-43 & Library - D	47.30004	-122.377902	W2	1	8524	1969	Yes	1.349	0.464	High	C	High	2.9	0.7	2.9
Federal Way	Brigadoon Elementary School	Rooms 50-58 - A	47.30004	-122.377902	W2	1	8500	1969	Yes	1.349	0.464	High	C	High	2.9	0.7	2.9
Federal Way	Camelot Elementary School	Main Building	47.334846	-122.284265	W2	1	41111	1964	Yes	1.32	0.453	High	C	High	1.9	0.7	1.9
Federal Way	Kilo Middle School	Building A Main Office	47.326821	-122.27806	W2	1	5280	1970	Yes	1.312	0.45	High	C	High	2.9	0.7	2.9
Federal Way	Kilo Middle School	Building B	47.326821	-122.27806	W2	2	7200	1970	Yes	1.312	0.45	High	C	High	2.9	0.7	2.9
Federal Way	Kilo Middle School	Building C	47.326821	-122.27806	W2	1	9600	1970	Yes	1.312	0.45	High	C	High	2.9	0.7	2.9
Federal Way	Kilo Middle School	Building D	47.326821	-122.27806	W2	1	4320	1970	Yes	1.312	0.45	High	C	High	2.9	0.7	2.9
Federal Way	Kilo Middle School	Building E Little Theater	47.326821	-122.27806	W2	2	7680	1970	Yes	1.312	0.45	High	C	High	2.9	0.7	2.9
Federal Way	Kilo Middle School	Building F1-F4 & Library	47.326821	-122.27806	W2	1	1800	1970	Yes	1.312	0.45	High	C	High	2.9	0.7	2.9
Federal Way	Kilo Middle School	Building F5-F8	47.326821	-122.27806	W2	1	7440	1970	Yes	1.312	0.45	High	C	High	2.9	0.7	2.9
Federal Way	Kilo Middle School	Building G	47.326821	-122.27806	W2	1	6240	1970	Yes	1.312	0.45	High	C	High	2.9	0.7	2.9
Federal Way	Kilo Middle School	Building H Gymnasium	47.326821	-122.27806	W2	1	8160	1970	Yes	1.312	0.45	High	C	High	2.9	0.7	2.9
Federal Way	Kilo Middle School	Building I Cafeteria	47.326821	-122.27806	W2	2	6720	1970	Yes	1.312	0.45	High	C	High	2.9	0.7	2.9
Federal Way	Kilo Middle School	Building J	47.326821	-122.27806	W2	2	21504	1970	Yes	1.312	0.45	High	C	High	2.9	0.7	2.9
Federal Way	Nautilus K-8 School	Multipurpose Rm Bldg	47.342635	-122.32233	W2	1	7000	1968	Yes	1.346	0.462	High	C	High	2.9	0.7	2.9
Federal Way	Nautilus K-8 School	Rooms 15-20 Bldg	47.342635	-122.32233	W2	1	6700	1968	Yes	1.346	0.462	High	C	High	2.9	0.7	2.9
Federal Way	Nautilus K-8 School	Rooms 1-6 Bldg	47.342635	-122.32233	W2	1	8548	1968	Yes	1.346	0.462	High	C	High	2.9	0.7	2.9
Federal Way	Nautilus K-8 School	Rooms 22-25 Bldg	47.342635	-122.32233	W2	1	6700	1968	Yes	1.346	0.462	High	C	High	2.9	0.7	2.9
Federal Way	Nautilus K-8 School	Rooms 7-14 Bldg	47.342635	-122.32233	W2	1	8548	1968	Yes	1.346	0.462	High	C	High	2.9	0.7	2.9
Federal Way	Sacajawea Middle School	100 Building	47.334644	-122.318896	RM1	1	7025	1966	Yes	1.339	0.46	High	C	High	1.7	0.3	1.7
Federal Way	Sacajawea Middle School	300 Building/Cafeteria	47.334644	-122.318896	RM1	1	9408	1968	Yes	1.339	0.46	High	C	High	1.7	0.3	1.7
Federal Way	Sacajawea Middle School	400 Building	47.334644	-122.318896	RM1	1	9606	1966	Yes	1.339	0.46	High	C	High	1.2	0.3	1.2
Federal Way	Sacajawea Middle School	600/700/800 Building	47.334644	-122.318896	RM1	1	18371	1966	Yes	1.339	0.46	High	C	High	1.2	0.3	1.2
Federal Way	Sacajawea Middle School	900 Building	47.334644	-122.318896	RM1	1	4582	1966	Yes	1.339	0.46	High	C	High	1.7	0.3	1.7
Federal Way	Sacajawea Middle School	Gym (500) Building	47.334644	-122.318896	RM1	1	14831	1966	Yes	1.339	0.46	High	C	High	1.7	0.3	1.7
Federal Way	Sacajawea Middle School	Main Office Building	47.334644	-122.318896	RM1	1	9308	1968	Yes	1.339	0.46	High	C	High	1.7	0.3	1.7
Ferndale	Central Elementary School	Main Building	48.845252	-122.592183	W2	2	44516	1920	Yes	1.005	0.352	High	E	High	1.1	0.7	1.1
Ferndale	Custer Elementary	Main Building	48.919105	-122.63725	W2	1	49103	1936	No	0.992	0.348	High	D	Moderately High	0.4	0.8	0.8
Granite Falls	Crossroads High School (form. MS)	Crossroads HS, RM1	48.084894	-121.963583	RM1	2	29720	1938	Yes	1.008	0.358	High	D	High	3.8	0.3	3.8
Granite Falls	Crossroads High School (form. MS)	Crossroads HS, W2	48.084894	-121.963583	W2	2	29720	1938	Yes	1.008	0.358	High	D	High	5.1	0.7	5.1

District Name	Facility Name	Building Name	Latitude	Longitude	FEMA Const. Type	# of Floors	Gross Sq Ft	Year Built	Struct. Dwgs Available	Ss BSE - 2N	S1 BSE - 2N	ASCE 41 Lvl. of Seismicity	Soil Type	FEMA 154 RVS Seismicity Level	Calc. Lvl. 1 Score	Lvl. 1 Score Minimum	Final Lvl. 1 Score
Granite Falls	Granite Falls Middle School (form. HS)	Main Building - Gym	48.087045	-121.962767	RM1	1	63019	1974	Yes	1.007	0.358	High	C	High	1.7	0.3	1.7
Granite Falls	Granite Falls Middle School (form. HS)	Main Building (Excl. Gym), RM1	48.087045	-121.962767	RM1	1	63019	1974	Yes	1.007	0.358	High	C	High	1.7	0.3	1.7
Granite Falls	Granite Falls Middle School (form. HS)	Main Building (Excl. Gym), W2	48.087045	-121.962767	W2	1	63019	1974	Yes	1.007	0.358	High	C	High	2.9	0.7	2.9
Granite Falls	Granite Falls Middle School (form. HS)	Multi-Purpose Building	48.086613	-121.963734	W2	1	4460	1988	No	1.007	0.358	High	C	High	4.4	0.7	4.4
Granite Falls	Mountain Way Elementary School	Gymnasium, RM1	48.0899	-121.970293	RM1	1	51515	1988	Yes	1.008	0.358	High	C	High	1.7	0.3	1.7
Granite Falls	Mountain Way Elementary School	Main Building, W2	48.0899	-121.970293	W2	1	51515	1988	Yes	1.008	0.358	High	C	High	4.1	0.7	4.1
Highline	Beverly Park @ Glendale Elementary School	Main Building A	47.510268	-122.317833	RM1	1	45700	1963	Yes	1.541	0.528	High	C	Very High	1.1	0.3	1.1
Highline	Beverly Park @ Glendale Elementary School	Multi-Purpose Building B	47.510268	-122.317833	RM1	1	17200	1963	Yes	1.541	0.528	High	C	Very High	1.1	0.3	1.1
Highline	Chinook Middle School	100 Building	47.435377	-122.28165	W2	1	26500	1956	Yes	1.45	0.493	High	C	High	2.9	0.7	2.9
Highline	Chinook Middle School	200 Building	47.435377	-122.28165	W2	1	23560	1956	Yes	1.45	0.493	High	C	High	2.9	0.7	2.9
Highline	Chinook Middle School	300 Building - Gymnasium	47.435377	-122.28165	W2	1	25680	1956	Yes	1.45	0.493	High	C	High	2.9	0.7	2.9
Highline	Chinook Middle School	400 Building - Cafeteria	47.435377	-122.28165	W2	1	11100	1956	Yes	1.45	0.493	High	C	High	2.9	0.7	2.9
Highline	Chinook Middle School	800 Building	47.435377	-122.28165	W2	1	11650	1966	Yes	1.45	0.493	High	C	High	2.2	0.7	2.2
Highline	Hilltop Elementary School	100 Building - Bldg A	47.49361	-122.30185	RM1	1	6700	1957	Yes	1.528	0.522	High	D	Very High	0.3	0.3	0.3
Highline	Hilltop Elementary School	200 Building - Bldg B	47.49361	-122.30185	W2	1	10990	1957	Yes	1.528	0.522	High	D	Very High	1.5	0.7	1.5
Highline	Hilltop Elementary School	300 Building - Bldg C	47.49361	-122.30185	W2	1	12045	1958	Yes	1.528	0.522	High	D	Very High	1.5	0.7	1.5
Highline	Hilltop Elementary School	400 Building - Bldg D	47.49361	-122.30185	W2	1	17212	1997	Yes	1.528	0.522	High	D	Very High	3.8	0.7	3.8
Highline	Seahurst Elementary School	Main Building	47.471715	-122.35263	W2	2	38200	1992	Yes	1.55	0.528	High	C	Very High	3.8	0.7	3.8
Highline	Southern Heights Elementary School	Building A	47.502051	-122.31535	W2	1	11715	1955	Yes	1.543	0.527	High	D	Very High	1.5	0.7	1.5
Highline	Southern Heights Elementary School	Building B	47.502051	-122.31535	W2	1	9694	1956	Yes	1.543	0.527	High	D	Very High	1.5	0.7	1.5
Highline	Southern Heights Elementary School	Building C - Admin/Multi Purpose	47.502051	-122.31535	RM1	1	11970	1964	Yes	1.543	0.527	High	D	Very High	0.7	0.3	0.7
Highline	Sylvester Middle School	100 Building	47.457604	-122.34088	W2	1	27360	1953	Yes	1.53	0.52	High	D	Very High	0.4	0.7	0.7
Highline	Sylvester Middle School	200 Building	47.457604	-122.34088	C2	1	11544	1953	No	1.53	0.52	High	D	Very High	1.0	0.3	1.0
Highline	Sylvester Middle School	300 Building - Gymnasium/Cafeteria	47.457604	-122.34088	C2	1	3919	1953	Yes	1.53	0.52	High	D	Very High	1.0	0.3	1.0
Highline	Sylvester Middle School	400 Building	47.457604	-122.34088	C2	1	6327	1953	Yes	1.53	0.52	High	D	Very High	0.6	0.3	0.6
Highline	Sylvester Middle School	500 Building - Library	47.457604	-122.34088	C2	1	4560	1969	Yes	1.53	0.52	High	D	Very High	0.7	0.3	0.7
Highline	Sylvester Middle School	600 Building	47.457604	-122.34088	C2	1	4141	1969	Yes	1.53	0.52	High	D	Very High	1.2	0.3	1.2
Highline	Sylvester Middle School	700 Building - Band/Drama	47.457604	-122.34088	C2	1	4560	1969	Yes	1.53	0.52	High	D	Very High	0.7	0.3	0.7
Hockinson	Hockinson Heights Elementary School (East)	Building 100 A	45.741462	-122.467151	RM1	1	23845	1992	Yes	0.759	0.346	High	D	Moderately High	1.8	0.3	1.8
Hockinson	Hockinson Heights Elementary School (East)	Building 200 C	45.741462	-122.467151	W2	1	13934	1975	Yes	0.759	0.346	High	D	Moderately High	5.5	0.8	5.5
Hockinson	Hockinson Heights Elementary School (East)	Building 300 D	45.741462	-122.467151	W2	1	10154	1975	Yes	0.759	0.346	High	D	Moderately High	3.2	0.8	3.2
Hockinson	Hockinson Heights Elementary School (East)	Building 400 B	45.741462	-122.467151	W2	1	3982	1992	Yes	0.759	0.346	High	D	Moderately High	4.7	0.8	4.7
Hockinson	Hockinson Heights Elementary School (East)	Building 500 E	45.741462	-122.467151	W2	1	10091	1980	Yes	0.759	0.346	High	D	Moderately High	5.5	0.8	5.5
Hockinson	Hockinson Heights Elementary School (East)	Building 600 F	45.741462	-122.467151	W2	1	5254	1980	Yes	0.759	0.346	High	D	Moderately High	5.5	0.8	5.5
Hockinson	Hockinson Heights Elementary School (East)	Building 800 H	45.741462	-122.467151	W2	1	6904	1975	Yes	0.759	0.346	High	D	Moderately High	3.2	0.8	3.2

District Name	Facility Name	Building Name	Latitude	Longitude	FEMA Const. Type	# of Floors	Gross Sq Ft	Year Built	Struct. Dwgs Available	Ss BSE - 2N	S1 BSE - 2N	ASCE 41 Lvl. of Seismicity	Soil Type	FEMA 154 RVS Seismicity Level	Calc. Lvl. 1 Score	Lvl. 1 Score Minimum	Final Lvl. 1 Score
Hoquiam	Central Elementary School	Main Building	46.9803	-123.889045	C2	1	38946	1952	No	1.53	0.707	High	E	Very High	0.3	0.3	0.3
Hoquiam	Emerson Elementary School	Main Building	46.9814	-123.903806	C2	1	30641	1954	Yes	1.532	0.71	High	E	Very High	-0.5	0.3	0.3
Hoquiam	Hoquiam High School	D-Business Education	46.983116	-123.910415	W2	1	9513	1966	Yes	1.533	0.711	High	D	Very High	1.2	0.7	1.2
Hoquiam	Hoquiam High School	F-Humanities	46.983116	-123.910415	W2	1	11954	1966	Yes	1.533	0.711	High	D	Very High	1.2	0.7	1.2
Hoquiam	Hoquiam High School	G-Little Theater	46.983116	-123.910415	RM1	2	14607	1966	Yes	1.533	0.711	High	D	Very High	1.1	0.3	1.1
Kelso	Coweeman Middle School	Main Building	46.143709	-122.889042	W2	1	76925	1961	Yes	0.891	0.427	High	E	High	3.0	0.7	3.0
Kelso	Rose Valley Elementary School	Main Building	46.098025	-122.826658	URM	2	21937	1939	Yes	0.866	0.413	High	C	High	1.0	0.2	1.0
La Center	La Center Elementary & Middle Schools	Building 300 - ES Main Building	45.861385	-122.66416	W2	1	31357	1938	Yes	0.8	0.376	High	D	Moderately High	1.0	0.8	1.0
Lake Washington	Dickinson Elementary School	Main Building	47.669	-122.062	W2	1	49156	1992	Yes	1.262	0.442	High	C	High	5.1	0.7	5.1
Lake Washington	Einstein Elementary School	Main Building - S2	47.702058	-122.09847	S2	2	29029	1997	Yes	1.266	0.444	High	C	High	2.0	0.5	2.0
Lake Washington	Einstein Elementary School	Main Building - W2	47.702058	-122.09847	W2	2	29029	1997	Yes	1.266	0.444	High	C	High	5.1	0.7	5.1
Lake Washington	Emerson Campus	Emerson	47.655802	-122.194179	W2	1	28188	1982	Yes	1.279	0.445	High	D	High	5.1	0.7	5.1
Lake Washington	Rockwell Elementary School	Main Building	47.698624	-122.1256	RM1	1	48953	1979	Yes	1.263	0.442	High	D	High	1.7	0.3	1.7
Lake Washington	Wilder Elementary School	Main Building	47.719408	-122.04142	W2	1	49154	1989	Yes	1.276	0.448	High	C	High	5.1	0.7	5.1
Longview	Mint Valley Elementary School	Building A - 1	46.165573	-122.974388	RM1	1	7683	1969	No	0.914	0.445	High	E	High	1.6	0.3	1.6
Longview	Mint Valley Elementary School	Building B - 2	46.165573	-122.974388	RM1	1	7046	1969	Yes	0.914	0.445	High	E	High	1.6	0.3	1.6
Longview	Mint Valley Elementary School	Building D - 4	46.165573	-122.974388	RM1	1	6427	1969	No	0.914	0.445	High	E	High	1.6	0.3	1.6
Longview	Mt. Solo Middle School	Main Building	46.164537	-123.020244	RM1	1	81432	2003	Yes	0.924	0.454	High	E	High	3.7	0.3	3.7
Longview	Northlake Elementary School	Main Building	46.145003	-122.943937	W2	1	32363	1954	No	0.902	0.438	High	Not Measured (Type D Assumed)	High	2.0	0.7	2.0
Longview	Olympic Elementary School	Annex Building	46.139456	-122.96197	W2	1	6583	1958	No	0.904	0.441	High	E	High	3.0	0.7	3.0
Longview	Olympic Elementary School	Main Building	46.139456	-122.96197	W2	1	49730	1950	No	0.904	0.441	High	E	High	2.1	0.7	2.1
Longview	Olympic Elementary School	Multipurpose Building	46.139456	-122.96197	RM1	1	8323	1958	No	0.904	0.441	High	E	High	1.6	0.3	1.6
Longview	Robert Gray Elementary School	Main Building	46.171176	-122.992588	RM2	1	49730	1997	Yes	0.919	0.449	High	E	High	3.2	0.3	3.2
Lopez Island	Lopez Elementary School	Elementary	48.491959	-122.89725	W2	1	24469	1978	Yes	1.219	0.437	High	C	High	5.1	0.7	5.1
Lopez Island	Lopez Middle High School	Gym/Tech Building	48.491816	-122.898503	RM1	1	19750	1988	Yes	1.219	0.437	High	C	High	1.7	0.3	1.7
Lopez Island	Lopez Middle High School	Junior Senior High Building	48.491816	-122.898503	W2	1	13724	1930	No	1.219	0.437	High	C	High	2.0	0.7	2.0
Mary M Knight	Mary M. Knight School	Elementary School	47.1993	-123.4322	W2	1	13333	1963	Yes	1.566	0.633	High	C	Very High	1.8	0.7	1.8
Mary M Knight	Mary M. Knight School	High School Building	47.1993	-123.4322	W2	1	29349	1979	Yes	1.566	0.633	High	C	Very High	3.8	0.7	3.8
Marysville	Cascade Elementary School	Unit A - Masonry	48.085427	-122.160481	RM1	1	12730	1955	Yes	1.092	0.389	High	D	High	1.7	0.3	1.7
Marysville	Cascade Elementary School	Unit A - Wood	48.085427	-122.160481	W2	1	12730	1955	Yes	1.092	0.389	High	D	High	2.9	0.7	2.9
Marysville	Cascade Elementary School	Unit B - Masonry	48.085427	-122.160481	RM1	1	12110	1955	Yes	1.091	0.389	High	D	High	1.7	0.3	1.7
Marysville	Cascade Elementary School	Unit B - Wood	48.085427	-122.160481	W2	1	12110	1955	Yes	1.091	0.389	High	D	High	2.9	0.7	2.9
Marysville	Cascade Elementary School	Unit C - Masonry	48.085427	-122.160481	RM1	1	4976	1956	Yes	1.092	0.389	High	D	High	1.7	0.3	1.7
Marysville	Cascade Elementary School	Unit C - Wood	48.085427	-122.160481	W2	1	4976	1956	Yes	1.092	0.389	High	D	High	2.9	0.7	2.9
Marysville	Cascade Elementary School	Unit D - Masonry	48.085427	-122.160481	RM1	1	7868	1956	Yes	1.092	0.389	High	D	High	1.7	0.3	1.7

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Marysville	Cascade Elementary School	Unit D - Wood	48.085427	-122.160481	W2	1	7868	1956	Yes	1.092	0.389	High	D	High	2.9	0.7	2.9
Marysville	Marysville Pilchuck Senior High School	Arts & Crafts Building - Bldg B	48.095906	-122.155342	RM1	1	10107	1970	Yes	1.082	0.386	High	D	High	1.7	0.3	1.7
Marysville	Marysville Pilchuck Senior High School	Auditorium - Bldg K	48.095906	-122.155342	RM1	1	30632	1970	Yes	1.082	0.386	High	D	High	1.7	0.3	1.7
Marysville	Marysville Pilchuck Senior High School	Auditorium - Bldg K C2	48.095906	-122.155342	C2	1	30632	1970	Yes	1.082	0.386	High	D	High	2.0	0.3	2.0
Marysville	Marysville Pilchuck Senior High School	Business Ed & Home Learning - Bldg C	48.095906	-122.155342	RM1	1	11224	1970	Yes	1.081	0.385	High	D	High	1.7	0.3	1.7
Marysville	Marysville Pilchuck Senior High School	East Building - Bldg H	48.095906	-122.155342	RM1	1	8606	1970	Yes	1.081	0.385	High	D	High	1.7	0.3	1.7
Marysville	Marysville Pilchuck Senior High School	Gym & New Food Commons - Bldg M	48.095906	-122.155342	RM1	2	58730	1970	Yes	1.082	0.386	High	D	High	1.7	0.3	1.7
Marysville	Marysville Pilchuck Senior High School	Library - Bldg J	48.095906	-122.155342	RM1	1	19772	1970	Yes	1.081	0.385	High	D	High	0.5	0.3	0.5
Marysville	Marysville Pilchuck Senior High School	Life Science Building - Bldg F	48.095906	-122.155342	RM1	1	10225	1970	Yes	1.081	0.385	High	D	High	1.7	0.3	1.7
Marysville	Marysville Pilchuck Senior High School	Mech Plant & Former Cafeteria - Bldg E	48.095906	-122.155342	RM1	1	14892	1970	Yes	1.082	0.386	High	D	High	1.7	0.3	1.7
Marysville	Marysville Pilchuck Senior High School	Occupational Center - Bldg A	48.095906	-122.155342	RM1	1	15494	1970	Yes	1.081	0.385	High	D	High	1.7	0.3	1.7
Marysville	Marysville Pilchuck Senior High School	Pool Building - Bldg L	48.095906	-122.155342	RM1	1	25116	1970	Yes	1.083	0.386	High	D	High	1.0	0.3	1.0
Marysville	Marysville Pilchuck Senior High School	South Building - Bldg N	48.095906	-122.155342	RM1	1	9169	1984	No	1.081	0.385	High	D	High	1.7	0.3	1.7
Marysville	Pinewood Elementary School	Bldg E	48.072686	-122.161661	RM1	1	2045	1968	Yes	1.101	0.392	High	D	High	1.7	0.3	1.7
Marysville	Pinewood Elementary School	Bldg L (Library)	48.072686	-122.161661	RM1	1	3747	1968	Yes	1.1	0.392	High	D	High	1.7	0.3	1.7
Marysville	Pinewood Elementary School	Bldg M (Gym)	48.072686	-122.161661	RM1	1	8086	1968	Yes	1.1	0.392	High	D	High	1.7	0.3	1.7
Marysville	Pinewood Elementary School	Building A	48.072686	-122.161661	RM1	1	2492	1968	Yes	1.1	0.392	High	D	High	1.7	0.3	1.7
Marysville	Pinewood Elementary School	Building D	48.072686	-122.161661	RM1	1	3568	1968	Yes	1.1	0.392	High	D	High	1.7	0.3	1.7
Marysville	Quil Ceda Tulalip Elementary School	Main Building	48.06389	-122.198748	W2	1	45400	1997	Yes	1.131	0.403	High	D	High	4.1	0.7	4.1
Marysville	Shoultes Elementary School	Bldg A Gym (B Bldg in ICOS)	48.11833	-122.16206	RM1	1	6448	1964	Yes	1.075	0.383	High	D	High	1.7	0.3	1.7
Marysville	Shoultes Elementary School	Bldg B (A Bldg in ICOS)	48.11833	-122.16206	RM1	1	12348	1958	Yes	1.075	0.383	High	D	High	1.7	0.3	1.7
Marysville	Shoultes Elementary School	Bldg C - Masonry (D Bldg in ICOS)	48.11833	-122.16206	RM1	1	9405	1965	Yes	1.074	0.383	High	D	High	1.7	0.3	1.7
Marysville	Shoultes Elementary School	Bldg C - Wood (D Bldg in ICOS)	48.11833	-122.16206	W2	1	9405	1965	Yes	1.074	0.383	High	D	High	2.9	0.7	2.9
Marysville	Shoultes Elementary School	Bldg D (C Bldg in ICOS)	48.11833	-122.16206	RM1	1	10575	1964	Yes	1.074	0.383	High	D	High	1.7	0.3	1.7
Mount Baker	Acme Elementary School	Main Building	48.718947	-122.2088	W2	1	17964	1937	No	0.939	0.331	High	D	Moderately High	0.4	0.8	0.8
Napavine	Napavine Elementary School	Main Building	46.578478	-122.905242	W2	1	15770	1951	Yes	1.114	0.466	High	C	High	2.0	0.7	2.0
Napavine	Napavine Junior Senior High School	Annex	46.577151	-122.904116	W2	1	11274	1955	No	1.113	0.465	High	C	High	2.9	0.7	2.9
Napavine	Napavine Junior Senior High School	Main	46.577151	-122.904116	S2	1	44360	1980	No	1.113	0.465	High	C	High	2.0	0.5	2.0
Naselle-Grays River Valley	Naselle K-12 School	Elementary	46.376621	-123.801168	W2	1	29156	1952	Yes	1.281	0.657	High	D	Very High	1.0	0.7	1.0
Naselle-Grays River Valley	Naselle K-12 School	High School/Admin	46.376621	-123.801168	W2	1	34621	1952	Yes	1.281	0.657	High	D	Very High	1.5	0.7	1.5
North Beach	North Beach Junior/Senior High School	Main Building	47.018545	-124.15817	RM1	2	63096	1991	Yes	1.555	0.747	High	D	Very High	0.7	0.3	0.7
North Mason	Belfair Elementary School	Gymnasium Building	47.438813	-122.83427	RM1	1	7470	1970	Yes	1.63	0.579	High	C	Very High	1.1	0.3	1.1
North Mason	Belfair Elementary School	Main Building	47.438813	-122.83427	RM2	2	33648	1970	Yes	1.63	0.579	High	C	Very High	0.3	0.3	0.3

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North River	North River School	Elementary	46.775401	-123.48387	W2	1	3702	1945	No	1.331	0.589	High	D	High	2.0	0.7	2.0
North River	North River School	Gym Home Ec-Cafeteria	46.775401	-123.48387	W2	1	9885	1922	No	1.331	0.589	High	D	High	2.0	0.7	2.0
North River	North River School	High School & Admin Building	46.775401	-123.48387	W2	2	11228	1922	No	1.331	0.589	High	D	High	2.0	0.7	2.0
North River	North River School	Talley Building (Music/Art)	46.775401	-123.48387	W2	1	2880	1945	No	1.331	0.589	High	D	High	2.0	0.7	2.0
Northshore	Canyon Creek Elementary School	Building A - Classroom/Library	47.804741	-122.187733	W2	1	17477	1977	No	1.317	0.467	High	C	High	5.1	0.7	5.1
Northshore	Canyon Creek Elementary School	Building C - Cafeteria/Gym	47.804741	-122.187733	RM1	1	18505	1977	No	1.317	0.467	High	C	High	1.7	0.3	1.7
Northshore	Crystal Springs Elementary School	Building 1 - Admin	47.801178	-122.220298	RM1	1	7626	1957	Yes	1.304	0.461	High	D	High	1.0	0.3	1.0
Northshore	Crystal Springs Elementary School	Building 2 - Classrooms/Kitchen	47.801178	-122.220298	RM1	1	7172	1957	Yes	1.304	0.461	High	D	High	1.0	0.3	1.0
Northshore	Crystal Springs Elementary School	Building 3/4 - Classrooms	47.801178	-122.220298	RM1	1	9875	1957	Yes	1.304	0.461	High	D	High	1.0	0.3	1.0
Northshore	Crystal Springs Elementary School	Building 5 - Classrooms	47.801178	-122.220298	RM1	1	4809	1957	Yes	1.304	0.461	High	D	High	1.7	0.3	1.7
Northshore	Shelton View Elementary School	Building A1/10 - Classroom	47.785541	-122.23962	RM1	1	8634	1969	Yes	1.286	0.453	High	C	High	1.0	0.3	1.0
Northshore	Shelton View Elementary School	Building C - Gym	47.785541	-122.23962	RM1	1	5899	1969	Yes	1.286	0.453	High	C	High	1.7	0.3	1.7
Oak Harbor	Clover Valley School	Main Building	48.329197	-122.673992	W2	1	38208	1951	Yes	1.368	0.491	High	C	High	1.0	0.7	1.0
Oak Harbor	Oak Harbor Middle School	Band Building	48.293554	-122.659291	RM1	1	2241	1961	No	1.363	0.489	High	C	High	1.7	0.3	1.7
Oak Harbor	Oak Harbor Middle School	Building B	48.293554	-122.659291	W2	1	12000	1961	Yes	1.363	0.489	High	C	High	1.9	0.7	1.9
Oak Harbor	Oak Harbor Middle School	C Wing	48.293554	-122.659291	W2	1	24000	1961	Yes	1.363	0.489	High	C	High	1.9	0.7	1.9
Oak Harbor	Oak Harbor Middle School	D Wing	48.293554	-122.659291	W2	1	3800	1948	Yes	1.363	0.489	High	C	High	2.0	0.7	2.0
Oak Harbor	Oak Harbor Middle School	Gym	48.293554	-122.659291	RM1	1	12310	1959	Yes	1.363	0.489	High	C	High	1.7	0.3	1.7
Oak Harbor	Oak Harbor Middle School	Main Building A	48.293554	-122.659291	W2	1	23200	1955	Yes	1.363	0.489	High	C	High	1.9	0.7	1.9
Ocean Beach	Kaino Gym	Kaino Gym	46.310056	-124.038651	W2	1	3200	1985	No	1.426	0.737	High	D	Very High	3.8	0.7	3.8
Olympia	Boston Harbor Elementary School	Main Building	47.13775	-122.8855	W2	1	27000	1991	Yes	1.448	0.529	High	C	High	5.1	0.7	5.1
Olympia	Thurgood Marshall Middle School	Gym Building	47.0623	-122.951	RM1	1	16689	1994	Yes	1.432	0.534	High	C	High	1.7	0.3	1.7
Olympia	Thurgood Marshall Middle School	Main Building	47.0623	-122.951	W2	1	56347	1994	Yes	1.432	0.534	High	C	High	5.1	0.7	5.1
Orting	Orting Primary School	Main Building	47.101367	-122.20734	W2	1	21945	1968	Yes	1.215	0.42	High	D	High	1.2	0.7	1.2
Pe Ell	Pe Ell School	Fitness Center	46.5748	-123.2995	W2	1	1500	1993	Yes	1.171	0.534	High	C	High	5.1	0.7	5.1
Pe Ell	Pe Ell School	Main Building	46.5748	-123.2995	URM	1	64492	1954	No	1.171	0.534	High	C	High	0.6	0.2	0.6
Peninsula	Discovery Elementary School	Main Building	47.331568	-122.60374	PC1	1	40337	1980	Yes	1.483	0.517	High	C	High	1.6	0.2	1.6
Peninsula	Gig Harbor High School	Main Building	47.331152	-122.60549	RM1	1	134248	1978	Yes	1.483	0.518	High	C	High	1.2	0.3	1.2
Peninsula	Gig Harbor High School	Two-Story Building	47.331152	-122.60549	W2	2	47026	1991	Yes	1.483	0.518	High	C	High	4.1	0.7	4.1
Peninsula	Gig Harbor High School	Voc-Ed Building	47.331152	-122.60549	RM1	1	12554	1978	Yes	1.483	0.518	High	C	High	1.7	0.3	1.7
Peninsula	Minter Creek Elementary School	Main Building	47.373	-122.69281	W2	1	36146	1981	Yes	1.586	0.557	High	C	Very High	3.8	0.7	3.8
Peninsula	Peninsula High School	500 Building	47.386284	-122.62442	W2	1	18439	1946	Yes	1.582	0.551	High	C	Very High	1.5	0.7	1.5
Peninsula	Peninsula High School	600 Building	47.386284	-122.62442	W2	2	13991	1962	Yes	1.582	0.551	High	C	Very High	1.8	0.7	1.8
Peninsula	Peninsula High School	700 Building - Voc Ag	47.386284	-122.62442	PC1	1	6631	1978	No	1.582	0.551	High	C	Very High	1.1	0.2	1.1
Peninsula	Peninsula High School	800 Building - Auditorium Area	47.386284	-122.62442	W2	1	19451	1970	Yes	1.582	0.551	High	C	Very High	1.8	0.7	1.8

District Name	Facility Name	Building Name	Latitude	Longitude	FEMA Const. Type	# of Floors	Gross Sq Ft	Year Built	Struct. Dwgs Available	Ss BSE - 2N	S1 BSE - 2N	ASCE 41 Lvl. of Seismicity	Soil Type	FEMA 154 RVS Seismicity Level	Calc. Lvl. 1 Score	Lvl. 1 Score Minimum	Final Lvl. 1 Score
Peninsula	Peninsula High School	900 Building - Pool Building	47.386284	-122.62442	W2	2	44692	1969	Yes	1.582	0.551	High	C	Very High	1.8	0.7	1.8
Peninsula	Peninsula High School	Main Building (100, 200, 300, 400)	47.386284	-122.62442	W2	2	92460	1946	Yes	1.582	0.551	High	C	Very High	1.5	0.7	1.5
Peninsula	Voyager Elementary School	Main Building	47.308647	-122.67879	W2	1	41088	1988	Yes	1.483	0.521	High	D	High	5.1	0.7	5.1
Port Townsend	Blue Heron Middle School	Main Building	48.1289	-122.7791	CFS2	1	60124	1995	Yes	1.354	0.495	High	D	High			
Puyallup	Meeker Elementary School	Main Building	47.18841	-122.298804	W2	1	35542	1923	Yes	1.273	0.438	High	E	High	2.1	0.7	2.1
Puyallup	Mt View Elementary School	Main Building	47.226127	-122.27123	W2	1	16507	1965	Yes	1.271	0.437	High	C	High	2.9	0.7	2.9
Puyallup	Mt View Elementary School	Multipurpose Building	47.226127	-122.27123	RM1	1	5414	1965	Yes	1.271	0.437	High	C	High	1.7	0.3	1.7
Puyallup	Waller Road Elementary School	Main Building	47.199488	-122.389323	URM	1	31241	1936	Yes	1.314	0.453	High	C	High	1.0	0.2	1.0
Puyallup	Wildwood Elementary	Main Building	47.16645	-122.273725	W2	1	40240	1965	Yes	1.257	0.433	High	C	High	2.9	0.7	2.9
Quillayute Valley	Forks Elementary School	Main Building - 1969 Portion	47.947635	-124.37883	W2	1	43258	1969	Yes	1.458	0.718	High	C	Very High	1.8	0.7	1.8
Quillayute Valley	Forks Intermediate School	Main Building - 1952 Portion	47.9494	-124.3838	W2	1	44142	1952	No	1.458	0.718	High	C	Very High	0.4	0.7	0.7
Quillayute Valley	Forks Junior-Senior High School	Main Junior High Building - 1949 Portion	47.948493	-124.38378	W2	1	9066	1949	No	1.458	0.719	High	C	Very High	1.5	0.7	1.5
Renton	Hazen Senior High School	700 Building	47.501316	-122.15251	PC1	1	24316	1968	Yes	1.401	0.48	High	C	High	0.9	0.2	0.9
Renton	Hazen Senior High School	Bldg 1 Gym/Pool	47.501316	-122.15251	PC1	2	50000	1969	Yes	1.401	0.48	High	C	High	0.9	0.2	0.9
Renton	Hazen Senior High School	Bldg 1 Main Building	47.501316	-122.15251	PC1	2	231902	1969	Yes	1.401	0.48	High	C	High	0.3	0.2	0.3
Renton	Hazen Senior High School	Bldg 1 Music, Band, Cafeteria	47.501316	-122.15251	PC1	2	231902	1969	Yes	1.401	0.48	High	C	High	0.3	0.2	0.3
Renton	Hazen Senior High School	Gym Addition	47.501316	-122.15251	C2	2	16976	1977	Yes	1.401	0.48	High	C	High	0.6	0.3	0.6
Renton	Lindbergh Senior High School	Gym Addition	47.454655	-122.16714	RM1	1	7519	1979	Yes	1.383	0.471	High	C	High	1.0	0.3	1.0
Renton	Lindbergh Senior High School	Gymnasium	47.454655	-122.16714	RM1	1	37210	1979	Yes	1.383	0.471	High	C	High	0.1	0.3	0.3
Renton	Lindbergh Senior High School	Main Building - North	47.454655	-122.16714	RM1	1	184279	1971	Yes	1.383	0.471	High	C	High	0.1	0.3	0.3
Renton	Lindbergh Senior High School	Main Building - South	47.454655	-122.16714	RM1	1	184279	1971	Yes	1.383	0.471	High	C	High	0.5	0.3	0.5
Renton	Renton Senior High School	Cafeteria/Gym	47.481594	-122.211709	C2	2	90714	1954	Yes	1.443	0.492	High	D	High	-0.1	0.3	0.3
Ridgefield	South Ridge Elementary School	Main Building	45.765719	-122.67507	S5	1	40588	1961	Yes	0.804	0.376	High	C	Moderately High	2.0	0.5	2.0
Skamania	Skamania Elementary School	Main Building	45.617003	-122.049404	W2	1	14277	1947	Yes	0.637	0.288	High	D	Moderately High	2.3	0.8	2.3
Snohomish	Cathcart Elementary School	100 Building	47.8273	-122.1222	RM1	1	4608	1966	No	1.323	0.468	High	C	High	1.0	0.3	1.0
Snohomish	Cathcart Elementary School	200 Building	47.8273	-122.1222	RM1	1	3328	1966	No	1.323	0.468	High	C	High	1.0	0.3	1.0
Snohomish	Cathcart Elementary School	300 Building	47.8273	-122.1222	RM1	1	2304	1966	No	1.323	0.468	High	C	High	1.0	0.3	1.0
Snohomish	Cathcart Elementary School	400 Building	47.8273	-122.1222	RM1	1	7168	1966	No	1.323	0.468	High	C	High	1.2	0.3	1.2
Snohomish	Cathcart Elementary School	500 Building	47.8273	-122.1222	RM1	1	5766	1980	No	1.323	0.468	High	C	High	1.7	0.3	1.7
Snohomish	Cathcart Elementary School	600 Building	47.8273	-122.1222	RM1	1	3072	1966	No	1.323	0.468	High	C	High	1.0	0.3	1.0
Snohomish	Cathcart Elementary School	700 Building	47.8273	-122.1222	RM1	1	9600	1970	No	1.323	0.468	High	C	High	1.0	0.3	1.0
Snohomish	Central Elementary School	Main Building - Gym (Concrete)	47.9141	-122.0922	C2	2	42000	1948	Yes	1.214	0.429	High	C	High	1.3	0.3	1.3
Snohomish	Central Elementary School	Main Building - Wood	47.9141	-122.0922	W2	2	42000	1948	Yes	1.214	0.429	High	C	High	0.3	0.7	0.7
Snohomish	Emerson Elementary School	Annex	47.9251	-122.0844	W2	1	10393	1958	No	1.188	0.42	High	C	High	2.9	0.7	2.9

District Name	Facility Name	Building Name	Latitude	Longitude	FEMA Const. Type	# of Floors	Gross Sq Ft	Year Built	Struct. Dwgs Available	Ss BSE - 2N	S1 BSE - 2N	ASCE 41 Lvl. of Seismicity	Soil Type	FEMA 154 RVS Seismicity Level	Calc. Lvl. 1 Score	Lvl. 1 Score Minimum	Final Lvl. 1 Score
Snohomish	Emerson Elementary School	Main Building	47.9251	-122.0844	W2	1	29645	1954	No	1.189	0.42	High	C	High	2.0	0.7	2.0
South Bend	South Bend Jr/Sr High School	Main Building High School	46.662053	-123.791702	W2	1	51000	1968	Yes	1.358	0.658	High	E	Very High	1.4	0.7	1.4
South Whidbey	South Whidbey Grades 5 & 6 - (Formerly S. Whid. Primary)	A- Classrooms	48.025867	-122.455621	RM1	1	4900	1969	No	1.425	0.513	High	C	High	1.7	0.3	1.7
South Whidbey	South Whidbey Grades 5 & 6 - (Formerly S. Whid. Primary)	C - Classrooms/Admin	48.025867	-122.455621	RM1	1	7253	1969	No	1.425	0.513	High	C	High	1.7	0.3	1.7
South Whidbey	South Whidbey Grades 5 & 6 - (Formerly S. Whid. Primary)	D - WIA Office/Classrooms	48.025867	-122.455621	RM1	1	8827	1969	Yes	1.425	0.513	High	C	High	1.7	0.3	1.7
South Whidbey	South Whidbey Grades 5 & 6 - (Formerly S. Whid. Primary)	E - Classrooms	48.025867	-122.455621	RM1	1	8827	1969	Yes	1.425	0.513	High	C	High	1.2	0.3	1.2
South Whidbey	South Whidbey Grades 5 & 6 - (Formerly S. Whid. Primary)	F - Multipurpose	48.025867	-122.455621	W2	1	6722	1969	Yes	1.425	0.513	High	C	High	1.2	0.7	1.2
Spokane	Bancroft (The Community School)	Main Building	47.672072	-117.427894	URM	1	26081	1960	Yes	0.307	0.112	Low	C	Moderate	1.7	0.2	1.7
Spokane	Bryant Center	Main Building	47.665184	-117.436596	RM1	1	21200	1960	Yes	0.307	0.112	Low	C	Moderate	2.1	0.3	2.1
Spokane	Havermale (Montessori)	Main Building 1928 & 1940 Areas	47.676614	-117.431725	URM	2	43822	1928	No	0.307	0.112	Low	C	Moderate	1.0	0.2	1.0
Spokane	Havermale (Montessori)	Main Building 1928 Gym	47.676614	-117.431725	URM	1	10592	1928	No	0.307	0.112	Low	C	Moderate	1.6	0.2	1.6
Spokane	Havermale (Montessori)	Main Building 1965 Areas	47.676614	-117.431725	URM	2	29398	1928	No	0.307	0.112	Low	C	Moderate	1.0	0.2	1.0
Spokane	Madison Elementary School	Main Building	47.708597	-117.416174	URM	1	32900	1948	Yes	0.309	0.112	Moderate	D	Moderate	1.6	0.2	1.6
Stanwood-Camano	Stanwood Elementary School	Main Building Unit C 1966	48.244738	-122.372416	W2	1	10000	1966	Yes	1.161	0.415	High	E	High	3.0	0.7	3.0
Stanwood-Camano	Stanwood Elementary School	Main Building Unit C 1981	48.244738	-122.372416	W2	1	10500	1981	Yes	1.161	0.415	High	E	High	4.2	0.7	4.2
Stanwood-Camano	Stanwood Elementary School	Main Building Units A, B	48.244738	-122.372416	W2	1	20000	1956	Yes	1.161	0.415	High	E	High	2.1	0.7	2.1
Stanwood-Camano	Stanwood Middle School	Building 3 - Music (Band & Choir)	48.242474	-122.361046	RM1	1	4765	1957	Yes	1.15	0.411	High	E	High	1.6	0.3	1.6
Stanwood-Camano	Stanwood Middle School	Main Building (Building 1) Unit D	48.242474	-122.361046	S2	1	8840	1992	Yes	1.15	0.411	High	E	High	1.6	0.5	1.6
Stanwood-Camano	Stanwood Middle School	Main Building (Building 1) Unit G	48.242474	-122.361046	W2	1	15091	1989	Yes	1.15	0.411	High	E	High	5.2	0.7	5.2
Stanwood-Camano	Stanwood Middle School	Main Building (Building 1) Units E & F	48.242474	-122.361046	RM1	1	12271	1968	Yes	1.15	0.411	High	E	High	1.6	0.3	1.6
Stanwood-Camano	Twin City Elementary School	Main Building	48.2345	-122.329	S2	2	43962	1988	Yes	1.126	0.402	High	D	High	1.4	0.5	1.4
Stevenson-Carson	Carson Elementary School	Main Building	45.726413	-121.812741	W2	1	49183	1951	Yes	0.584	0.265	High	C	Moderately High	2.3	0.8	2.3
Stevenson-Carson	Stevenson High School	Main Building	45.70118	-121.887398	W2	2	75594	1954	Yes	0.6	0.272	High	D	Moderately High	2.3	0.8	2.3
Stevenson-Carson	Stevenson High School	Vocational Building	45.70118	-121.887398	RM1	1	17428	1964	Yes	0.6	0.272	High	D	Moderately High	1.8	0.3	1.8
Stevenson-Carson	Wind River Education Center	Main Building	45.726452	-121.811141	PC1	1	53660	1970	Yes	0.584	0.265	High	C	Moderately High	1.8	0.2	1.8
Tacoma	DeLong Elementary School	First Bldg-Bldg B	47.248884	-122.501496	W2	1	21219	1958	No	1.375	0.476	High	C	High	2.9	0.7	2.9
Tacoma	DeLong Elementary School	Original Bldg-Bldg A	47.248884	-122.501496	W2	1	35193	1953	Yes	1.375	0.476	High	C	High	2.0	0.7	2.0
Tacoma	Edison Elementary School	Main Building	47.203605	-122.473772	W2	2	65034	1997	Yes	1.348	0.467	High	C	High	4.1	0.7	4.1
Tacoma	Foss High School	Gym-Pool-Cafeteria	47.239366	-122.495351	RM1	3	70000	1972	Yes	1.369	0.474	High	C	High	1.7	0.3	1.7
Tacoma	Foss High School	Main Building - 2003 Addition	47.239366	-122.495351	S2	3	16371	2003	Yes	1.369	0.474	High	C	High	3.4	0.5	3.4
Tacoma	Foss High School	Main Building - North	47.239366	-122.495351	RM2	2	56500	1972	Yes	1.369	0.474	High	C	High	1.0	0.3	1.0
Tacoma	Foss High School	Main Building - South	47.239366	-122.495351	RM2	3	106530	1972	Yes	1.369	0.474	High	C	High	1.7	0.3	1.7

District Name	Facility Name	Building Name	Latitude	Longitude	FEMA Const. Type	# of Floors	Gross Sq Ft	Year Built	Struct. Dwgs Available	Ss BSE - 2N	S1 BSE - 2N	ASCE 41 Lvl. of Seismicity	Soil Type	FEMA 154 RVS Seismicity Level	Calc. Lvl. 1 Score	Lvl. 1 Score Minimum	Final Lvl. 1 Score
Tacoma	Franklin Elementary School	Main Building	47.248254	-122.479497	RM1	2	60957	1997	Yes	1.366	0.473	High	C	High	1.7	0.3	1.7
Tacoma	Larchmont Elementary School	Original Building	47.178441	-122.428158	W2	1	72318	1969	Yes	1.322	0.458	High	C	High	2.9	0.7	2.9
Tacoma	Lister Elementary School	Main Building	47.215969	-122.400073	W2	2	72548	1998	Yes	1.324	0.457	High	C	High	5.1	0.7	5.1
Tacoma	Manitou Park Elementary School	Main Building	47.197315	-122.495051	W2	2	69257	1994	Yes	1.354	0.47	High	C	High	4.1	0.7	4.1
Tacoma	Mann Elementary School	Main Building	47.209673	-122.447795	W2	1	54705	1952	Yes	1.34	0.464	High	C	High	2.0	0.7	2.0
Tacoma	Northeast Tacoma Elementary School	Gym Bldg-Bldg 2	47.281985	-122.374586	RM1	1	13492	1993	Yes	1.339	0.461	High	C	High	1.7	0.3	1.7
Tacoma	Northeast Tacoma Elementary School	Main Bldg-Bldg 1	47.281985	-122.374586	W2	2	42607	1993	Yes	1.339	0.461	High	C	High	5.1	0.7	5.1
Tacoma	Point Defiance Elementary School	Main Building	47.289609	-122.517828	W2	1	52423	1959	Yes	1.407	0.488	High	C	High	2.9	0.7	2.9
Tacoma	Reed Elementary School	Main Building	47.225803	-122.460806	W2	1	53388	1950	Yes	1.351	0.467	High	C	High	2.0	0.7	2.0
Tacoma	Roosevelt Elementary School	Main Bldg	47.228244	-122.399388	W2	1	51763	1972	Yes	1.327	0.458	High	C	High	2.9	0.7	2.9
Tacoma	Sheridan Elementary School	Main Building	47.208803	-122.420344	W2	2	58876	1993	Yes	1.329	0.459	High	C	High	4.1	0.7	4.1
Tacoma	Stanley Elementary School	First Bldg	47.24461	-122.459857	W2	1	42378	1989	Yes	1.357	0.469	High	C	High	5.1	0.7	5.1
Tacoma	Stanley Elementary School	Gym Bldg	47.24461	-122.459857	RM1	1	15061	1971	Yes	1.357	0.469	High	C	High	1.7	0.3	1.7
Tacoma	Tacoma School of the Arts-Pacific	SOTA Pacific Ave	47.243533	-122.436639	URM	2	21601	1904	No	1.347	0.465	High	C	High	1.0	0.2	1.0
Tacoma	Willie Stewart Academy	Main Bldg	47.244841	-122.442828	URM	1	5985	1919	No	1.35	0.466	High	C	High	1.0	0.2	1.0
Toledo	Toledo Elementary School	Main Building	46.438782	-122.852615	RM1	1	51401	1954	Yes	1.023	0.444	High	D	High	1.2	0.3	1.2
Toledo	Toledo Middle School	Classroom Bldg. (Bldg #2)	46.440842	-122.84978	W2	1	7594	1952	Yes	1.024	0.444	High	C	High	2.0	0.7	2.0
Toledo	Toledo Middle School	Main Building (Bldg. #1)	46.440842	-122.84978	W2	1	35056	1952	Yes	1.024	0.444	High	C	High	1.3	0.7	1.3
University Place	Curtis Senior High School	500 Building	47.221551	-122.55017	RM1	1	18408	1971	Yes	1.381	0.481	High	D	High	1.7	0.3	1.7
University Place	Sunset Primary School	Main Building	47.215568	-122.564381	W2	1	41824	1966	Yes	1.384	0.482	High	C	High	2.9	0.7	2.9
Wahkiakum	Julius A. Wendt Elementary/John C. Thomas Middle School	J A Wendt Elementary School	46.2013	-123.3802	W2	1	28694	1952	No	1.037	0.533	High	C	High	2.0	0.7	2.0
West Valley (Yakima)	West Valley Junior High School	WVJH (Gym Building)	46.577574	-120.60828	PC1	1	27797	1978	No	0.487	0.202	High	C	Moderately High	1.8	0.2	1.8
West Valley (Yakima)	West Valley Junior High School	WVJH (Main Building)	46.577574	-120.60828	RM2	1	89273	1978	No	0.487	0.202	High	C	Moderately High	1.8	0.3	1.8
White River	Mountain Meadow Elementary School	Main Building	47.1505	-122.05911	W2	1	45060	1990	Yes	1.165	0.401	High	C	High	4.1	0.7	4.1
Willapa Valley	Willapa Elementary School	Main Building	46.675606	-123.66477	W2	1	14041	1963	Yes	1.315	0.622	High	D	Very High	1.8	0.7	1.8
Woodland	Columbia Elementary School	1991 Addition	45.902743	-122.753293	RM1	2	37879	1993	No	0.82	0.392	High	E	Moderately High	1.4	0.3	1.4
Woodland	Columbia Elementary School	Main Building	45.902743	-122.753293	RM1	2	37879	1972	No	0.82	0.392	High	E	Moderately High	0.8	0.3	0.8
Woodland	Woodland Middle School	Gymnasium Building	45.904426	-122.748344	URM	1	54228	1954	Yes	0.819	0.391	High	E	Moderately High	0.8	0.2	0.8
Woodland	Woodland Middle School	Main Building	45.904426	-122.748344	URM	1	54228	1954	Yes	0.819	0.391	High	E	Moderately High	0.8	0.2	0.8
Woodland	Woodland Middle School	Performing Arts	45.904426	-122.748344	RM1	1	54228	1954	Yes	0.819	0.391	High	E	Moderately High	0.9	0.3	0.9
Woodland	Woodland Middle School	Shared High School /Middle School	45.904426	-122.748344	URM	1	12167	1954	Yes	0.819	0.391	High	E	Moderately High	0.8	0.2	0.8
Woodland	Woodland Middle School	Vocational Building	45.904426	-122.748344	RM1	1	54228	1954	Yes	0.819	0.391	High	E	Moderately High	0.9	0.3	0.9
Yakima	Adams Elementary School	8 Plex Bldg D	46.594811	-120.48982	URM	1	8710	1971	Yes	0.467	0.195	Moderate	C	Moderate	1.7	0.2	1.7
Yakima	Adams Elementary School	BLDG C-1	46.594811	-120.48982	RM1	1	4025	1960	Yes	0.467	0.195	Moderate	C	Moderate	2.1	0.3	2.1

District Name	Facility Name	Building Name	Latitude	Longitude	FEMA Const. Type	# of Floors	Gross Sq Ft	Year Built	Struct. Dwgs Available	Ss BSE - 2N	S1 BSE - 2N	ASCE 41 Lvl. of Seismicity	Soil Type	FEMA 154 RVS Seismicity Level	Calc. Lvl. 1 Score	Lvl. 1 Score Minimum	Final Lvl. 1 Score
Yakima	Adams Elementary School	Old Gym C	46.594811	-120.48982	RM1	1	5680	1960	Yes	0.467	0.195	Moderate	C	Moderate	2.1	0.3	2.1
Yakima	Hoover Elementary School	Area D - Annex Building	46.580949	-120.51198	W2	1	5050	1975	No	0.47	0.196	Moderate	C	Moderate	3.8	0.9	3.8
Yakima	Hoover Elementary School	Classrooms - Area F	46.580949	-120.51198	W2	1	2170	1975	No	0.47	0.196	Moderate	C	Moderate	3.8	0.9	3.8
Yakima	Hoover Elementary School	Main Building - Area A	46.580949	-120.51198	W2	1	42963	1948	No	0.47	0.196	Moderate	C	Moderate	3.2	0.9	3.2
Yakima	Hoover Elementary School	Main Building - Area B	46.580949	-120.51198	W2	1	22095	1948	No	0.47	0.196	Moderate	C	Moderate	3.2	0.9	3.2
Yakima	Nob Hill Elementary School	Main Building	46.590279	-120.55324	URM	1	36889	1951	Yes	0.478	0.199	Moderate	C	Moderate	1.6	0.2	1.6
Yakima	Robertson Elementary School	100 Building - Bldg "B"	46.60509	-120.5466	RM1	1	4200	1958	Yes	0.478	0.199	Moderate	C	Moderate	2.1	0.3	2.1
Yakima	Robertson Elementary School	200 Building - Bldg "C"	46.60509	-120.5466	RM1	1	4200	1958	Yes	0.478	0.199	Moderate	C	Moderate	2.1	0.3	2.1
Yakima	Robertson Elementary School	300 Building - Bldg "D"	46.60509	-120.5466	RM1	1	6848	1958	Yes	0.478	0.199	Moderate	C	Moderate	2.1	0.3	2.1
Yakima	Robertson Elementary School	400 Building - Bldg "E"	46.60509	-120.5466	RM1	1	6848	1958	Yes	0.478	0.199	Moderate	C	Moderate	2.1	0.3	2.1
Yakima	Robertson Elementary School	500 Building - Bldg "G"	46.60509	-120.5466	RM1	1	5668	1958	Yes	0.478	0.199	Moderate	C	Moderate	2.1	0.3	2.1
Yakima	Wilson Middle School	Main Building	46.588977	-120.56711	URM	1	82203	1961	Yes	0.48	0.2	High	C	Moderately High	1.2	0.2	1.2
Yakima	Wilson Middle School	Science Building	46.588977	-120.56711	URM	1	5541	1961	Yes	0.48	0.2	High	C	Moderately High	1.2	0.2	1.2

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FEMA P-154 Rapid Visual Screening (RVS) Forms

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Address: 1801 Bay Ave.
Aberdeen, WA **Zip:** 98520
Other Identifiers: Icos Building ID: 57384
Building Name: Aberdeen, A.J. West Elementary School, 1952 Building
Use: School
Latitude: 46.972278 **Longitude:** -123.837765
S_s: 1.518 **S_1:** 0.696
Screener(s): Ben Fisher **Date/Time:** 6/21/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1952
Total Floor Area (sq. ft.): 22630 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☐ D Stiff Soil ☑ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Scale:

Reference:

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Scale:

Reference:

Address: 1801 Bay Ave.
Aberdeen, WA **Zip:** 98520
Other Identifiers: Icos Building ID: 57385
Building Name: Aberdeen, A.J. West Elementary School, Annex Building
Use: School
Latitude: 46.972278 **Longitude:** -123.837765
S_S: 1.518 **S_1:** 0.696
Screener(s): Ben Fisher **Date/Time:** 6/21/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1966
Total Floor Area (sq. ft.): 16400 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☐ D Stiff Soil ☑ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.4

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Scale:

Reference:

Address: 601 School Road
Aberdeen, WA **Zip:** 98520
Other Identifiers: Icos Building ID: 57391
Building Name: Aberdeen, Central Park Elementary School, Annex Building
Use: School
Latitude: 46.96766 **Longitude:** -123.697506
S_s: 1.49 **S_1:** 0.663
Screener(s): Ben Fisher **Date/Time:** 6/21/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1966
Total Floor Area (sq. ft.): 5895 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Scale:

Reference:

Address: 601 School Road
Aberdeen, WA **Zip:** 98520
Other Identifiers: Icos Building ID: 57392
Building Name: Aberdeen, Central Park Elementary School, Main Building
Use: School
Latitude: 46.96766 **Longitude:** -123.697506
S_s: 1.49 **S_1:** 0.663
Screener(s): Ben Fisher **Date/Time:** 6/21/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1956
Total Floor Area (sq. ft.): 15375 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.8

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Address: 1313 Pacific
Aberdeen, WA **Zip:** 98520
Other Identifiers: Icos Building ID: 57394
Building Name: Aberdeen, Hopkins Building (Harbor High School), Hopkins Building
Use: School
Latitude: 46.972483 **Longitude:** -123.831786
S_S: 1.517 **S_1:** 0.694
Screener(s): Ben Fisher **Date/Time:** 6/3/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1956
Total Floor Area (sq. ft.): 53604 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☐ D Stiff Soil ☑ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Scale:

Reference:

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.5

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Address: 410 North G Street
Aberdeen, WA **Zip:** 98520
Other Identifiers: Icos Building ID: 57378
Building Name: Aberdeen, J. M. Weatherwax High School, 1964 Gymnasium Building
Use: School
Latitude: 46.979939 **Longitude:** -123.81815
S_s: 1.518 **S_1:** 0.692
Screener(s): Ben Fisher **Date/Time:** 6/3/2020

Scale:

Reference:

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1964
Total Floor Area (sq. ft.): 26,930 square feet **Code Year:** 1961
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☐ D Stiff Soil ☑ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Address: 410 North G Street
Aberdeen, WA **Zip:** 98520
Other Identifiers: Icos Building ID: 57378
Building Name: Aberdeen, J. M. Weatherwax High School, Main Building
Use: School
Latitude: 46.979939 **Longitude:** -123.81815
S_s: 1.518 **S_1:** 0.692
Screener(s): Ben Fisher **Date/Time:** 6/3/2020

Scale:

Reference:

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1964
Total Floor Area (sq. ft.): 200420 **Code Year:** 1961
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units:

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☐ D Stiff Soil ☑ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.8

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} 1.4 ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Address: 409 North K St
Aberdeen, WA **Zip:** 98520
Other Identifiers: Icos Building ID: 57397
Building Name: Aberdeen, McDermoth Elementary School, Main Building
Use: School
Latitude: 46.977157 **Longitude:** -123.82348
S_s: 1.518 **S_1:** 0.693
Screener(s): Ben Fisher (WSP), Michael Pauley (ASD) **Date/Time:** 6/3/2020

Scale:

Reference:

No. Stories: Above Grade: 3 Below Grade: 0 **Year Built:** 1930
Total Floor Area (sq. ft.): 61867 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Severe
☑ Plan (type) Torsion

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 1313 41st Street
Anacortes, WA **Zip:** 98221
Other Identifiers: Icos Building ID: 54084
Building Name: Anacortes, Mount Erie Elementary School, 1955 Original Main Building
Use: School
Latitude: 48.487422 **Longitude:** -122.618536
S_s: 1.148 **S_1:** 0.408
Screener(s): Brian Matsumoto, PE SE **Date/Time:** 9/11/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1955
Total Floor Area (sq. ft.): 41796 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 1313 41st Street
Anacortes, WA **Zip:** 98221
Other Identifiers: Icos Building ID: 54084
Building Name: Anacortes, Mount Erie Elementary School, 1991 Gym and Classrooms Addition
Use: School
Latitude: 48.487422 **Longitude:** -122.618536
S_S: 1.148 **S_1:** 0.408
Screener(s): Brian Matsumoto, PE SE **Date/Time:** 9/11/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1955
Total Floor Area (sq. ft.): 41796 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 9330 NE High School RD
Bainbridge Island, WA **Zip:** 98110
Other Identifiers: Icos Building ID: 57407
Building Name: Bainbridge Island, Bainbridge High School, 300 Building
Use: School
Latitude: 47.636703 **Longitude:** -122.52533
S_S: 1.464 **S_1:** 0.514
Screener(s): Stephen Blount, Ben Fisher, Glen Tyrrell (BISD) **Date/Time:** 8/3/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1981
Total Floor Area (sq. ft.): 19200 **Code Year:** 1979
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.5

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

Reid Middleton
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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 9330 NE High School RD
Bainbridge Island, WA **Zip:** 98110
Other Identifiers: Icos Building ID: 57410
Building Name: Bainbridge Island, Bainbridge High School, 500 Building
Use: School
Latitude: 47.636703 **Longitude:** -122.52533
S_S: 1.464 **S_1:** 0.514
Screener(s): Stephen Blount, Ben Fisher, Glen Tyrrell (BISD) **Date/Time:** 8/3/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1981
Total Floor Area (sq. ft.): 29000 **Code Year:** 1979
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Severe
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.6

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 9530 High School Rd NE
Bainbridge Island, WA **Zip:** 98110
Other Identifiers: Icos Building ID: 57422
Building Name: Bainbridge Island, Commodore Options School, Art and Classrooms
Use: School
Latitude: 47.636688 **Longitude:** -122.521656
S_S: 1.462 **S_1:** 0.513
Screener(s): Stephen Blount, Ben Fisher, Glen Tyrrell (BISD) **Date/Time:** 6/15/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1970
Total Floor Area (sq. ft.): 7488 **Code Year:** 1967
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 9530 High School Rd NE
Bainbridge Island, WA **Zip:** 98110
Other Identifiers: Icos Building ID: 57422
Building Name: Bainbridge Island, Commodore Options School, Commodore Options School
Use: School
Latitude: 47.636688 **Longitude:** -122.521656
S_S: 1.462 **S_1:** 0.513
Screener(s): Stephen Blount, Ben Fisher, Glen Tyrrell (BISD) **Date/Time:** 6/15/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1948
Total Floor Area (sq. ft.): 8300 **Code Year:** 1946
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 9530 High School Rd NE
Bainbridge Island, WA **Zip:** 98110
Other Identifiers: Icos Building ID: 57422
Building Name: Bainbridge Island, Commodore Options School, Eagle Harbor HS
Use: School
Latitude: 47.636688 **Longitude:** -122.521656
S_S: 1.462 **S_1:** 0.513
Screener(s): Stephen Blount, Ben Fisher, Glen Tyrrell (BISD) **Date/Time:** 6/15/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1981
Total Floor Area (sq. ft.): 13600 **Code Year:** 1979
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Ph: 425-741-3800
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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 8555 Madison Ave NE
Bainbridge Island, WA **Zip:** 98110
Other Identifiers: Icos Building ID: 57416
Building Name: Bainbridge Island, Ordway Elementary School, Education Pod
Use: School
Latitude: 47.639669 **Longitude:** -122.52201
S_S: 1.454 **S_1:** 0.51
Screener(s): Stephen Blount, Ben Fisher **Date/Time:** 8/3/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1978
Total Floor Area (sq. ft.): 15750 **Code Year:** 1976
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 8555 Madison Ave NE
Bainbridge Island, WA **Zip:** 98110
Other Identifiers: Icos Building ID: 57416
Building Name: Bainbridge Island, Ordway Elementary School, K-4 Building
Use: School
Latitude: 47.639669 **Longitude:** -122.52201
S_S: 1.454 **S_1:** 0.51
Screener(s): Stephen Blount, Ben Fisher **Date/Time:** 8/3/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1978
Total Floor Area (sq. ft.): 11800 **Code Year:** 1976
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Level 1 HIGH Seismicity

Scale:

Reference:

Address: 8555 Madison Ave NE
Bainbridge Island, WA **Zip:** 98110
Other Identifiers: Icos Building ID: 57416
Building Name: Bainbridge Island, Ordway Elementary School, Main Building
Use: School
Latitude: 47.639669 **Longitude:** -122.52201
S_S: 1.454 **S_1:** 0.51
Screener(s): Stephen Blount, Ben Fisher **Date/Time:** 8/3/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1978
Total Floor Area (sq. ft.): 17300 **Code Year:** 1976
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☑ Plan (type) Torsion

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.3

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 9100 NE Sportsman Club Rd
Bainbridge Island, WA **Zip:** 98110
Other Identifiers: Icos Building ID: 57424
Building Name: Bainbridge Island, Woodward Middle School, 2-Story Classroom Wing
Use: School
Latitude: 47.645078 **Longitude:** -122.52921
S_S: 1.444 **S_1:** 0.507
Screener(s): Ben Fisher, Stephen Blount, Glen Tyrrell (BISD) **Date/Time:** 8/3/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1994
Total Floor Area (sq. ft.): 35200 **Code Year:** 1991
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☑ Plan (type) Non-Parallel Systems

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 3.4

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Reference:

Address: 9100 NE Sportsman Club Rd
Bainbridge Island, WA **Zip:** 98110
Other Identifiers: Icos Building ID: 57424
Building Name: Bainbridge Island, Woodward Middle School, Gym
Use: School
Latitude: 47.645078 **Longitude:** -122.52921
S_S: 1.444 **S_1:** 0.507
Screener(s): Ben Fisher, Stephen Blount, Glen Tyrrell (BISD) **Date/Time:** 8/3/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1994
Total Floor Area (sq. ft.): 12400 **Code Year:** 1991
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☑ Plan (type) Non-Parallel Systems

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.5

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 9100 NE Sportsman Club Rd
Bainbridge Island, WA **Zip:** 98110
Other Identifiers: Icos Building ID: 57424
Building Name: Bainbridge Island, Woodward Middle School, Main Building
Use: School
Latitude: 47.645078 **Longitude:** -122.52921
S_S: 1.444 **S_1:** 0.507
Screener(s): Ben Fisher, Stephen Blount, Glen Tyrrell (BISD) **Date/Time:** 8/3/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1994
Total Floor Area (sq. ft.): 44850 **Code Year:** 1991
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☑ Plan (type) Non-Parallel Systems

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.5

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 110 Park Ridge Rd
Bellingham, WA **Zip:** 98225
Other Identifiers: Icos Building ID: 54454
Building Name: Bellingham, Fairhaven Middle School, Main Building - Classrooms
Use: School
Latitude: 48.714623 **Longitude:** -122.50258
S_S: 1.016 **S_1:** 0.357
Screener(s): Brian Matsumoto, Kenny O'Neill & Noman Shafi **Date/Time:** 12/26/2019

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1994
Total Floor Area (sq. ft.): 23865 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 5.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 110 Park Ridge Rd
Bellingham, WA **Zip:** 98225
Other Identifiers: Icos Building ID: 54455
Building Name: Bellingham, Fairhaven Middle School, West Wing
Use: School
Latitude: 48.714623 **Longitude:** -122.50258
S_S: 1.016 **S_1:** 0.357
Screener(s): Brian Matsumoto, Kenny O'Neill & Noman Shafi **Date/Time:** 12/26/2019

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1994
Total Floor Area (sq. ft.): 60600 - Engineer to Edit **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 5.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATELY HIGH Seismicity

Scale:

Reference:

Address: 2900 Yew St
Bellingham, WA **Zip:** 98226
Other Identifiers: Icos Building ID: 54493
Building Name: Bellingham, Roosevelt Elementary School, Main Building
Use: School
Latitude: 48.7679 **Longitude:** -122.4416
S_s: 0.987 **S_1:** 0.347
Screener(s): Brian Matsumoto PE SE **Date/Time:** 9/29/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1972
Total Floor Area (sq. ft.): 43061 **Code Year:** 1970
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: Moderately High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.5

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATELY HIGH Seismicity

Scale:

Reference:

Address: 810 Halleck St
Bellingham, WA **Zip:** 98225
Other Identifiers: Icos Building ID: 54467
Building Name: Bellingham, Whatcom Middle School, Industrial Arts Building
Use: School
Latitude: 48.759 **Longitude:** -122.48
S_s: 0.999 **S_1:** 0.351
Screener(s): Brian Matsumoto, Kenny O'Neill & Noman Shafi **Date/Time:** 12/26/2019

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1978
Total Floor Area (sq. ft.): 8350 **Code Year:** 1973
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: Moderately High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.8

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATELY HIGH Seismicity

Scale:

Reference:

Address: 810 Halleck St
Bellingham, WA **Zip:** 98225
Other Identifiers: Icos Building ID: 54468
Building Name: Bellingham, Whatcom Middle School, Music Building
Use: School
Latitude: 48.759 **Longitude:** -122.48
S_s: 0.999 **S_1:** 0.351
Screener(s): Brian Matsumoto, Kenny O'Neill & Noman Shafi **Date/Time:** 12/26/2019

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1971
Total Floor Area (sq. ft.): 4011 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: Moderately High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 3.2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 320 176th Street East
Spanaway, WA **Zip:** 98387
Other Identifiers: Icos Building ID: 57577
Building Name: Bethel, Camas Prairie Elementary School, Main Building
Use: School
Latitude: 47.096579 **Longitude:** -122.427471
S_s: 1.296 **S_1:** 0.452
Screener(s): Ben Fisher, Stephen Blount **Date/Time:** 12/30/2019

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1987
Total Floor Area (sq. ft.): 44728 **Code Year:** 1985
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 5.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 6514 260th Street East
Graham, WA **Zip:** 98338
Other Identifiers: Icos Building ID: 57514
Building Name: Bethel, Rocky Ridge Elementary School, Main Building
Use: School
Latitude: 47.020012 **Longitude:** -122.345543
S_S: 1.243 **S_1:** 0.435
Screener(s): Ben Fisher, Stephen Blount **Date/Time:** 12/30/2019

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1985
Total Floor Area (sq. ft.): 43864 **Code Year:** 1983
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 5.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 46 SCHOOLHOUSE RD
Brinnon, WA **Zip:** 98320
Other Identifiers: Icos Building ID: 57777
Building Name: Brinnon, Brinnon Elementary School, Main Building
Use: School
Latitude: 47.697418 **Longitude:** -122.903055
S_S: 1.452 **S_1:** 0.528
Screener(s): Brian Matsumoto, PE SE **Date/Time:** 9/23/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1952
Total Floor Area (sq. ft.): 13737 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 301 N BURLINGTON BLVD
Burlington, WA **Zip:** 98233
Other Identifiers: Icos Building ID: 50112
Building Name: Burlington-Edison, Burlington-Edison High School, 500 Wing
Use: School
Latitude: 48.478157 **Longitude:** -122.337203
S_S: 1.053 **S_1:** 0.374
Screener(s): Kenny O'Neill & Suzie Bauer **Date/Time:** 7/9/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1973
Total Floor Area (sq. ft.): 9171 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 301 N BURLINGTON BLVD
Burlington, WA **Zip:** 98233
Other Identifiers: Icos Building ID: 50118
Building Name: Burlington-Edison, Burlington-Edison High School, Admin/Classroom Building
Use: School
Latitude: 48.478157 **Longitude:** -122.337203
S_s: 1.052 **S_1:** 0.374
Screener(s): Kenny O'Neill & Suzie Bauer **Date/Time:** 7/9/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1973
Total Floor Area (sq. ft.): 13296 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 301 N BURLINGTON BLVD
Burlington, WA **Zip:** 98233
Other Identifiers: Icos Building ID: 50119
Building Name: Burlington-Edison, Burlington-Edison High School, Art/Tiger TUB Building
Use: School
Latitude: 48.478157 **Longitude:** -122.337203
S_S: 1.052 **S_1:** 0.374
Screener(s): Kenny O'Neill & Suzie Bauer **Date/Time:** 7/9/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1958
Total Floor Area (sq. ft.): 15665 **Code Year:** 1955
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 301 N BURLINGTON BLVD
Burlington, WA **Zip:** 98233
Other Identifiers: Icos Building ID: 50117
Building Name: Burlington-Edison, Burlington-Edison High School, Cafeteria and 400 Wing
Use: School
Latitude: 48.478157 **Longitude:** -122.337203
S_s: 1.053 **S_1:** 0.375
Screener(s): Kenny O'Neill & Suzie Bauer **Date/Time:** 7/9/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1970
Total Floor Area (sq. ft.): 18668 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 301 N BURLINGTON BLVD
Burlington, WA **Zip:** 98233
Other Identifiers: Icos Building ID: 50110
Building Name: Burlington-Edison, Burlington-Edison High School, CTE
Use: School
Latitude: 48.478157 **Longitude:** -122.337203
S_S: 1.053 **S_1:** 0.374
Screener(s): Kenny O'Neill & Suzie Bauer **Date/Time:** 7/9/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1969
Total Floor Area (sq. ft.): 5003 **Code Year:** 1967
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 301 N BURLINGTON BLVD
Burlington, WA **Zip:** 98233
Other Identifiers: Icos Building ID: 50109
Building Name: Burlington-Edison, Burlington-Edison High School, Fieldhouse 1953 and 1975
Use: School
Latitude: 48.478157 **Longitude:** -122.337203
S_S: 1.053 **S_1:** 0.375
Screener(s): Kenny O'Neill & Suzie Bauer **Date/Time:** 7/9/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1953
Total Floor Area (sq. ft.): 36097 **Code Year:** 1952
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.5

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 301 N BURLINGTON BLVD
Burlington, WA **Zip:** 98233
Other Identifiers: Icos Building ID: 50109
Building Name: Burlington-Edison, Burlington-Edison High School, Fieldhouse 1984 Addition
Use: School
Latitude: 48.47704 **Longitude:** -122.337601
S_S: 1.053 **S_1:** 0.375
Screener(s): Kenny O'Neill & Suzie Bauer **Date/Time:** 7/9/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1984
Total Floor Area (sq. ft.): 14036 **Code Year:** 1982
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 515 W VICTORIA AVE
Burlington, WA **Zip:** 98233
Other Identifiers: Icos Building ID: 50095
Building Name: Burlington-Edison, West View Elementary School, Main Building
Use: School
Latitude: 48.476939 **Longitude:** -122.341184
S_S: 1.055 **S_1:** 0.375
Screener(s): Kenny O'Neill & Suzie Bauer **Date/Time:** 7/9/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1950
Total Floor Area (sq. ft.): 43537 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATELY HIGH Seismicity

Scale:

Reference:

Address: 2623 NW Sierra St
Camas, WA **Zip:** 98607
Other Identifiers: Icos Building ID: 57808
Building Name: Camas, Dorothy Fox Elementary School, Main Building
Use: School
Latitude: 45.598716 **Longitude:** -122.430054
S_s: 0.819 **S_1:** 0.354
Screener(s): Brian Knight **Date/Time:** 6/7/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1982
Total Floor Area (sq. ft.): 38124 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter
☐ Industrial ☐ Office ☑ School ☐ Government
☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer
☐ Parapets ☐ Appendages
☐ Other ____

Comments: RVS Level of Seismicity: Moderately High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATELY HIGH Seismicity

Scale:

Reference:

Address: 19265 Beaver Valley Rd
Leavenworth, WA **Zip:** 98826
Other Identifiers: Icos Building ID: 51675
Building Name: Cascade, Beaver Valley School, Main Building
Use: School
Latitude: 47.769747 **Longitude:** -120.665182
S_s: 0.558 **S_1:** 0.217
Screener(s): Kenny O'Neill, PE, SE **Date/Time:** 9/9/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 2000
Total Floor Area (sq. ft.): 3141 **Code Year:** 1997
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: Moderately High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 5.5

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATELY HIGH Seismicity

Scale:

Reference:

Address: 19265 Beaver Valley Rd
Leavenworth, WA **Zip:** 98826
Other Identifiers: Icos Building ID: 51677
Building Name: Cascade, Beaver Valley School, Old Winton School House
Use: School
Latitude: 47.769747 **Longitude:** -120.665182
S_s: 0.558 **S_1:** 0.217
Screener(s): Kenny O'Neill, PE, SE **Date/Time:** 9/9/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1916
Total Floor Area (sq. ft.): 750 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: Moderately High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.3

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 330 FOSTER RD NE
Silverdale, WA **Zip:** 98383
Other Identifiers: Icos Building ID: 57901
Building Name: Central Kitsap, Cottonwood Elementary School, Gym, PC1
Use: School
Latitude: 47.642702 **Longitude:** -122.64602
S_S: 1.479 **S_1:** 0.523
Screener(s): Casey Hansen, Kenny O'Neill **Date/Time:** 8/26/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1976
Total Floor Area (sq. ft.): 54150 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.6

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 330 FOSTER RD NE
Silverdale, WA **Zip:** 98383
Other Identifiers: Icos Building ID: 57901
Building Name: Central Kitsap, Cottonwood Elementary School, Main, W2
Use: School
Latitude: 47.642702 **Longitude:** -122.64602
S_S: 1.479 **S_1:** 0.523
Screener(s): Casey Hansen, Kenny O'Neill **Date/Time:** 8/26/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1976
Total Floor Area (sq. ft.): 54150 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units:

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 5.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} _____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 1260 NW PINNACLE CT
Silverdale, WA **Zip:** 98383
Other Identifiers: Icos Building ID: 57877
Building Name: Central Kitsap, Emerald Heights Elementary, Gym
Use: School
Latitude: 47.674956 **Longitude:** -122.66483
S_S: 1.433 **S_1:** 0.507
Screener(s): Casey Hansen, Kenny O'Neill **Date/Time:** 8/26/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1993
Total Floor Area (sq. ft.): 56000 **Code Year:** 1991
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Level 1 HIGH Seismicity

Scale:

Reference:

Address: 1260 NW PINNACLE CT
Silverdale, WA **Zip:** 98383
Other Identifiers: Icos Building ID: 57877
Building Name: Central Kitsap, Emerald Heights Elementary, Main, S2
Use: School
Latitude: 47.674956 **Longitude:** -122.66483
S_S: 1.433 **S_1:** 0.507
Screener(s): Casey Hansen, Kenny O'Neill **Date/Time:** 8/26/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1993
Total Floor Area (sq. ft.): 56000 **Code Year:** 1991
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Scale:

Reference:

Address: 3860 BOUNDARY TRAIL NW
Bremerton, WA **Zip:** 98312
Other Identifiers: Icos Building ID: 57875
Building Name: Central Kitsap, Green Mountain Elementary, Gymnasium, RM1
Use: School
Latitude: 47.598533 **Longitude:** -122.81993
S_s: 1.552 **S_1:** 0.558
Screener(s): Casey Hansen, Kenny O'neill **Date/Time:** 8/29/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1992
Total Floor Area (sq. ft.): 43360 **Code Year:** 1985
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Scale:

Reference:

Address: 5530 PINE RD NE
Bremerton, WA **Zip:** 98311
Other Identifiers: Icos Building ID: 57854
Building Name: Central Kitsap, Pinecrest Elementary, Main, S2
Use: School
Latitude: 47.613079 **Longitude:** -122.63632
S_s: 1.544 **S_1:** 0.545
Screener(s): Casey Hansen, Kenny O'Neill **Date/Time:** 8/26/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1998
Total Floor Area (sq. ft.): 56181 **Code Year:** 1994
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.4

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Scale:

Reference:

Address: 5530 PINE RD NE
Bremerton, WA **Zip:** 98311
Other Identifiers: Icos Building ID: 57854
Building Name: Central Kitsap, Pinecrest Elementary, Gymnasium, RM1
Use: School
Latitude: 47.613079 **Longitude:** -122.63632
S_s: 1.544 **S_1:** 0.545
Screener(s): Casey Hansen, Kenny O'Neill **Date/Time:** 8/26/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1998
Total Floor Area (sq. ft.): 56181 **Code Year:** 1994
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
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Rapid Visual Screening of Buildings for Potential Seismic Hazards

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Level 1 VERY HIGH Seismicity

Scale:

Reference:

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Other Identifiers: Icos Building ID: 57854
Building Name: Central Kitsap, Pinecrest Elementary, Main Bldg, W2
Use: School
Latitude: 47.613079 **Longitude:** -122.63632
S_s: 1.544 **S_1:** 0.545
Screener(s): Casey Hansen, Kenny O'Neill **Date/Time:** 8/26/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1998
Total Floor Area (sq. ft.): 56181 **Code Year:** 1994
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 3.8

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Scale:

Reference:

Address: 5530 PINE RD NE
Bremerton, WA **Zip:** 98311
Other Identifiers: Icos Building ID: 57854
Building Name: Central Kitsap, Pinecrest Elementary, Main, S2
Use: School
Latitude: 47.613079 **Longitude:** -122.63632
S_S: 1.544 **S_1:** 0.545
Screener(s): Casey Hansen, Kenny O'Neill **Date/Time:** 8/26/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1998
Total Floor Area (sq. ft.): 56181 **Code Year:** 1994
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☑ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.4

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Scale:

Reference:

Address: 7420 CENTRAL VALLEY RD NE
Bremerton, WA **Zip:** 98311
Other Identifiers: Icos Building ID: 57903
Building Name: Central Kitsap, Woodlands Elementary, Main
Use: School
Latitude: 47.629824 **Longitude:** -122.64765
S_s: 1.507 **S_1:** 0.533
Screener(s): Casey Hansen, Kenny O'neill **Date/Time:** 8/26/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1981
Total Floor Area (sq. ft.): 54243 **Code Year:** 1976
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 3.8

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 901 Johnson Road
Centralia, WA **Zip:** 98531
Other Identifiers: Icos Building ID: 57953
Building Name: Centralia, Centralia Middle School, Classroom Wings
Use: School
Latitude: 46.726079 **Longitude:** -122.982241
S_S: 1.226 **S_1:** 0.496
Screener(s): Brian Knight **Date/Time:** 7/17/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1958
Total Floor Area (sq. ft.): 88504 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 901 Johnson Road
Centralia, WA **Zip:** 98531
Other Identifiers: Icos Building ID: 57953
Building Name: Centralia, Centralia Middle School, Gym Wing
Use: School
Latitude: 46.726079 **Longitude:** -122.982241
S_S: 1.226 **S_1:** 0.496
Screener(s): Brian Knight **Date/Time:** 7/17/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1958
Total Floor Area (sq. ft.): 88504 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter
☐ Industrial ☐ Office ☑ School ☐ Government
☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer
☐ Parapets ☐ Appendages
☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 901 Johnson Road
Centralia, WA **Zip:** 98531
Other Identifiers: Icos Building ID: 57953
Building Name: Centralia, Centralia Middle School, Main Building
Use: School
Latitude: 46.726079 **Longitude:** -122.982241
S_S: 1.226 **S_1:** 0.496
Screener(s): Brian Knight **Date/Time:** 7/17/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1958
Total Floor Area (sq. ft.): 88504 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter
☐ Industrial ☐ Office ☑ School ☐ Government
☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer
☐ Parapets ☐ Appendages
☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 201 E Oakview Ave
Centralia, WA **Zip:** 98531
Other Identifiers: Icos Building ID: 57970
Building Name: Centralia, Oakview Elementary School, Main Building
Use: School
Latitude: 46.742741 **Longitude:** -122.952026
S_s: 1.234 **S_1:** 0.494
Screener(s): Brian Knight **Date/Time:** 7/17/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1928
Total Floor Area (sq. ft.): 38046 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 800 Field Ave
Centralia, WA **Zip:** 98531
Other Identifiers: Icos Building ID: 57962
Building Name: Centralia, Washington Elementary School, Main Building
Use: School
Latitude: 46.708534 **Longitude:** -122.953839
S_S: 1.209 **S_1:** 0.489
Screener(s): Brian Knight **Date/Time:** 7/23/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1950
Total Floor Area (sq. ft.): 51063 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} _____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 91 West Valley Rd
Chimacum, WA **Zip:** 98325
Other Identifiers: Icos Building ID: 58034
Building Name: Chimacum, Chimacum High School, High School 100 Bldg A - North Wing
Use: School
Latitude: 48.012446 **Longitude:** -122.778205
S_s: 1.317 **S_1:** 0.479
Screener(s): Ben Fisher **Date/Time:** 5/18/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1979
Total Floor Area (sq. ft.): 36609 **Code Year:** 1976
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units:

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} _____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 91 West Valley Rd
Chimacum, WA **Zip:** 98325
Other Identifiers: Icos Building ID: 58034
Building Name: Chimacum, Chimacum High School, High School 100 Bldg A - South Wing
Use: School
Latitude: 48.012446 **Longitude:** -122.778205
S_s: 1.317 **S_1:** 0.479
Screener(s): Ben Fisher **Date/Time:** 5/18/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1979
Total Floor Area (sq. ft.): 32231 **Code Year:** 1976
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 91 West Valley Rd
Chimacum, WA **Zip:** 98325
Other Identifiers: Icos Building ID: 58032
Building Name: Chimacum, Chimacum Middle School, Middle School Bldg 100 B
Use: School
Latitude: 48.011563 **Longitude:** -122.777624
S_S: 1.317 **S_1:** 0.479
Screener(s): Ben Fisher **Date/Time:** 5/18/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1959
Total Floor Area (sq. ft.): 27245 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 91 West Valley Rd
Chimacum, WA **Zip:** 98325
Other Identifiers: Icos Building ID: 58031
Building Name: Chimacum, Chimacum Middle School, Middle School Bldg 200
Use: School
Latitude: 48.011563 **Longitude:** -122.777624
S_S: 1.317 **S_1:** 0.479
Screener(s): Ben Fisher **Date/Time:** 5/17/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1991
Total Floor Area (sq. ft.): 38005 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 7801 Steilacoom Blvd SW
Lakewood, WA **Zip:** 98498
Other Identifiers: Icos Building ID: 50243
Building Name: Clover Park, Custer Elementary School, Library - CU2
Use: School
Latitude: 47.180577 **Longitude:** -122.540396
S_S: 1.363 **S_1:** 0.475
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 7/23/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1992
Total Floor Area (sq. ft.): 3264 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 5.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 7801 Steilacoom Blvd SW
Lakewood, WA **Zip:** 98498
Other Identifiers: Icos Building ID: 50240
Building Name: Clover Park, Custer Elementary School, Second Classroom Building - CU1
Use: School
Latitude: 47.180577 **Longitude:** -122.540396
S_S: 1.363 **S_1:** 0.475
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 7/23/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1952
Total Floor Area (sq. ft.): 40304 **Code Year:** 1949
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 7802 83rd AVE SW
Lakewood, WA **Zip:** 98498
Other Identifiers: Icos Building ID: 50244
Building Name: Clover Park, Oakbrook Elementary School, First Classroom Building - OB1
Use: School
Latitude: 47.185916 **Longitude:** -122.548519
S_S: 1.368 **S_1:** 0.477
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 7/23/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1970
Total Floor Area (sq. ft.): 38000 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 7802 83rd AVE SW
Lakewood, WA **Zip:** 98498
Other Identifiers: Icos Building ID: 50245
Building Name: Clover Park, Oakbrook Elementary School, Gym / MPR - OB2
Use: School
Latitude: 47.185916 **Longitude:** -122.548519
S_S: 1.368 **S_1:** 0.477
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 7/23/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1970
Total Floor Area (sq. ft.): 11760 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 8514 Maple St SW
Lakewood, WA **Zip:** 98498
Other Identifiers: Icos Building ID: 50186
Building Name: Clover Park, Tillicum Elementary School, Classroom Building - TL1
Use: School
Latitude: 47.125239 **Longitude:** -122.553491
S_S: 1.348 **S_1:** 0.473
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 7/23/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1944
Total Floor Area (sq. ft.): 37468 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.6

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 20029 12th Street E.
Lake Tapps, WA **Zip:** 98391
Other Identifiers: Icos Building ID: 58058
Building Name: Dieringer, North Tapps Middle School, Main Building
Use: School
Latitude: 47.248751 **Longitude:** -122.16117
S_S: 1.226 **S_1:** 0.42
Screener(s): Josh Comfort **Date/Time:** 2/15/2021

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1992
Total Floor Area (sq. ft.): 75128 **Code Year:** 1988
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter
☐ Industrial ☐ Office ☑ School ☐ Government
☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer
☐ Parapets ☐ Appendages
☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 5.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATE Seismicity

Scale:

Reference:

Address: 333 4TH AVE NW
Ephrata, WA **Zip:** 98823
Other Identifiers: Icos Building ID: 51934
Building Name: Ephrata, Ephrata High School, 1937 Annex (Former Beezley Springs ES)
Use: School
Latitude: 47.325756 **Longitude:** -119.55105
S_S: 0.398 **S_1:** 0.159
Screener(s): Josh Comfort, Dylan Larson **Date/Time:** 7/28/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1937
Total Floor Area (sq. ft.): 23619 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: Moderate

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.6

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATE Seismicity

Scale:

Reference:

Address: 333 4TH AVE NW
Ephrata, WA **Zip:** 98823
Other Identifiers: Icos Building ID: 51932
Building Name: Ephrata, Ephrata High School, Performing Arts Center PAC
Use: School
Latitude: 47.325756 **Longitude:** -119.55105
S_s: 0.398 **S_1:** 0.159
Screener(s): Josh Comfort, Dylan Larson **Date/Time:** 7/28/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1951
Total Floor Area (sq. ft.): 32125 **Code Year:** 1949
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: Moderate

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.6

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATE Seismicity

Scale:

Reference:

Address: 451 3RD NW
Ephrata, WA **Zip:** 98823
Other Identifiers: Icos Building ID: 51927
Building Name: Ephrata, Grant Elementary School, Main Building
Use: School
Latitude: 47.325836 **Longitude:** -119.554528
S_s: 0.399 **S_1:** 0.159
Screener(s): Josh Comfort, Dylan Larson **Date/Time:** 7/28/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1957
Total Floor Area (sq. ft.): 31612 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: Moderate

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.4

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Everett, WA 98204
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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATE Seismicity

Scale:

Reference:

Address: 1011 PARKWAY BLVD
Ephrata, WA **Zip:** 98823
Other Identifiers: Icos Building ID: 51938
Building Name: Ephrata, Parkway School, Main Building
Use: School
Latitude: 47.312661 **Longitude:** -119.56069
S_s: 0.399 **S_1:** 0.159
Screener(s): Josh Comfort, Dylan Larson **Date/Time:** 7/28/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1947
Total Floor Area (sq. ft.): 27288 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: Moderate

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.3

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 3700 Federal Ave.
Everett, WA **Zip:** 98201
Other Identifiers: Icos Building ID: 54780
Building Name: Everett, Jackson Elementary School, Main Building
Use: School
Latitude: 47.967612 **Longitude:** -122.217939
S_S: 1.276 **S_1:** 0.453
Screener(s): Paul Crocker & Noman Shafi **Date/Time:** 12/4/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1949
Total Floor Area (sq. ft.): 51652 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter
☐ Industrial ☐ Office ☑ School ☐ Government
☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer
☐ Parapets ☐ Appendages
☐ Other

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} _____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 616 Pecks Dr.
Everett, WA **Zip:** 98203
Other Identifiers: Icos Building ID: 54831
Building Name: Everett, Madison Elementary School, Main Building
Use: School
Latitude: 47.941618 **Longitude:** -122.223808
S_s: 1.324 **S_1:** 0.469
Screener(s): Paul Crocker & Noman Shafi **Date/Time:** 12/4/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1947
Total Floor Area (sq. ft.): 41835 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 3601 SW 336th ST
Federal Way, WA **Zip:** 98023
Other Identifiers: Icos Building ID: 50844
Building Name: Federal Way, Brigadoon Elementary School, Main Office Building - E
Use: School
Latitude: 47.30004 **Longitude:** -122.377902
S_s: 1.349 **S_1:** 0.464
Screener(s): Ben Fisher **Date/Time:** 3/24/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1969
Total Floor Area (sq. ft.): 3681 **Code Year:** 1967
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 3601 SW 336th ST
Federal Way, WA **Zip:** 98023
Other Identifiers: Icos Building ID: 50838
Building Name: Federal Way, Brigadoon Elementary School, Multipurpose Building - C
Use: School
Latitude: 47.30004 **Longitude:** -122.377902
S_s: 1.349 **S_1:** 0.464
Screener(s): Ben Fisher **Date/Time:** 3/24/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1970
Total Floor Area (sq. ft.): 4823 **Code Year:** 1967
Additions: ☐ None ☐ Yes, Year(s) Built _____

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: _____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other _____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} _____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 3601 SW 336th ST
Federal Way, WA **Zip:** 98023
Other Identifiers: Icos Building ID: 50843
Building Name: Federal Way, Brigadoon Elementary School, Rooms 20-25 and Kitchen - B
Use: School
Latitude: 47.30004 **Longitude:** -122.377902
S_S: 1.349 **S_1:** 0.464
Screener(s): Ben Fisher **Date/Time:** 3/24/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1969
Total Floor Area (sq. ft.): 6704 **Code Year:** 1967
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units:

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} _____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 3601 SW 336th ST
Federal Way, WA **Zip:** 98023
Other Identifiers: Icos Building ID: 50839
Building Name: Federal Way, Brigadoon Elementary School, Rooms 30-35 - F
Use: School
Latitude: 47.30004 **Longitude:** -122.377902
S_S: 1.349 **S_1:** 0.464
Screener(s): Ben Fisher **Date/Time:** 3/24/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1969
Total Floor Area (sq. ft.): 6704 **Code Year:** 1967
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 3601 SW 336th ST
Federal Way, WA **Zip:** 98023
Other Identifiers: Icos Building ID: 50841
Building Name: Federal Way, Brigadoon Elementary School, Rooms 40-43 and Library - D
Use: School
Latitude: 47.30004 **Longitude:** -122.377902
S_S: 1.349 **S_1:** 0.464
Screener(s): Ben Fisher **Date/Time:** 3/24/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1969
Total Floor Area (sq. ft.): 8524 **Code Year:** 1967
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 3601 SW 336th ST
Federal Way, WA **Zip:** 98023
Other Identifiers: Icos Building ID: 50842
Building Name: Federal Way, Brigadoon Elementary School, Rooms 50-58 - A
Use: School
Latitude: 47.30004 **Longitude:** -122.377902
S_S: 1.349 **S_1:** 0.464
Screener(s): Ben Fisher **Date/Time:** 3/24/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1969
Total Floor Area (sq. ft.): 8500 **Code Year:** 1967
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 4041 S 298TH
Auburn, WA **Zip:** 98001
Other Identifiers: Icos Building ID: 50675
Building Name: Federal Way, Camelot Elementary School, Main Building
Use: School
Latitude: 47.334846 **Longitude:** -122.284265
S_S: 1.32 **S_1:** 0.453
Screener(s): Ben Fisher, Darwin Valenzuela **Date/Time:** 3/24/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1964
Total Floor Area (sq. ft.): 41111 **Code Year:** 1961
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units:

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} _____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 4400 S 308TH ST
Auburn, WA **Zip:** 98001
Other Identifiers: Icos Building ID: 50805
Building Name: Federal Way, Kilo Middle School, Building A Main Office
Use: School
Latitude: 47.326821 **Longitude:** -122.27806
S_S: 1.312 **S_1:** 0.45
Screener(s): Ben Fisher, Darwin Valenzuela **Date/Time:** 3/24/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1970
Total Floor Area (sq. ft.): 5280 **Code Year:** 1967
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 4400 S 308TH ST
Auburn, WA **Zip:** 98001
Other Identifiers: Icos Building ID: 50803
Building Name: Federal Way, Kilo Middle School, Building B
Use: School
Latitude: 47.326821 **Longitude:** -122.27806
S_s: 1.312 **S_1:** 0.45
Screener(s): Ben Fisher, Darwin Valenzuela **Date/Time:** 3/24/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1970
Total Floor Area (sq. ft.): 7200 **Code Year:** 1967
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 4400 S 308TH ST
Auburn, WA **Zip:** 98001
Other Identifiers: Icos Building ID: 50807
Building Name: Federal Way, Kilo Middle School, Building C
Use: School
Latitude: 47.326821 **Longitude:** -122.27806
S_s: 1.312 **S_1:** 0.45
Screener(s): Ben Fisher, Darwin Valenzuela **Date/Time:** 3/24/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1970
Total Floor Area (sq. ft.): 9600 **Code Year:** 1967
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} 2.9 ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 4400 S 308TH ST
Auburn, WA **Zip:** 98001
Other Identifiers: Icos Building ID: 50808
Building Name: Federal Way, Kilo Middle School, Building D
Use: School
Latitude: 47.326821 **Longitude:** -122.27806
S_S: 1.312 **S_1:** 0.45
Screener(s): Ben Fisher, Darwin Valenzuela **Date/Time:** 3/24/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1970
Total Floor Area (sq. ft.): 4320 **Code Year:** 1967
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units:

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} _____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Address: 4400 S 308TH ST
Auburn, WA **Zip:** 98001
Other Identifiers: Icos Building ID: 50811
Building Name: Federal Way, Kilo Middle School, Building E Little Theater
Use: School
Latitude: 47.326821 **Longitude:** -122.27806
S_S: 1.312 **S_1:** 0.45
Screener(s): Ben Fisher, Darwin Valenzuela **Date/Time:** 3/24/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1970
Total Floor Area (sq. ft.): 7680 **Code Year:** 1967
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other

Scale:

Reference:

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} _____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 4400 S 308TH ST
Auburn, WA **Zip:** 98001
Other Identifiers: Icos Building ID: 50806
Building Name: Federal Way, Kilo Middle School, Building F1-F4 and Library
Use: School
Latitude: 47.326821 **Longitude:** -122.27806
S_S: 1.312 **S_1:** 0.45
Screener(s): Ben Fisher, Darwin Valenzuela **Date/Time:** 3/24/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1970
Total Floor Area (sq. ft.): 1800 **Code Year:** 1967
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} 2.9 ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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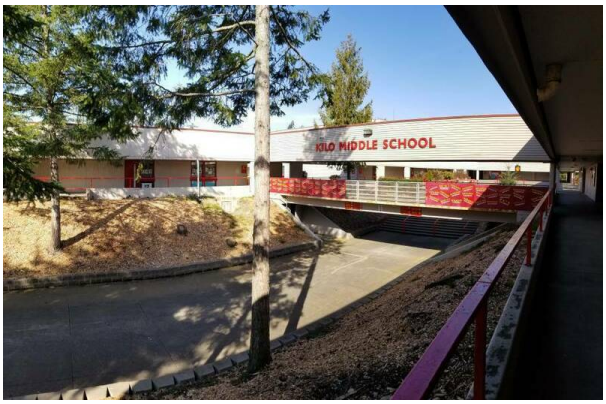
Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity



Scale:

Reference:

Address: 4400 S 308TH ST
Auburn, WA **Zip:** 98001
Other Identifiers: Icos Building ID: 50804
Building Name: Federal Way, Kilo Middle School, Building F5-F8
Use: School
Latitude: 47.326821 **Longitude:** -122.27806
S_S: 1.312 **S_1:** 0.45
Screener(s): Ben Fisher, Darwin Valenzuela **Date/Time:** 3/24/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1970
Total Floor Area (sq. ft.): 7440 **Code Year:** 1967
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 4400 S 308TH ST
Auburn, WA **Zip:** 98001
Other Identifiers: Icos Building ID: 50802
Building Name: Federal Way, Kilo Middle School, Building G
Use: School
Latitude: 47.326821 **Longitude:** -122.27806
S_S: 1.312 **S_1:** 0.45
Screener(s): Ben Fisher, Darwin Valenzuela **Date/Time:** 3/24/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1970
Total Floor Area (sq. ft.): 6240 **Code Year:** 1967
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 4400 S 308TH ST
Auburn, WA **Zip:** 98001
Other Identifiers: Icos Building ID: 50812
Building Name: Federal Way, Kilo Middle School, Building H Gymnasium
Use: School
Latitude: 47.326821 **Longitude:** -122.27806
S_s: 1.312 **S_1:** 0.45
Screener(s): Ben Fisher, Darwin Valenzuela **Date/Time:** 3/24/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1970
Total Floor Area (sq. ft.): 8160 **Code Year:** 1967
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 4400 S 308TH ST
Auburn, WA **Zip:** 98001
Other Identifiers: Icos Building ID: 50809
Building Name: Federal Way, Kilo Middle School, Building I Cafeteria
Use: School
Latitude: 47.326821 **Longitude:** -122.27806
S_S: 1.312 **S_1:** 0.45
Screener(s): Ben Fisher, Darwin Valenzuela **Date/Time:** 3/24/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1970
Total Floor Area (sq. ft.): 6720 **Code Year:** 1967
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Address: 4400 S 308TH ST
Auburn, WA **Zip:** 98001
Other Identifiers: Icos Building ID: 50810
Building Name: Federal Way, Kilo Middle School, Building J
Use: School
Latitude: 47.326821 **Longitude:** -122.27806
S_S: 1.312 **S_1:** 0.45
Screener(s): Ben Fisher, Darwin Valenzuela **Date/Time:** 3/24/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1970
Total Floor Area (sq. ft.): 21504 **Code Year:** 1967
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Scale:

Reference:

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 1000 S 289TH ST
Federal Way, WA **Zip:** 98003
Other Identifiers: Icos Building ID: 50828
Building Name: Federal Way, Nautilus K-8 School, Multipurpose Rm Bldg
Use: School
Latitude: 47.342635 **Longitude:** -122.32233
S_S: 1.346 **S_1:** 0.462
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 8/6/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1968
Total Floor Area (sq. ft.): 7000 **Code Year:** 1964
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 1000 S 289TH ST
Federal Way, WA **Zip:** 98003
Other Identifiers: Icos Building ID: 50826
Building Name: Federal Way, Nautilus K-8 School, Rooms 1-6 Bldg
Use: School
Latitude: 47.342635 **Longitude:** -122.32233
S_S: 1.346 **S_1:** 0.462
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 8/6/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1968
Total Floor Area (sq. ft.): 8548 **Code Year:** 1966
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 1000 S 289TH ST
Federal Way, WA **Zip:** 98003
Other Identifiers: Icos Building ID: 50830
Building Name: Federal Way, Nautilus K-8 School, Rooms 7-14 Bldg
Use: School
Latitude: 47.342635 **Longitude:** -122.32233
S_S: 1.346 **S_1:** 0.462
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 8/6/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1968
Total Floor Area (sq. ft.): 8548 **Code Year:** 1968
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 1000 S 289TH ST
Federal Way, WA **Zip:** 98003
Other Identifiers: Icos Building ID: 50825
Building Name: Federal Way, Nautilus K-8 School, Rooms 15-20 Bldg
Use: School
Latitude: 47.342635 **Longitude:** -122.32233
S_S: 1.346 **S_1:** 0.462
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 8/6/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1968
Total Floor Area (sq. ft.): 6700 **Code Year:** 1965
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 1000 S 289TH ST
Federal Way, WA **Zip:** 98003
Other Identifiers: Icos Building ID: 50829
Building Name: Federal Way, Nautilus K-8 School, Rooms 22-25 Bldg
Use: School
Latitude: 47.342635 **Longitude:** -122.32233
S_S: 1.346 **S_1:** 0.462
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 8/6/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1968
Total Floor Area (sq. ft.): 6700 **Code Year:** 1967
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 1101 S DASH POINT RD
Federal Way, WA **Zip:** 98003
Other Identifiers: Icos Building ID: 50701
Building Name: Federal Way, Sacajawea Middle School, 100 Building
Use: School
Latitude: 47.334644 **Longitude:** -122.318896
S_S: 1.339 **S_1:** 0.46
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 8/6/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1966
Total Floor Area (sq. ft.): 7025.92 **Code Year:** 1964
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 1101 S DASH POINT RD
Federal Way, WA **Zip:** 98003
Other Identifiers: Icos Building ID: 50706
Building Name: Federal Way, Sacajawea Middle School, 300 Building/Cafeteria
Use: School
Latitude: 47.334644 **Longitude:** -122.318896
S_S: 1.339 **S_1:** 0.46
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 8/6/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1968
Total Floor Area (sq. ft.): 9408 **Code Year:** 1964
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 1101 S DASH POINT RD
Federal Way, WA **Zip:** 98003
Other Identifiers: Icos Building ID: 50703
Building Name: Federal Way, Sacajawea Middle School, 400 Building
Use: School
Latitude: 47.334644 **Longitude:** -122.318896
S_S: 1.339 **S_1:** 0.46
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 8/6/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1966
Total Floor Area (sq. ft.): 9606.31 **Code Year:** 1964
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} 1.7 ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 1101 S DASH POINT RD
Federal Way, WA **Zip:** 98003
Other Identifiers: Icos Building ID: 50702
Building Name: Federal Way, Sacajawea Middle School, 600/700/800 Building
Use: School
Latitude: 47.334644 **Longitude:** -122.318896
S_S: 1.339 **S_1:** 0.46
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 8/6/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1966
Total Floor Area (sq. ft.): 18371 **Code Year:** 1964
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units:

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} _____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 1101 S DASH POINT RD
Federal Way, WA **Zip:** 98003
Other Identifiers: Icos Building ID: 50700
Building Name: Federal Way, Sacajawea Middle School, 900 Building
Use: School
Latitude: 47.334644 **Longitude:** -122.318896
S_S: 1.339 **S_1:** 0.46
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 8/6/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1966
Total Floor Area (sq. ft.): 4582 **Code Year:** 1964
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 1101 S DASH POINT RD
Federal Way, WA **Zip:** 98003
Other Identifiers: Icos Building ID: 50705
Building Name: Federal Way, Sacajawea Middle School, Gym (500) Building
Use: School
Latitude: 47.334644 **Longitude:** -122.318896
S_S: 1.339 **S_1:** 0.46
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 8/6/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1966
Total Floor Area (sq. ft.): 14831 **Code Year:** 1964
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 1101 S DASH POINT RD
Federal Way, WA **Zip:** 98003
Other Identifiers: Icos Building ID: 50704
Building Name: Federal Way, Sacajawea Middle School, Main Office Building
Use: School
Latitude: 47.334644 **Longitude:** -122.318896
S_S: 1.339 **S_1:** 0.46
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 8/6/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1968
Total Floor Area (sq. ft.): 9308 **Code Year:** 1964
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 5610 Second Avenue
Ferndale, WA **Zip:** 98248
Other Identifiers: Icos Building ID: 54971
Building Name: Ferndale, Central Elementary School, Main Building
Use: School
Latitude: 48.845252 **Longitude:** -122.592183
S_S: 1.005 **S_1:** 0.352
Screener(s): Kenny O'Neill, PE, SE, Brian Matsumoto, PE, SE, Noman Shafi **Date/Time:** 12/26/2019

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1920
Total Floor Area (sq. ft.): 44516 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☐ D Stiff Soil ☑ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATELY HIGH Seismicity

Scale:

Reference:

Address: 7660 Custer School Road
Custer, WA **Zip:** 98240
Other Identifiers: Icos Building ID: 54976
Building Name: Ferndale, Custer Elementary, Main Building
Use: School
Latitude: 48.919105 **Longitude:** -122.63725
S_s: 0.992 **S_1:** 0.348
Screener(s): Kenny O'Neill, PE, SE, Brian Matsumoto, PE, SE, Noman Shafi **Date/Time:** 12/26/2019

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1936
Total Floor Area (sq. ft.): 49103 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: Moderately High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.8

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 205 North Alder Avenue
Granite Falls, WA **Zip:** 98252
Other Identifiers: Icos Building ID: 55015
Building Name: Granite Falls, Crossroads High School (form. MS), Crossroads HS, RM1
Use: School
Latitude: 48.084894 **Longitude:** -121.963583
S_s: 1.008 **S_1:** 0.358
Screener(s): Casey Hansen, Brian Matsumoto **Date/Time:** 7/30/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1938
Total Floor Area (sq. ft.): 29720 **Code Year:** 1997
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 3.8

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 205 North Alder Avenue
Granite Falls, WA **Zip:** 98252
Other Identifiers: Icos Building ID: 55015
Building Name: Granite Falls, Crossroads High School (form. MS), Crossroads HS, W2
Use: School
Latitude: 48.084894 **Longitude:** -121.963583
S_S: 1.008 **S_1:** 0.358
Screener(s): Casey Hansen, Brian Matsumoto **Date/Time:** 7/30/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1938
Total Floor Area (sq. ft.): 29720 **Code Year:** 1997
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter
☐ Industrial ☐ Office ☑ School ☐ Government
☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer
☐ Parapets ☐ Appendages
☐ Other

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 5.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} _____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 405 North Alder Ave
Granite Falls, WA **Zip:** 98252
Other Identifiers: Icos Building ID: 55028
Building Name: Granite Falls, Granite Falls Middle School (form. HS), Main Building (Excl. Gym), RM1
Use: School
Latitude: 48.087045 **Longitude:** -121.962767
S_S: 1.007 **S_1:** 0.358
Screener(s): Casey Hansen, Brian Matsumoto **Date/Time:** 7/30/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1974
Total Floor Area (sq. ft.): 63019 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 405 North Alder Ave
Granite Falls, WA **Zip:** 98252
Other Identifiers: Icos Building ID: 55028
Building Name: Granite Falls, Granite Falls Middle School (form. HS), Main Building (Excl. Gym), W2
Use: School
Latitude: 48.087045 **Longitude:** -121.962767
S_S: 1.007 **S_1:** 0.358
Screener(s): Casey Hansen, Brian Matsumoto **Date/Time:** 7/30/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1974
Total Floor Area (sq. ft.): 63019 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

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Level 1 HIGH Seismicity

Scale:

Reference:

Address: 405 North Alder Ave
Granite Falls, WA **Zip:** 98252
Other Identifiers: Icos Building ID: 55028
Building Name: Granite Falls, Granite Falls Middle School (form. HS), Main Building - Gym
Use: School
Latitude: 48.087045 **Longitude:** -121.962767
S_S: 1.007 **S_1:** 0.358
Screener(s): Casey Hansen, Brian Matsumoto **Date/Time:** 7/30/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1974
Total Floor Area (sq. ft.): 63019 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Ph: 425-741-3800
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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 405 North Alder Ave
Granite Falls, WA **Zip:** 98252
Other Identifiers: Icos Building ID: 55030
Building Name: Granite Falls, Granite Falls Middle School (form. HS), Multi-Purpose Building
Use: School
Latitude: 48.086613 **Longitude:** -121.963734
S_S: 1.007 **S_1:** 0.358
Screener(s): Casey Hansen, Brian Matsumoto **Date/Time:** 7/31/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1988
Total Floor Area (sq. ft.): 4460 **Code Year:** 1985
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 4.4

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 702 N. Granite Ave
Granite Falls, WA **Zip:** 98252
Other Identifiers: Icos Building ID: 55012
Building Name: Granite Falls, Mountain Way Elementary School, Gymnasium, RM1
Use: School
Latitude: 48.0899 **Longitude:** -121.970293
S_S: 1.008 **S_1:** 0.358
Screener(s): Casey Hansen, Brian Matsumoto **Date/Time:** 7/31/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1988
Total Floor Area (sq. ft.): 51515 **Code Year:** 1985
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter
☐ Industrial ☐ Office ☑ School ☐ Government
☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer
☐ Parapets ☐ Appendages
☐ Other

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} _____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 702 N. Granite Ave
Granite Falls, WA **Zip:** 98252
Other Identifiers: Icos Building ID: 55012
Building Name: Granite Falls, Mountain Way Elementary School, Main Building, W2
Use: School
Latitude: 48.0899 **Longitude:** -121.970293
S_S: 1.008 **S_1:** 0.358
Screener(s): Casey Hansen, Brian Matsumoto **Date/Time:** 7/31/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1988
Total Floor Area (sq. ft.): 51515 **Code Year:** 1985
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 4.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Address: 1201 S 104th St
Seattle, WA **Zip:** 98168
Other Identifiers: Icos Building ID: 55096
Building Name: Highline, Beverly Park @ Glendale Elementary School, Main Building A
Use: School
Latitude: 47.510268 **Longitude:** -122.317833
S_s: 1.541 **S_1:** 0.528
Screener(s): Stephen Blount, Noli Torres, Ben Fisher **Date/Time:** 3/24/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1963
Total Floor Area (sq. ft.): 45700 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Scale:

Reference:

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Address: 1201 S 104th St
Seattle, WA **Zip:** 98168
Other Identifiers: Icos Building ID: 55097
Building Name: Highline, Beverly Park @ Glendale Elementary School, Multi-Purpose Building B
Use: School
Latitude: 47.510268 **Longitude:** -122.317833
S_S: 1.541 **S_1:** 0.528
Screener(s): Stephen Blount, Noli Torres, Ben Fisher **Date/Time:** 3/24/2020

Scale:

Reference:

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1963
Total Floor Area (sq. ft.): 17200 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 18650 42nd Ave S
Seatac, WA **Zip:** 98188
Other Identifiers: Icos Building ID: 55065
Building Name: Highline, Chinook Middle School, 100 Building
Use: School
Latitude: 47.435377 **Longitude:** -122.28165
S_s: 1.45 **S_1:** 0.493
Screener(s): Stephen Blount, Noli Torres, Ben Fisher **Date/Time:** 3/24/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1956
Total Floor Area (sq. ft.): 26500 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 18650 42nd Ave S
Seatac, WA **Zip:** 98188
Other Identifiers: Icos Building ID: 55067
Building Name: Highline, Chinook Middle School, 200 Building
Use: School
Latitude: 47.435377 **Longitude:** -122.28165
S_s: 1.45 **S_1:** 0.493
Screener(s): Stephen Blount, Noli Torres, Ben Fisher **Date/Time:** 3/24/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1956
Total Floor Area (sq. ft.): 23560 **Code Year:** 1956
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 18650 42nd Ave S
Seatac, WA **Zip:** 98188
Other Identifiers: Icos Building ID: 55063
Building Name: Highline, Chinook Middle School, 300 Building - Gymnasium
Use: School
Latitude: 47.435377 **Longitude:** -122.28165
S_s: 1.45 **S_1:** 0.493
Screener(s): Stephen Blount, Noli Torres, Ben Fisher **Date/Time:** 3/24/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1956
Total Floor Area (sq. ft.): 25680 **Code Year:** 1955
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 18650 42nd Ave S
Seatac, WA **Zip:** 98188
Other Identifiers: Icos Building ID: 55066
Building Name: Highline, Chinook Middle School, 400 Building - Cafeteria
Use: School
Latitude: 47.435377 **Longitude:** -122.28165
S_S: 1.45 **S_1:** 0.493
Screener(s): Stephen Blount, Noli Torres, Ben Fisher **Date/Time:** 3/24/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1956
Total Floor Area (sq. ft.): 11100 **Code Year:** 1955
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 18650 42nd Ave S
Seatac, WA **Zip:** 98188
Other Identifiers: Icos Building ID: 55064
Building Name: Highline, Chinook Middle School, 800 Building
Use: School
Latitude: 47.435377 **Longitude:** -122.28165
S_s: 1.45 **S_1:** 0.493
Screener(s): Stephen Blount, Noli Torres, Ben Fisher **Date/Time:** 3/24/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1966
Total Floor Area (sq. ft.): 11650 **Code Year:** 1964
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Address: 12250 24th Ave S
Seattle, WA **Zip:** 98168
Other Identifiers: Icos Building ID: 55177
Building Name: Highline, Hilltop Elementary School, 100 Building - Bldg A
Use: School
Latitude: 47.49361 **Longitude:** -122.30185
S_s: 1.528 **S_1:** 0.522
Screener(s): Ben Fisher, Stephen Blount, Noli Torres **Date/Time:** 3/17/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1957
Total Floor Area (sq. ft.): 6700 **Code Year:** 1955
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Scale:

Reference:

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.3

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Address: 12250 24th Ave S
Seattle, WA **Zip:** 98168
Other Identifiers: Icos Building ID: 55176
Building Name: Highline, Hilltop Elementary School, 200 Building - Bldg B
Use: School
Latitude: 47.49361 **Longitude:** -122.30185
S_s: 1.528 **S_1:** 0.522
Screener(s): Ben Fisher, Stephen Blount, Noli Torres **Date/Time:** 3/17/2020

Scale:

Reference:

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1957
Total Floor Area (sq. ft.): 10990 **Code Year:** 1954
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.5

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Address: 12250 24th Ave S
Seattle, WA **Zip:** 98168
Other Identifiers: Icos Building ID: 55178
Building Name: Highline, Hilltop Elementary School, 300 Building - Bldg C
Use: School
Latitude: 47.49361 **Longitude:** -122.30185
S_s: 1.528 **S_1:** 0.522
Screener(s): Ben Fisher, Stephen Blount, Noli Torres **Date/Time:** 3/17/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1958
Total Floor Area (sq. ft.): 12045 **Code Year:** 1954
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Sesimicity: Very High

Scale:

Reference:

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.5

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Address: 12250 24th Ave S
Seattle, WA **Zip:** 98168
Other Identifiers: Icos Building ID: 55175
Building Name: Highline, Hilltop Elementary School, 400 Building - Bldg D
Use: School
Latitude: 47.49361 **Longitude:** -122.30185
S_s: 1.528 **S_1:** 0.522
Screener(s): Ben Fisher, Stephen Blount, Noli Torres **Date/Time:** 3/17/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1997
Total Floor Area (sq. ft.): 17212 **Code Year:** 1994
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Sesimicity: Very High

Scale:

Reference:

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 3.8

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Address: 14603 14th Ave SW
Burien, WA **Zip:** 98166
Other Identifiers: Icos Building ID: 55100
Building Name: Highline, Seahurst Elementary School, Main Building
Use: School
Latitude: 47.471715 **Longitude:** -122.35263
S_s: 1.55 **S_1:** 0.528
Screener(s): Stephen Blount, Noli Torres, Ben Fisher **Date/Time:** 3/24/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1992
Total Floor Area (sq. ft.): 38200 **Code Year:** 1988
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Sesimicity: Very High

Scale:

Reference:

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 3.8

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Address: 11249 14th Ave S
Seattle, WA **Zip:** 98168
Other Identifiers: Icos Building ID: 55185
Building Name: Highline, Southern Heights Elementary School, Building A
Use: School
Latitude: 47.502051 **Longitude:** -122.31535
S_s: 1.543 **S_1:** 0.527
Screener(s): Ben Fisher, Stephen Blount, Noli Torres **Date/Time:** 3/17/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1955
Total Floor Area (sq. ft.): 11715 **Code Year:** 1954
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Scale:

Reference:

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.5

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Address: 11249 14th Ave S
Seattle, WA **Zip:** 98168
Other Identifiers: Icos Building ID: 55186
Building Name: Highline, Southern Heights Elementary School, Building B
Use: School
Latitude: 47.502051 **Longitude:** -122.31535
S_S: 1.543 **S_1:** 0.527
Screener(s): Ben Fisher, Stephen Blount, Noli Torres **Date/Time:** 3/17/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1956
Total Floor Area (sq. ft.): 9694 **Code Year:** 1954
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Scale:

Reference:

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.5

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Address: 11249 14th Ave S
Seattle, WA **Zip:** 98168
Other Identifiers: Icos Building ID: 55188
Building Name: Highline, Southern Heights Elementary School, Building C - Admin/Multi Purpose
Use: School
Latitude: 47.502051 **Longitude:** -122.31535
S_S: 1.543 **S_1:** 0.527
Screener(s): Ben Fisher, Stephen Blount, Noli Torres **Date/Time:** 3/17/2020

Scale:

Reference:

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1964
Total Floor Area (sq. ft.): 11970 **Code Year:** 1961
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Address: 16222 Sylvester Road SW
Burien, WA **Zip:** 98166
Other Identifiers: Icos Building ID: 55128
Building Name: Highline, Sylvester Middle School, 100 Building
Use: School
Latitude: 47.457604 **Longitude:** -122.34088
S_s: 1.53 **S_1:** 0.52
Screener(s): Ben Fisher, Stephen Blount, Noli Torres **Date/Time:** 3/17/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1953
Total Floor Area (sq. ft.): 27360 **Code Year:** 1952
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☑ Plan (type) Diaphragm Opening

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Scale:

Reference:

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Address: 16222 Sylvester Road SW
Burien, WA **Zip:** 98166
Other Identifiers: Icos Building ID: 55131
Building Name: Highline, Sylvester Middle School, 200 Building
Use: School
Latitude: 47.457604 **Longitude:** -122.34088
S_s: 1.53 **S_1:** 0.52
Screener(s): Ben Fisher, Stephen Blount, Noli Torres **Date/Time:** 3/17/2020

Scale:

Reference:

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1953
Total Floor Area (sq. ft.): 11544 **Code Year:** 1952
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Address: 16222 Sylvester Road SW
Burien, WA **Zip:** 98166
Other Identifiers: Icos Building ID: 55134
Building Name: Highline, Sylvester Middle School, 300 Building - Gymnasium/Cafeteria
Use: School
Latitude: 47.457604 **Longitude:** -122.34088
S_s: 1.53 **S_1:** 0.52
Screener(s): Ben Fisher, Stephen Blount, Noli Torres **Date/Time:** 3/17/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1953
Total Floor Area (sq. ft.): 3919 **Code Year:** 1952
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Scale:

Reference:

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Address: 16222 Sylvester Road SW
Burien, WA **Zip:** 98166
Other Identifiers: Icos Building ID: 55130
Building Name: Highline, Sylvester Middle School, 400 Building
Use: School
Latitude: 47.457604 **Longitude:** -122.34088
S_s: 1.53 **S_1:** 0.52
Screener(s): Ben Fisher, Stephen Blount, Noli Torres **Date/Time:** 3/17/2020

Scale:

Reference:

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1953
Total Floor Area (sq. ft.): 6327 **Code Year:** 1952
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.6

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Address: 16222 Sylvester Road SW
Burien, WA **Zip:** 98166
Other Identifiers: Icos Building ID: 55133
Building Name: Highline, Sylvester Middle School, 500 Building - Library
Use: School
Latitude: 47.457604 **Longitude:** -122.34088
S_s: 1.53 **S_1:** 0.52
Screener(s): Ben Fisher, Stephen Blount, Noli Torres **Date/Time:** 3/17/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1969
Total Floor Area (sq. ft.): 4560 **Code Year:** 1967
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☑ Plan (type) Non-Parallel Systems

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Sesimicity: Very High

Scale:

Reference:

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Address: 16222 Sylvester Road SW
Burien, WA **Zip:** 98166
Other Identifiers: Icos Building ID: 55129
Building Name: Highline, Sylvester Middle School, 600 Building
Use: School
Latitude: 47.457604 **Longitude:** -122.34088
S_s: 1.53 **S_1:** 0.52
Screener(s): Ben Fisher, Stephen Blount, Noli Torres **Date/Time:** 3/17/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1969
Total Floor Area (sq. ft.): 4141 **Code Year:** 1967
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Scale:

Reference:

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Address: 16222 Sylvester Road SW
Burien, WA **Zip:** 98166
Other Identifiers: Icos Building ID: 55132
Building Name: Highline, Sylvester Middle School, 700 Building - Band/Drama
Use: School
Latitude: 47.457604 **Longitude:** -122.34088
S_S: 1.53 **S_1:** 0.52
Screener(s): Ben Fisher, Stephen Blount, Noli Torres **Date/Time:** 3/17/2020

Scale:

Reference:

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1969
Total Floor Area (sq. ft.): 4560 **Code Year:** 1967
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☑ Plan (type) Non-Parallel Systems

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATELY HIGH Seismicity

Scale:

Reference:

Address: 20000 NE 164 ST
Brush Prairie, WA **Zip:** 98606
Other Identifiers: Icos Building ID: 58331
Building Name: Hockinson, Hockinson Heights Elementary School (East), Building 100 A
Use: School
Latitude: 45.741462 **Longitude:** -122.467151
S_S: 0.759 **S_1:** 0.346
Screener(s): Brian Knight **Date/Time:** 7/23/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1992
Total Floor Area (sq. ft.): 23845 **Code Year:** 1988
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: Moderately High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.8

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATELY HIGH Seismicity

Scale:

Reference:

Address: 20000 NE 164 ST
Brush Prairie, WA **Zip:** 98606
Other Identifiers: Icos Building ID: 58332
Building Name: Hockinson, Hockinson Heights Elementary School (East), Building 200 C
Use: School
Latitude: 45.741462 **Longitude:** -122.467151
S_s: 0.759 **S_1:** 0.346
Screener(s): Brian Knight **Date/Time:** 7/23/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1975
Total Floor Area (sq. ft.): 13934 **Code Year:** 1988
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: Moderately High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 5.5

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATELY HIGH Seismicity

Scale:

Reference:

Address: 20000 NE 164 ST
Brush Prairie, WA **Zip:** 98606
Other Identifiers: Icos Building ID: 58328
Building Name: Hockinson, Hockinson Heights Elementary School (East), Building 300 D
Use: School
Latitude: 45.741462 **Longitude:** -122.467151
S_s: 0.759 **S_1:** 0.346
Screener(s): Brian Knight **Date/Time:** 7/23/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1975
Total Floor Area (sq. ft.): 10154 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: Moderately High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 3.2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATELY HIGH Seismicity

Scale:

Reference:

Address: 20000 NE 164 ST
Brush Prairie, WA **Zip:** 98606
Other Identifiers: Icos Building ID: 58326
Building Name: Hockinson, Hockinson Heights Elementary School (East), Building 400 B
Use: School
Latitude: 45.741462 **Longitude:** -122.467151
S_S: 0.759 **S_1:** 0.346
Screener(s): Brian Knight **Date/Time:** 7/23/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1992
Total Floor Area (sq. ft.): 3982 **Code Year:** 1988
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: Moderately High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 4.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATELY HIGH Seismicity

Scale:

Reference:

Address: 20000 NE 164 ST
Brush Prairie, WA **Zip:** 98606
Other Identifiers: Icos Building ID: 58327
Building Name: Hockinson, Hockinson Heights Elementary School (East), Building 500 E
Use: School
Latitude: 45.741462 **Longitude:** -122.467151
S_s: 0.759 **S_1:** 0.346
Screener(s): Brian Knight **Date/Time:** 7/23/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1980
Total Floor Area (sq. ft.): 10091 **Code Year:** 1976
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter
☐ Industrial ☐ Office ☑ School ☐ Government
☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer
☐ Parapets ☐ Appendages
☐ Other ____

Comments: RVS Level of Seismicity: Moderately High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 5.5

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATELY HIGH Seismicity

Scale:

Reference:

Address: 20000 NE 164 ST
Brush Prairie, WA **Zip:** 98606
Other Identifiers: Icos Building ID: 58329
Building Name: Hockinson, Hockinson Heights Elementary School (East), Building 600 F
Use: School
Latitude: 45.741462 **Longitude:** -122.467151
S_s: 0.759 **S_1:** 0.346
Screener(s): Brian Knight **Date/Time:** 7/23/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1980
Total Floor Area (sq. ft.): 5254 **Code Year:** 1976
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: Moderately High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 5.5

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATELY HIGH Seismicity

Scale:

Reference:

Address: 20000 NE 164 ST
Brush Prairie, WA **Zip:** 98606
Other Identifiers: Icos Building ID: 58325
Building Name: Hockinson, Hockinson Heights Elementary School (East), Building 800 H
Use: School
Latitude: 45.741462 **Longitude:** -122.467151
S_s: 0.759 **S_1:** 0.346
Screener(s): Brian Knight **Date/Time:** 7/17/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1975
Total Floor Area (sq. ft.): 6904 **Code Year:** 1973
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: Moderately High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 3.2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Address: 310 Simpson Avenue
Hoquiam, WA **Zip:** 98550
Other Identifiers: Icos Building ID: 58356
Building Name: Hoquiam, Central Elementary School, Main Building
Use: School
Latitude: 46.9803 **Longitude:** -123.889045
S_S: 1.53 **S_1:** 0.707
Screener(s): Ben Fisher **Date/Time:** 5/20/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1952
Total Floor Area (sq. ft.): 38946 **Code Year:** 1949
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units:

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☐ D Stiff Soil ☑ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☑ Plan (type) Torsion

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other

Comments: RVS Level of Sesimicity: Very High

Scale:

Reference:

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.3

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} _____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Address: 101 W Emerson
Hoquiam, WA **Zip:** 98550
Other Identifiers: Icos Building ID: 58357
Building Name: Hoquiam, Emerson Elementary School, Main Building
Use: School
Latitude: 46.9814 **Longitude:** -123.903806
S_s: 1.532 **S_1:** 0.71
Screener(s): Ben Fisher **Date/Time:** 5/20/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1954
Total Floor Area (sq. ft.): 30641 **Code Year:** 1952
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☐ D Stiff Soil ☑ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Severe
☑ Plan (type) Torsion

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Sesimicity: Very High

Scale:

Reference:

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.3

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Scale:

Reference:

Address: 501 W. Emerson
Hoquiam, WA **Zip:** 98550
Other Identifiers: Icos Building ID: 58347
Building Name: Hoquiam, Hoquiam High School, D-Business Education
Use: School
Latitude: 46.983116 **Longitude:** -123.910415
S_s: 1.533 **S_1:** 0.711
Screener(s): Ben Fisher **Date/Time:** 5/20/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1966
Total Floor Area (sq. ft.): 9513 **Code Year:** 1961
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☑ Plan (type) Non-Parallel Systems

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Scale:

Reference:

Address: 501 W. Emerson
Hoquiam, WA **Zip:** 98550
Other Identifiers: Icos Building ID: 58345
Building Name: Hoquiam, Hoquiam High School, F-Humanities
Use: School
Latitude: 46.983116 **Longitude:** -123.910415
S_s: 1.533 **S_1:** 0.711
Screener(s): BSF **Date/Time:** 5/20/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1966
Total Floor Area (sq. ft.): 11954 **Code Year:** 1961
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☑ Plan (type) Non-Parallel Systems

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Scale:

Reference:

Address: 501 W. Emerson
Hoquiam, WA **Zip:** 98550
Other Identifiers: Icos Building ID: 58346
Building Name: Hoquiam, Hoquiam High School, G-Little Theater
Use: School
Latitude: 46.983116 **Longitude:** -123.910415
S_s: 1.533 **S_1:** 0.711
Screener(s): Ben Fisher **Date/Time:** 5/20/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1966
Total Floor Area (sq. ft.): 14607 **Code Year:** 1961
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 2000 Allen St
Kelso, WA **Zip:** 98626
Other Identifiers: Icos Building ID: 58393
Building Name: Kelso, Coweeman Middle School, Main Building
Use: School
Latitude: 46.143709 **Longitude:** -122.889042
S_s: 0.891 **S_1:** 0.427
Screener(s): Brian Knight **Date/Time:** 9/10/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1961
Total Floor Area (sq. ft.): 76925 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☐ D Stiff Soil ☑ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 3

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} _____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 1502 Rose Valley Rd
Kelso, WA **Zip:** 98626
Other Identifiers: Icos Building ID: 58396
Building Name: Kelso, Rose Valley Elementary School, Main Building
Use: School
Latitude: 46.098025 **Longitude:** -122.826658
S_S: 0.866 **S_1:** 0.413
Screener(s): Brian Knight **Date/Time:** 9/10/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1939
Total Floor Area (sq. ft.): 21937 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} _____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATELY HIGH Seismicity

Scale:

Reference:

Address: 700 East 4th Street
La Center, WA **Zip:** 98629
Other Identifiers: Icos Building ID: 50901
Building Name: La Center, La Center Elementary & Middle Schools, Building 300 - ES Main Building
Use: School
Latitude: 45.861385 **Longitude:** -122.66416
S_S: 0.8 **S_1:** 0.376
Screener(s): Brian Knight **Date/Time:** 6/4/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1938
Total Floor Area (sq. ft.): 31357 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Severe
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: Moderately High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 7040 - 208th NE
Redmond, WA **Zip:** 98053
Other Identifiers: Icos Building ID: 55935
Building Name: Lake Washington, Dickinson Elementary School, Main Building
Use: School
Latitude: 47.669 **Longitude:** -122.062
S_s: 1.262 **S_1:** 0.442
Screener(s): Brian Matsumoto & Noman Shafi **Date/Time:** 11/3/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1992
Total Floor Area (sq. ft.): 49156 **Code Year:** 1988
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter
☐ Industrial ☐ Office ☑ School ☐ Government
☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer
☐ Parapets ☐ Appendages
☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 5.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 18025 NE 116th
Redmond, WA **Zip:** 98052
Other Identifiers: Icos Building ID: 55836
Building Name: Lake Washington, Einstein Elementary School, Main Building - S2
Use: School
Latitude: 47.702058 **Longitude:** -122.09847
S_S: 1.266 **S_1:** 0.444
Screener(s): Brian Matsumoto & Noman Shafi **Date/Time:** 11/19/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1997
Total Floor Area (sq. ft.): 29029 **Code Year:** 1991
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units:

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} _____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 18025 NE 116th
Redmond, WA **Zip:** 98052
Other Identifiers: Icos Building ID: 55836
Building Name: Lake Washington, Einstein Elementary School, Main Building - W2
Use: School
Latitude: 47.702058 **Longitude:** -122.09847
S_S: 1.266 **S_1:** 0.444
Screener(s): Brian Matsumoto & Noman Shafi **Date/Time:** 11/19/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1997
Total Floor Area (sq. ft.): 29029 **Code Year:** 1991
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 5.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 10903 NE 53rd ST
Kirkland, WA **Zip:** 98033
Other Identifiers: Icos Building ID: 55920
Building Name: Lake Washington, Emerson Campus, Emerson
Use: School
Latitude: 47.655802 **Longitude:** -122.194179
S_S: 1.279 **S_1:** 0.445
Screener(s): Noman Shafi **Date/Time:** 11/4/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1982
Total Floor Area (sq. ft.): 28188 **Code Year:** 1979
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter
☐ Industrial ☐ Office ☑ School ☐ Government
☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer
☐ Parapets ☐ Appendages
☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 5.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 11125 - 162nd AVE NE
Redmond, WA **Zip:** 98052
Other Identifiers: Icos Building ID: 55771
Building Name: Lake Washington, Rockwell Elementary School, Main Building
Use: School
Latitude: 47.698624 **Longitude:** -122.1256
S_S: 1.263 **S_1:** 0.442
Screener(s): Brian Matsumoto & Noman Shafi **Date/Time:** 11/3/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1979
Total Floor Area (sq. ft.): 48953 **Code Year:** 1976
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter
☐ Industrial ☐ Office ☑ School ☐ Government
☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer
☐ Parapets ☐ Appendages
☐ Other

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} _____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 22130 NE 133rd
Woodinville, WA **Zip:** 98077
Other Identifiers: Icos Building ID: 55846
Building Name: Lake Washington, Wilder Elementary School, Main Building
Use: School
Latitude: 47.719408 **Longitude:** -122.04142
S_s: 1.276 **S_1:** 0.448
Screener(s): Brian Matsumoto & Noman Shafi **Date/Time:** 11/3/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1989
Total Floor Area (sq. ft.): 49154 **Code Year:** 1985
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 5.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 2745 38th Avenue
Longview, WA **Zip:** 98632
Other Identifiers: Icos Building ID: 58459
Building Name: Longview, Mint Valley Elementary School, Building A - 1
Use: School
Latitude: 46.165573 **Longitude:** -122.974388
S_S: 0.914 **S_1:** 0.445
Screener(s): Brian Knight **Date/Time:** 6/18/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1969
Total Floor Area (sq. ft.): 7683 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☐ D Stiff Soil ☑ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.6

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} _____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 2745 38th Avenue
Longview, WA **Zip:** 98632
Other Identifiers: Icos Building ID: 58458
Building Name: Longview, Mint Valley Elementary School, Building B - 2
Use: School
Latitude: 46.165573 **Longitude:** -122.974388
S_S: 0.914 **S_1:** 0.445
Screener(s): Brian Knight **Date/Time:** 6/18/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1969
Total Floor Area (sq. ft.): 7046 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☐ D Stiff Soil ☑ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.6

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 2745 38th Avenue
Longview, WA **Zip:** 98632
Other Identifiers: Icos Building ID: 58461
Building Name: Longview, Mint Valley Elementary School, Building D - 4
Use: School
Latitude: 46.165573 **Longitude:** -122.974388
S_S: 0.914 **S_1:** 0.445
Screener(s): Brian Knight **Date/Time:** 6/18/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1969
Total Floor Area (sq. ft.): 6427 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☐ D Stiff Soil ☑ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.6

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 5300 Mt. Solo Road
Longview, WA **Zip:** 98632
Other Identifiers: Icos Building ID: 58466
Building Name: Longview, Mt. Solo Middle School, Main Building
Use: School
Latitude: 46.164537 **Longitude:** -123.020244
S_S: 0.924 **S_1:** 0.454
Screener(s): Brian Knight **Date/Time:** 6/18/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 2003
Total Floor Area (sq. ft.): 81432 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☐ D Stiff Soil ☑ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 3.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 2210 Olympia Way
Longview, WA **Zip:** 98632
Other Identifiers: Icos Building ID: 58447
Building Name: Longview, Northlake Elementary School, Main Building
Use: School
Latitude: 46.145003 **Longitude:** -122.943937
S_s: 0.902 **S_1:** 0.438
Screener(s): Brian Knight **Date/Time:** 1/7/2021

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1954
Total Floor Area (sq. ft.): 32363 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☑ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 1324 30th Avenue
Longview, WA **Zip:** 98632
Other Identifiers: Icos Building ID: 58438
Building Name: Longview, Olympic Elementary School, Annex Building
Use: School
Latitude: 46.139456 **Longitude:** -122.96197
S_S: 0.904 **S_1:** 0.441
Screener(s): Brian Knight **Date/Time:** 6/18/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1958
Total Floor Area (sq. ft.): 6583 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☐ D Stiff Soil ☑ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 3

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 1324 30th Avenue
Longview, WA **Zip:** 98632
Other Identifiers: Icos Building ID: 58436
Building Name: Longview, Olympic Elementary School, Main Building
Use: School
Latitude: 46.139456 **Longitude:** -122.96197
S_s: 0.904 **S_1:** 0.441
Screener(s): Brian Knight **Date/Time:** 6/18/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1950
Total Floor Area (sq. ft.): 49730 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☐ D Stiff Soil ☑ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 1324 30th Avenue
Longview, WA **Zip:** 98632
Other Identifiers: Icos Building ID: 58437
Building Name: Longview, Olympic Elementary School, Multipurpose Building
Use: School
Latitude: 46.139456 **Longitude:** -122.96197
S_S: 0.904 **S_1:** 0.441
Screener(s): Brian Knight **Date/Time:** 6/18/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1958
Total Floor Area (sq. ft.): 8323 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☐ D Stiff Soil ☑ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.6

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 4622 Ohio Street
Longview, WA **Zip:** 98632
Other Identifiers: Icos Building ID: 58432
Building Name: Longview, Robert Gray Elementary School, Main Building
Use: School
Latitude: 46.171176 **Longitude:** -122.992588
S_s: 0.919 **S_1:** 0.449
Screener(s): Brian Knight **Date/Time:** 6/18/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1997
Total Floor Area (sq. ft.): 49730 **Code Year:** 1994
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter
☐ Industrial ☐ Office ☑ School ☐ Government
☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☐ D Stiff Soil ☑ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer
☐ Parapets ☐ Appendages
☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 3.2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 86 School Rd
Lopez Island, WA **Zip:** 98261
Other Identifiers: Icos Building ID: 56065
Building Name: Lopez Island, Lopez Elementary School, Elementary
Use: School
Latitude: 48.491959 **Longitude:** -122.89725
S_S: 1.219 **S_1:** 0.437
Screener(s): Brian Knight **Date/Time:** 6/29/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1978
Total Floor Area (sq. ft.): 24469 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 5.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 86 School Road
Lopez Island, WA **Zip:** 98261
Other Identifiers: Icos Building ID: 56067
Building Name: Lopez Island, Lopez Middle High School, Gym/Tech Building
Use: School
Latitude: 48.491816 **Longitude:** -122.898503
S_S: 1.219 **S_1:** 0.437
Screener(s): Brian Knight **Date/Time:** 6/29/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1988
Total Floor Area (sq. ft.): 19750 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 86 School Road
Lopez Island, WA **Zip:** 98261
Other Identifiers: Icos Building ID: 56068
Building Name: Lopez Island, Lopez Middle High School, Junior Senior High Building
Use: School
Latitude: 48.491816 **Longitude:** -122.898503
S_s: 1.219 **S_1:** 0.437
Screener(s): Brian Knight **Date/Time:** 6/29/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1930
Total Floor Area (sq. ft.): 13724 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Address: 2987 W MATLOCK BRADY RD
Elma, WA **Zip:** 98541
Other Identifiers: Icos Building ID: 50921
Building Name: Mary M Knight, Mary M. Knight School, Elementary School
Use: School
Latitude: 47.1993 **Longitude:** -123.4322
S_s: 1.566 **S_1:** 0.633
Screener(s): Ben Fisher **Date/Time:** 7/30/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1963
Total Floor Area (sq. ft.): 13333 **Code Year:** 1961
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Sesimicity: Very High

Scale:

Reference:

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.8

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Address: 2987 W MATLOCK BRADY RD
Elma, WA **Zip:** 98541
Other Identifiers: Icos Building ID: 50924
Building Name: Mary M Knight, Mary M. Knight School, High School Building
Use: School
Latitude: 47.1993 **Longitude:** -123.4322
S_S: 1.566 **S_1:** 0.633
Screener(s): Ben Fisher **Date/Time:** 7/30/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1979
Total Floor Area (sq. ft.): 29349 **Code Year:** 1976
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Sesimicity: Very High

Scale:

Reference:

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 3.8

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 5200 100th St NE
Marysville, WA **Zip:** 98270
Other Identifiers: Icos Building ID: 56103
Building Name: Marysville, Cascade Elementary School, Unit A - Masonry
Use: School
Latitude: 48.085427 **Longitude:** -122.160481
S_S: 1.092 **S_1:** 0.389
Screener(s): Brian Matsumoto, P.E., S.E., Drew Nielson **Date/Time:** 5/15/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1955
Total Floor Area (sq. ft.): 12730 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 5200 100th St NE
Marysville, WA **Zip:** 98270
Other Identifiers: Icos Building ID: 56103
Building Name: Marysville, Cascade Elementary School, Unit A - Wood
Use: School
Latitude: 48.085427 **Longitude:** -122.160481
S_S: 1.092 **S_1:** 0.389
Screener(s): Brian Matsumoto, P.E., S.E., Drew Nielson **Date/Time:** 5/15/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1955
Total Floor Area (sq. ft.): 12730 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 5200 100th St NE
Marysville, WA **Zip:** 98270
Other Identifiers: Icos Building ID: 56101
Building Name: Marysville, Cascade Elementary School, Unit B - Masonry
Use: School
Latitude: 48.085427 **Longitude:** -122.160481
S_S: 1.091 **S_1:** 0.389
Screener(s): Brian Matsumoto, P.E., S.E., Drew Nielson **Date/Time:** 5/15/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1955
Total Floor Area (sq. ft.): 12110 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

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Level 1 HIGH Seismicity

Scale:

Reference:

Address: 5200 100th St NE
Marysville, WA **Zip:** 98270
Other Identifiers: Icos Building ID: 56101
Building Name: Marysville, Cascade Elementary School, Unit B - Wood
Use: School
Latitude: 48.085427 **Longitude:** -122.160481
S_S: 1.091 **S_1:** 0.389
Screener(s): Brian Matsumoto, P.E., S.E., Drew Nielson **Date/Time:** 5/15/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1955
Total Floor Area (sq. ft.): 12110 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 5200 100th St NE
Marysville, WA **Zip:** 98270
Other Identifiers: Icos Building ID: 56104
Building Name: Marysville, Cascade Elementary School, Unit C - Masonry
Use: School
Latitude: 48.085427 **Longitude:** -122.160481
S_S: 1.092 **S_1:** 0.389
Screener(s): Brian Matsumoto, PE, SE, Drew Nielson **Date/Time:** 5/15/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1956
Total Floor Area (sq. ft.): 4976 **Code Year:** 1955
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 5200 100th St NE
Marysville, WA **Zip:** 98270
Other Identifiers: Icos Building ID: 56104
Building Name: Marysville, Cascade Elementary School, Unit C - Wood
Use: School
Latitude: 48.085427 **Longitude:** -122.160481
S_S: 1.092 **S_1:** 0.389
Screener(s): Brian Matsumoto, PE, SE, Drew Nielson **Date/Time:** 5/15/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1956
Total Floor Area (sq. ft.): 4976 **Code Year:** 1955
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 5200 100th St NE
Marysville, WA **Zip:** 98270
Other Identifiers: Icos Building ID: 56102
Building Name: Marysville, Cascade Elementary School, Unit D - Masonry
Use: School
Latitude: 48.085427 **Longitude:** -122.160481
S_S: 1.092 **S_1:** 0.389
Screener(s): Brian Matsumoto, P.E., S.E., Drew Nielson **Date/Time:** 5/15/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1956
Total Floor Area (sq. ft.): 7868 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 5200 100th St NE
Marysville, WA **Zip:** 98270
Other Identifiers: Icos Building ID: 56102
Building Name: Marysville, Cascade Elementary School, Unit D - Wood
Use: School
Latitude: 48.085427 **Longitude:** -122.160481
S_S: 1.092 **S_1:** 0.389
Screener(s): Brian Matsumoto, P.E., S.E., Drew Nielson **Date/Time:** 5/15/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1956
Total Floor Area (sq. ft.): 7868 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 5611 108th Street NE
Marysville, WA **Zip:** 98271

Other Identifiers: Icos Building ID: 56254

Building Name: Marysville, Marysville Pilchuck Senior High School, Arts and Crafts Building - Bldg B

Use: School

Latitude: 48.095906 **Longitude:** -122.155342

S_S: 1.082 **S_1:** 0.386

Screener(s): Brian Matsumoto, Drew Nielson & Suzie Bauer **Date/Time:** 6/17/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1970

Total Floor Area (sq. ft.): 10107 **Code Year:** 1967

Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial

Interior: ☐ None ☐ Visible ☑ Entered

Drawings Reviewed: ☑ Yes ☐ No

Soil Type Source: DNR

Geologic Hazards Source: DNR

Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Address: 5611 108th Street NE
Marysville, WA **Zip:** 98271
Other Identifiers: Icos Building ID: 56248
Building Name: Marysville, Marysville Pilchuck Senior High School, Auditorium - Bldg K C2
Use: School
Latitude: 48.095906 **Longitude:** -122.155342
S_S: 1.082 **S_1:** 0.386
Screener(s): Brian Matsumoto, Drew Nielson & Suzie Bauer **Date/Time:** 6/6/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1970
Total Floor Area (sq. ft.): 30632 **Code Year:** 1967
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

Scale:

Reference:

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 5611 108th Street NE
Marysville, WA **Zip:** 98271
Other Identifiers: Icos Building ID: 56248
Building Name: Marysville, Marysville Pilchuck Senior High School, Auditorium - Bldg K
Use: School
Latitude: 48.095906 **Longitude:** -122.155342
S_S: 1.082 **S_1:** 0.386
Screener(s): Brian Matsumoto, Drew Nielson & Suzie Bauer **Date/Time:** 6/17/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1970
Total Floor Area (sq. ft.): 30632 **Code Year:** 1967
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 5611 108th Street NE
Marysville, WA **Zip:** 98271

Other Identifiers: Icos Building ID: 56242

Building Name: Marysville, Marysville Pilchuck Senior High School, Business Ed and Home Learning - Bldg C

Use: School

Latitude: 48.095906 **Longitude:** -122.155342

S_S: 1.081 **S_1:** 0.385

Screener(s): Brian Matsumoto, Drew Nielson & Suzie Bauer **Date/Time:** 6/17/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1970

Total Floor Area (sq. ft.): 11224 **Code Year:** 1967

Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial

Interior: ☐ None ☐ Visible ☑ Entered

Drawings Reviewed: ☑ Yes ☐ No

Soil Type Source: DNR

Geologic Hazards Source: DNR

Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 5611 108th Street NE
Marysville, WA **Zip:** 98271
Other Identifiers: Icos Building ID: 56240
Building Name: Marysville, Marysville Pilchuck Senior High School, East Building - Bldg H
Use: School
Latitude: 48.095906 **Longitude:** -122.155342
S_S: 1.081 **S_1:** 0.385
Screener(s): Brian Matsumoto, Drew Nielson & Suzie Bauer **Date/Time:** 6/17/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1970
Total Floor Area (sq. ft.): 8606 **Code Year:** 1967
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 5611 108th Street NE
Marysville, WA **Zip:** 98271

Other Identifiers: Icos Building ID: 56246

Building Name: Marysville, Marysville Pilchuck Senior High School, Gym & New Food Commons - Bldg M

Use: School

Latitude: 48.095906 **Longitude:** -122.155342

S_S: 1.082 **S_1:** 0.386

Screener(s): Brian Matsumoto, Drew Nielson & Suzie Bauer **Date/Time:** 6/17/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1970

Total Floor Area (sq. ft.): 58730 **Code Year:** 1967

Additions: ☐ None ☐ Yes, Year(s) Built _____

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: _____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other _____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial

Interior: ☐ None ☐ Visible ☑ Entered

Drawings Reviewed: ☑ Yes ☐ No

Soil Type Source: DNR

Geologic Hazards Source: DNR

Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} _____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 5611 108th Street NE
Marysville, WA **Zip:** 98271
Other Identifiers: Icos Building ID: 56244
Building Name: Marysville, Marysville Pilchuck Senior High School, Library - Bldg J
Use: School
Latitude: 48.095906 **Longitude:** -122.155342
S_S: 1.081 **S_1:** 0.385
Screener(s): Brian Matsumoto, Drew Nielson & Suzie Bauer **Date/Time:** 6/17/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1970
Total Floor Area (sq. ft.): 19772 **Code Year:** 1967
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.5

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 5611 108th Street NE
Marysville, WA **Zip:** 98271

Other Identifiers: Icos Building ID: 56253

Building Name: Marysville, Marysville Pilchuck Senior High School, Life Science Building - Bldg F

Use: School

Latitude: 48.095906 **Longitude:** -122.155342

S_S: 1.081 **S_1:** 0.385

Screener(s): Brian Matsumoto, Drew Nielson & Suzie Bauer **Date/Time:** 6/17/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1970

Total Floor Area (sq. ft.): 10225 **Code Year:** 1967

Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial

Interior: ☐ None ☐ Visible ☑ Entered

Drawings Reviewed: ☑ Yes ☐ No

Soil Type Source: DNR

Geologic Hazards Source: DNR

Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 5611 108th Street NE
Marysville, WA **Zip:** 98271

Other Identifiers: Icos Building ID: 56235

Building Name: Marysville, Marysville Pilchuck Senior High School, Mech Plant and Former Cafteria - Bldg E

Use: School

Latitude: 48.095906 **Longitude:** -122.155342

S_S: 1.082 **S_1:** 0.386

Screener(s): Brian Matsumoto, Drew Nielson & Suzie Bauer **Date/Time:** 6/17/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1970

Total Floor Area (sq. ft.): 14892 **Code Year:** 1967

Additions: ☐ None ☐ Yes, Year(s) Built _____

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: _____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other _____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial

Interior: ☐ None ☐ Visible ☑ Entered

Drawings Reviewed: ☑ Yes ☐ No

Soil Type Source: DNR

Geologic Hazards Source: DNR

Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} _____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 5611 108th Street NE
Marysville, WA **Zip:** 98271

Other Identifiers: Icos Building ID: 56245

Building Name: Marysville, Marysville Pilchuck Senior High School, Occupational Center - Bldg A

Use: School

Latitude: 48.095906 **Longitude:** -122.155342

S_S: 1.081 **S_1:** 0.385

Screener(s): Brian Matsumoto, Drew Nielson & Suzie Bauer **Date/Time:** 6/17/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1970

Total Floor Area (sq. ft.): 15494 **Code Year:** 1967

Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial

Interior: ☐ None ☐ Visible ☑ Entered

Drawings Reviewed: ☑ Yes ☐ No

Soil Type Source: DNR

Geologic Hazards Source: DNR

Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 5611 108th Street NE
Marysville, WA **Zip:** 98271
Other Identifiers: Icos Building ID: 56233
Building Name: Marysville, Marysville Pilchuck Senior High School, Pool Building - Bldg L
Use: School
Latitude: 48.095906 **Longitude:** -122.155342
S_S: 1.083 **S_1:** 0.386
Screener(s): Brian Matsumoto, Drew Nielson & Suzie Bauer **Date/Time:** 6/17/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1970
Total Floor Area (sq. ft.): 25116 **Code Year:** 1967
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 5611 108th Street NE
Marysville, WA **Zip:** 98271
Other Identifiers: Icos Building ID: 56247
Building Name: Marysville, Marysville Pilchuck Senior High School, South Building - Bldg N
Use: School
Latitude: 48.095906 **Longitude:** -122.155342
S_S: 1.081 **S_1:** 0.385
Screener(s): Brian Matsumoto, Drew Nielson & Suzie Bauer **Date/Time:** 6/17/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1984
Total Floor Area (sq. ft.): 9169 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 8600 52nd Ave NE
Marysville, WA **Zip:** 98270
Other Identifiers: Icos Building ID: 56134
Building Name: Marysville, Pinewood Elementary School, Bldg E
Use: School
Latitude: 48.072686 **Longitude:** -122.161661
S_S: 1.101 **S_1:** 0.392
Screener(s): Brian Matsumoto, PE, SE, Drew Nielson **Date/Time:** 5/14/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1968
Total Floor Area (sq. ft.): 2045 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 8600 52nd Ave NE
Marysville, WA **Zip:** 98270
Other Identifiers: Icos Building ID: 56141
Building Name: Marysville, Pinewood Elementary School, Bldg L (Library)
Use: School
Latitude: 48.072686 **Longitude:** -122.161661
S_S: 1.1 **S_1:** 0.392
Screener(s): Brian Matsumoto, PE, SE, Drew Nielson **Date/Time:** 5/14/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1968
Total Floor Area (sq. ft.): 3747 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 8600 52nd Ave NE
Marysville, WA **Zip:** 98270
Other Identifiers: Icos Building ID: 56139
Building Name: Marysville, Pinewood Elementary School, Bldg M (Gym)
Use: School
Latitude: 48.072686 **Longitude:** -122.161661
S_S: 1.1 **S_1:** 0.392
Screener(s): Brian Matsumoto, PE, SE, Drew Nielson **Date/Time:** 5/14/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1968
Total Floor Area (sq. ft.): 8086 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

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Level 1 HIGH Seismicity

Scale:

Reference:

Address: 8600 52nd Ave NE
Marysville, WA **Zip:** 98270
Other Identifiers: Icos Building ID: 56135
Building Name: Marysville, Pinewood Elementary School, Building A
Use: School
Latitude: 48.072686 **Longitude:** -122.161661
S_S: 1.1 **S_1:** 0.392
Screener(s): Brian Matsumoto, PE, SE, Drew Nielson **Date/Time:** 5/14/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1968
Total Floor Area (sq. ft.): 2492 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 8600 52nd Ave NE
Marysville, WA **Zip:** 98270
Other Identifiers: Icos Building ID: 56142
Building Name: Marysville, Pinewood Elementary School, Building D
Use: School
Latitude: 48.072686 **Longitude:** -122.161661
S_S: 1.1 **S_1:** 0.392
Screener(s): Brian Matsumoto, PE, SE, Drew Nielson **Date/Time:** 5/14/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1968
Total Floor Area (sq. ft.): 3568 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter
☐ Industrial ☐ Office ☑ School ☐ Government
☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer
☐ Parapets ☐ Appendages
☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 2415 74th St NE
Tulalip, WA **Zip:** 98271
Other Identifiers: Icos Building ID: 56204
Building Name: Marysville, Quil Ceda Tulalip Elementary School, Main Building
Use: School
Latitude: 48.06389 **Longitude:** -122.198748
S_S: 1.131 **S_1:** 0.403
Screener(s): Brian Matsumoto, PE, SE, Drew Nielson **Date/Time:** 5/14/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1997
Total Floor Area (sq. ft.): 45400 **Code Year:** 1991
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 4.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 13525 51st Ave NE
Marysville, WA **Zip:** 98271
Other Identifiers: Icos Building ID: 56266
Building Name: Marysville, Shoultes Elementary School, Bldg A Gym (B Bldg in ICOS)
Use: School
Latitude: 48.11833 **Longitude:** -122.16206
S_S: 1.075 **S_1:** 0.383
Screener(s): Brian Matsumoto, PE, SE, Drew Nielson **Date/Time:** 5/14/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1964
Total Floor Area (sq. ft.): 6448 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 13525 51st Ave NE
Marysville, WA **Zip:** 98271
Other Identifiers: Icos Building ID: 56264
Building Name: Marysville, Shoultes Elementary School, Bldg B (A Bldg in ICOS)
Use: School
Latitude: 48.11833 **Longitude:** -122.16206
S_S: 1.075 **S_1:** 0.383
Screener(s): Brian Matsumoto, PE, SE, Drew Nielson **Date/Time:** 5/14/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1958
Total Floor Area (sq. ft.): 12348 **Code Year:** 1961
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 13525 51st Ave NE
Marysville, WA **Zip:** 98271
Other Identifiers: Icos Building ID: 56267
Building Name: Marysville, Shoultes Elementary School, Bldg C (D Bldg in ICOS) - Masonry
Use: School
Latitude: 48.11833 **Longitude:** -122.16206
S_S: 1.074 **S_1:** 0.383
Screener(s): Brian Matsumoto, PE, SE, Drew Nielson **Date/Time:** 5/14/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1965
Total Floor Area (sq. ft.): 9405 **Code Year:** 1961
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 13525 51st Ave NE
Marysville, WA **Zip:** 98271
Other Identifiers: Icos Building ID: 56267
Building Name: Marysville, Shoultes Elementary School, Bldg C (D Bldg in ICOS) - Wood
Use: School
Latitude: 48.11833 **Longitude:** -122.16206
S_S: 1.074 **S_1:** 0.383
Screener(s): Brian Matsumoto, PE, SE, Drew Nielson **Date/Time:** 5/14/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1965
Total Floor Area (sq. ft.): 9405 **Code Year:** 1961
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 13525 51st Ave NE
Marysville, WA **Zip:** 98271
Other Identifiers: Icos Building ID: 56265
Building Name: Marysville, Shoultes Elementary School, Bldg D (C Bldg in ICOS)
Use: School
Latitude: 48.11833 **Longitude:** -122.16206
S_S: 1.074 **S_1:** 0.383
Screener(s): Brian Matsumoto, PE, SE, Drew Nielson **Date/Time:** 5/14/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1964
Total Floor Area (sq. ft.): 10575 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATELY HIGH Seismicity

Scale:

Reference:

Address: 5200 TURKINGTON RD
Acme, WA **Zip:** 98220
Other Identifiers: Icos Building ID: 56410
Building Name: Mount Baker, Acme Elementary School, Main Building
Use: School
Latitude: 48.718947 **Longitude:** -122.2088
S_S: 0.939 **S_1:** 0.331
Screener(s): Brian Matsumoto, PE SE **Date/Time:** 9/29/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1937
Total Floor Area (sq. ft.): 17964 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: Moderately High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.8

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 209 E. Park Street
Napavine, WA **Zip:** 98565
Other Identifiers: Icos Building ID: 58512
Building Name: Napavine, Napavine Elementary School, Main Building
Use: School
Latitude: 46.578478 **Longitude:** -122.905242
S_s: 1.114 **S_1:** 0.466
Screener(s): Brian Knight **Date/Time:** 9/9/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1951
Total Floor Area (sq. ft.): 15770 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter
☐ Industrial ☐ Office ☑ School ☐ Government
☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer
☐ Parapets ☐ Appendages
☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 404 4th Ave NE
Napavine, WA **Zip:** 98565
Other Identifiers: Icos Building ID: 58513
Building Name: Napavine, Napavine Junior Senior High School, Annex
Use: School
Latitude: 46.577151 **Longitude:** -122.904116
S_S: 1.113 **S_1:** 0.465
Screener(s): Brian Knight **Date/Time:** 9/9/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1955
Total Floor Area (sq. ft.): 11274 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 404 4th Ave NE
Napavine, WA **Zip:** 98565
Other Identifiers: Icos Building ID: 58514
Building Name: Napavine, Napavine Junior Senior High School, Main
Use: School
Latitude: 46.577151 **Longitude:** -122.904116
S_s: 1.113 **S_1:** 0.465
Screener(s): Brian Knight **Date/Time:** 9/9/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1980
Total Floor Area (sq. ft.): 44360 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Address: 793 SR 4
Naselle, WA **Zip:** 98638
Other Identifiers: Icos Building ID: 51032
Building Name: Naselle-Grays River Valley, Naselle K-12 School, Elementary
Use: School
Latitude: 46.376621 **Longitude:** -123.801168
S_S: 1.281 **S_1:** 0.657
Screener(s): Brian Knight **Date/Time:** 8/8/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1952
Total Floor Area (sq. ft.): 29156 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Scale:

Reference:

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Address: 793 SR 4
Naselle, WA **Zip:** 98638
Other Identifiers: Icos Building ID: 51032
Building Name: Naselle-Grays River Valley, Naselle K-12 School, High School/Admin
Use: School
Latitude: 46.376621 **Longitude:** -123.801168
S_S: 1.281 **S_1:** 0.657
Screener(s): Brian Knight **Date/Time:** 8/8/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1952
Total Floor Area (sq. ft.): 34621 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Sesimicity: Very High

Scale:

Reference:

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.5

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Address: 336 State Route 109
Ocean Shores, WA **Zip:** 98569
Other Identifiers: Icos Building ID: 58529
Building Name: North Beach, North Beach Junior/Senior High School, Main Building
Use: School
Latitude: 47.018545 **Longitude:** -124.15817
S_S: 1.555 **S_1:** 0.747
Screener(s): Ben Fisher **Date/Time:** 5/20/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1991
Total Floor Area (sq. ft.): 63096 **Code Year:** 1988
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: **Yes** / No / DNK

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Scale:

Reference:

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Scale:

Reference:

Address: NE 22900 Hwy 3
Belfair, WA **Zip:** 98528
Other Identifiers: Icos Building ID: 58613
Building Name: North Mason, Belfair Elementary School, Gymnasium Building
Use: School
Latitude: 47.438813 **Longitude:** -122.83427
S_s: 1.63 **S_1:** 0.579
Screener(s): Josh Comfort, Justin Cook **Date/Time:** 1/2/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1970
Total Floor Area (sq. ft.): 7470 **Code Year:** 1967
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Scale:

Reference:

Address: NE 22900 Hwy 3
Belfair, WA **Zip:** 98528
Other Identifiers: Icos Building ID: 58614
Building Name: North Mason, Belfair Elementary School, Main Building
Use: School
Latitude: 47.438813 **Longitude:** -122.83427
S_s: 1.63 **S_1:** 0.579
Screener(s): Josh Comfort, Justin Cook **Date/Time:** 1/2/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1970
Total Floor Area (sq. ft.): 33648 **Code Year:** 1967
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.3

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 2867 North River Rd
Cosmopolis, WA **Zip:** 98537
Other Identifiers: Icos Building ID: 58630
Building Name: North River, North River School, Elementary
Use: School
Latitude: 46.775401 **Longitude:** -123.48387
S_S: 1.331 **S_1:** 0.589
Screener(s): Brian Knight **Date/Time:** 7/20/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1945
Total Floor Area (sq. ft.): 3702 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 2867 North River Rd
Cosmopolis, WA **Zip:** 98537
Other Identifiers: Icos Building ID: 58634
Building Name: North River, North River School, Gym Home Ec-Cafeteria
Use: School
Latitude: 46.775401 **Longitude:** -123.48387
S_S: 1.331 **S_1:** 0.589
Screener(s): Brian Knight **Date/Time:** 7/20/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1922
Total Floor Area (sq. ft.): 9885 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter
☐ Industrial ☐ Office ☑ School ☐ Government
☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer
☐ Parapets ☐ Appendages
☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 2867 North River Rd
Cosmopolis, WA **Zip:** 98537
Other Identifiers: Icos Building ID: 58631
Building Name: North River, North River School, High School & Admin Building
Use: School
Latitude: 46.775401 **Longitude:** -123.48387
S_S: 1.331 **S_1:** 0.589
Screener(s): Brian Knight **Date/Time:** 7/20/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1922
Total Floor Area (sq. ft.): 11228 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 2867 North River Rd
Cosmopolis, WA **Zip:** 98537
Other Identifiers: Icos Building ID: 58636
Building Name: North River, North River School, Talley Building (Music/Art)
Use: School
Latitude: 46.775401 **Longitude:** -123.48387
S_s: 1.331 **S_1:** 0.589
Screener(s): Brian Knight **Date/Time:** 7/20/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1945
Total Floor Area (sq. ft.): 2880 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 21400 35 AV SE
Bothell, WA **Zip:** 98021
Other Identifiers: Icos Building ID: 56750
Building Name: Northshore, Canyon Creek Elementary School, Building A - Classroom/Library
Use: School
Latitude: 47.804741 **Longitude:** -122.187733
S_S: 1.317 **S_1:** 0.467
Screener(s): Brian Matsumoto and Sabina Surana **Date/Time:** 7/29/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1977
Total Floor Area (sq. ft.): 17477 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 21400 35 AV SE
Bothell, WA **Zip:** 98021
Other Identifiers: Icos Building ID: 56753
Building Name: Northshore, Canyon Creek Elementary School, Building C - Cafeteria/Gym
Use: School
Latitude: 47.804741 **Longitude:** -122.187733
S_S: 1.317 **S_1:** 0.467
Screener(s): Brian Matsumoto and Sabina Surana **Date/Time:** 7/29/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1977
Total Floor Area (sq. ft.): 18505 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units:

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 21615 9 AV SE
Bothell, WA **Zip:** 98021
Other Identifiers: Icos Building ID: 56775
Building Name: Northshore, Crystal Springs Elementary School, Building 1 - Admin
Use: School
Latitude: 47.801178 **Longitude:** -122.220298
S_S: 1.304 **S_1:** 0.461
Screener(s): Brian Matsumoto, PE SE **Date/Time:** 7/8/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1957
Total Floor Area (sq. ft.): 7626 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 21615 9 AV SE
Bothell, WA **Zip:** 98021
Other Identifiers: Icos Building ID: 56774
Building Name: Northshore, Crystal Springs Elementary School, Building 2 - Classrooms/Kitchen
Use: School
Latitude: 47.801178 **Longitude:** -122.220298
S_S: 1.304 **S_1:** 0.461
Screener(s): Brian Matsumoto, PE SE **Date/Time:** 7/8/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1957
Total Floor Area (sq. ft.): 7172 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 21615 9 AV SE
Bothell, WA **Zip:** 98021
Other Identifiers: Icos Building ID: 56772
Building Name: Northshore, Crystal Springs Elementary School, Building 3/4 - Classrooms
Use: School
Latitude: 47.801178 **Longitude:** -122.220298
S_S: 1.304 **S_1:** 0.461
Screener(s): Brian Matsumoto, PE SE **Date/Time:** 7/8/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1957
Total Floor Area (sq. ft.): 9875 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 21615 9 AV SE
Bothell, WA **Zip:** 98021
Other Identifiers: Icos Building ID: 56770
Building Name: Northshore, Crystal Springs Elementary School, Building 5 - Classrooms
Use: School
Latitude: 47.801178 **Longitude:** -122.220298
S_S: 1.304 **S_1:** 0.461
Screener(s): Brian Matsumoto, PE SE **Date/Time:** 7/8/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1957
Total Floor Area (sq. ft.): 4809 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 23400 5 AV W
Bothell, WA **Zip:** 98021
Other Identifiers: Icos Building ID: 56732
Building Name: Northshore, Shelton View Elementary School, Building A1/10 - Classroom
Use: School
Latitude: 47.785541 **Longitude:** -122.23962
S_S: 1.286 **S_1:** 0.453
Screener(s): Brian Matsumoto and Sabina Surana **Date/Time:** 7/29/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1969
Total Floor Area (sq. ft.): 8634 **Code Year:** 1967
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 23400 5 AV W
Bothell, WA **Zip:** 98021
Other Identifiers: Icos Building ID: 56727
Building Name: Northshore, Shelton View Elementary School, Building C - Gym
Use: School
Latitude: 47.785541 **Longitude:** -122.23962
S_S: 1.286 **S_1:** 0.453
Screener(s): Brian Matsumoto and Sabina Surana **Date/Time:** 7/29/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1969
Total Floor Area (sq. ft.): 5899 **Code Year:** 1967
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 600 Cherokee Dr.
Oak Harbor, WA **Zip:** 98277
Other Identifiers: Icos Building ID: 51299
Building Name: Oak Harbor, Clover Valley School, Main Building
Use: School
Latitude: 48.329197 **Longitude:** -122.673992
S_S: 1.368 **S_1:** 0.491
Screener(s): Rami Sabra, Erik Bishop **Date/Time:** 7/24/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1951
Total Floor Area (sq. ft.): 38208 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 150 SW Sixth Ave.
Oak Harbor, WA **Zip:** 98277
Other Identifiers: Icos Building ID: 51291
Building Name: Oak Harbor, Oak Harbor Middle School, Band Building
Use: School
Latitude: 48.293554 **Longitude:** -122.659291
S_s: 1.363 **S_1:** 0.489
Screener(s): Rami Sabra, Erik Bishop **Date/Time:** 7/24/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1961
Total Floor Area (sq. ft.): 2241 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 150 SW Sixth Ave.
Oak Harbor, WA **Zip:** 98277
Other Identifiers: Icos Building ID: 51288
Building Name: Oak Harbor, Oak Harbor Middle School, Building B
Use: School
Latitude: 48.293554 **Longitude:** -122.659291
S_s: 1.363 **S_1:** 0.489
Screener(s): Rami Sabra **Date/Time:** 7/24/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1961
Total Floor Area (sq. ft.): 12000 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 150 SW Sixth Ave.
Oak Harbor, WA **Zip:** 98277
Other Identifiers: Icos Building ID: 51290
Building Name: Oak Harbor, Oak Harbor Middle School, C Wing
Use: School
Latitude: 48.293554 **Longitude:** -122.659291
S_s: 1.363 **S_1:** 0.489
Screener(s): Rami Sabra, Erik Bishop **Date/Time:** 7/24/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1961
Total Floor Area (sq. ft.): 24000 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units:

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} _____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 150 SW Sixth Ave.
Oak Harbor, WA **Zip:** 98277
Other Identifiers: Icos Building ID: 51294
Building Name: Oak Harbor, Oak Harbor Middle School, D Wing
Use: School
Latitude: 48.293554 **Longitude:** -122.659291
S_S: 1.363 **S_1:** 0.489
Screener(s): Rami Sabra, Erik Bishop **Date/Time:** 7/24/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1948
Total Floor Area (sq. ft.): 3800 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 150 SW Sixth Ave.
Oak Harbor, WA **Zip:** 98277
Other Identifiers: Icos Building ID: 51293
Building Name: Oak Harbor, Oak Harbor Middle School, Gym
Use: School
Latitude: 48.293554 **Longitude:** -122.659291
S_S: 1.363 **S_1:** 0.489
Screener(s): Rami Sabra, Erik Bishop **Date/Time:** 7/24/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1959
Total Floor Area (sq. ft.): 12310 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 150 SW Sixth Ave.
Oak Harbor, WA **Zip:** 98277
Other Identifiers: Icos Building ID: 51289
Building Name: Oak Harbor, Oak Harbor Middle School, Main Building A
Use: School
Latitude: 48.293554 **Longitude:** -122.659291
S_s: 1.363 **S_1:** 0.489
Screener(s): Erik Bishop, Rami Sabra **Date/Time:** 7/24/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1955
Total Floor Area (sq. ft.): 23200 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Scale:

Reference:

Address: 421 Brumbach Ave NE
Ilwaco, WA **Zip:** 98624
Other Identifiers: Icos Building ID: 58644
Building Name: Ocean Beach, Kaino Gym, Kaino Gym
Use: School
Latitude: 46.310056 **Longitude:** -124.038651
S_s: 1.426 **S_1:** 0.737
Screener(s): Brian Knight **Date/Time:** 9/18/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1985
Total Floor Area (sq. ft.): 3200 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 3.8

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 7300 ZANGLE RD NE
Olympia, WA **Zip:** 98506
Other Identifiers: Icos Building ID: 58698
Building Name: Olympia, Boston Harbor Elementary School, Main Building
Use: School
Latitude: 47.13775 **Longitude:** -122.8855
S_S: 1.448 **S_1:** 0.529
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 7/24/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1991
Total Floor Area (sq. ft.): 27000 **Code Year:** 1988
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 5.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 3939 20TH AVE NW
Olympia, WA **Zip:** 98502
Other Identifiers: Icos Building ID: 58671
Building Name: Olympia, Thurgood Marshall Middle School, Gym Building
Use: School
Latitude: 47.0623 **Longitude:** -122.951
S_S: 1.432 **S_1:** 0.534
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 7/24/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1994
Total Floor Area (sq. ft.): 16689 **Code Year:** 1991
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units:

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} _____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 3939 20TH AVE NW
Olympia, WA **Zip:** 98502
Other Identifiers: Icos Building ID: 58672
Building Name: Olympia, Thurgood Marshall Middle School, Main Building
Use: School
Latitude: 47.0623 **Longitude:** -122.951
S_S: 1.432 **S_1:** 0.534
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 7/24/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1994
Total Floor Area (sq. ft.): 56347 **Code Year:** 1991
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 5.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 316 Washington Avenue North
Orting, WA **Zip:** 98360
Other Identifiers: Icos Building ID: 58761
Building Name: Orting, Orting Primary School, Main Building
Use: School
Latitude: 47.101367 **Longitude:** -122.20734
S_s: 1.215 **S_1:** 0.42
Screener(s): Ben Fisher **Date/Time:** 6/4/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1968
Total Floor Area (sq. ft.): 21945 **Code Year:** 1964
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☑ Plan (type) Diaphragm Opening

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 519 N. 2nd Street
Pe Ell, WA **Zip:** 98572
Other Identifiers: Icos Building ID: 51320
Building Name: Pe Ell, Pe Ell School, Fitness Center
Use: School
Latitude: 46.5748 **Longitude:** -123.2995
S_s: 1.171 **S_1:** 0.534
Screener(s): Brian Knight **Date/Time:** 9/9/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1993
Total Floor Area (sq. ft.): 1500 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter
☐ Industrial ☐ Office ☑ School ☐ Government
☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer
☐ Parapets ☐ Appendages
☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 5.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 519 N. 2nd Street
Pe Ell, WA **Zip:** 98572
Other Identifiers: Icos Building ID: 51321
Building Name: Pe Ell, Pe Ell School, Main Building
Use: School
Latitude: 46.5748 **Longitude:** -123.2995
S_S: 1.171 **S_1:** 0.534
Screener(s): Brian Knight **Date/Time:** 9/9/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1954
Total Floor Area (sq. ft.): 64492 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.6

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 4905 Rosedale St NW
Gig Harbor, WA **Zip:** 98335
Other Identifiers: Icos Building ID: 58839
Building Name: Peninsula, Discovery Elementary School, Main Building
Use: School
Latitude: 47.331568 **Longitude:** -122.60374
S_S: 1.483 **S_1:** 0.517
Screener(s): Justin Cook, Josh Comfort, Colby Litzenberger **Date/Time:** 1/3/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1980
Total Floor Area (sq. ft.): 40337 **Code Year:** 1976
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.6

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 5101 Rosedale St NW
Gig Harbor, WA **Zip:** 98335
Other Identifiers: Icos Building ID: 58821
Building Name: Peninsula, Gig Harbor High School, Main Building
Use: School
Latitude: 47.331152 **Longitude:** -122.60549
S_S: 1.483 **S_1:** 0.518
Screener(s): Justin Cook,Colby Litzenberger **Date/Time:** 1/3/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1978
Total Floor Area (sq. ft.): 134248 **Code Year:** 1973
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 5101 Rosedale St NW
Gig Harbor, WA **Zip:** 98335
Other Identifiers: Icos Building ID: 58819
Building Name: Peninsula, Gig Harbor High School, Two-Story Building
Use: School
Latitude: 47.331152 **Longitude:** -122.60549
S_S: 1.483 **S_1:** 0.518
Screener(s): Justin Cook,Colby Litzenberger **Date/Time:** 1/3/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1991
Total Floor Area (sq. ft.): 47026 **Code Year:** 1988
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter
☐ Industrial ☐ Office ☑ School ☐ Government
☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer
☐ Parapets ☐ Appendages
☐ Other

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 4.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} _____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 5101 Rosedale St NW
Gig Harbor, WA **Zip:** 98335
Other Identifiers: Icos Building ID: 58820
Building Name: Peninsula, Gig Harbor High School, Voc-Ed Building
Use: School
Latitude: 47.331152 **Longitude:** -122.60549
S_s: 1.483 **S_1:** 0.518
Screener(s): Justin Cook,Colby Litzenberger **Date/Time:** 1/3/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1978
Total Floor Area (sq. ft.): 12554 **Code Year:** 1973
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter
☐ Industrial ☐ Office ☑ School ☐ Government
☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer
☐ Parapets ☐ Appendages
☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Scale:

Reference:

Address: 12617 118th Ave NW
Gig Harbor, WA **Zip:** 98329
Other Identifiers: Icos Building ID: 58834
Building Name: Peninsula, Minter Creek Elementary School, Main Building
Use: School
Latitude: 47.373 **Longitude:** -122.69281
S_s: 1.586 **S_1:** 0.557
Screener(s): Josh Comfort **Date/Time:** 1/2/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1981
Total Floor Area (sq. ft.): 36146 **Code Year:** 1979
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 3.8

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Scale:

Reference:

Address: 14105 Purdy Dr NW
Gig Harbor, WA **Zip:** 98332
Other Identifiers: Icos Building ID: 58793
Building Name: Peninsula, Peninsula High School, 500 Building
Use: School
Latitude: 47.386284 **Longitude:** -122.62442
S_S: 1.582 **S_1:** 0.551
Screener(s): Colby Litzenberger, Justin Cook **Date/Time:** 1/2/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1946
Total Floor Area (sq. ft.): 18439 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.5

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Scale:

Reference:

Address: 14105 Purdy Dr NW
Gig Harbor, WA **Zip:** 98332
Other Identifiers: Icos Building ID: 58795
Building Name: Peninsula, Peninsula High School, 600 Building
Use: School
Latitude: 47.386284 **Longitude:** -122.62442
S_s: 1.582 **S_1:** 0.551
Screener(s): Colby Litzenberger, Justin Cook **Date/Time:** 1/2/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1962
Total Floor Area (sq. ft.): 13991 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.8

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Scale:

Reference:

Address: 14105 Purdy Dr NW
Gig Harbor, WA **Zip:** 98332
Other Identifiers: Icos Building ID: 58791
Building Name: Peninsula, Peninsula High School, 700 Building - Voc Ag
Use: School
Latitude: 47.386284 **Longitude:** -122.62442
S_S: 1.582 **S_1:** 0.551
Screener(s): Colby Litzenberger, Justin Cook **Date/Time:** 1/2/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1978
Total Floor Area (sq. ft.): 6631 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Scale:

Reference:

Address: 14105 Purdy Dr NW
Gig Harbor, WA **Zip:** 98332
Other Identifiers: Icos Building ID: 58792
Building Name: Peninsula, Peninsula High School, 800 Building - Auditorium Area
Use: School
Latitude: 47.386284 **Longitude:** -122.62442
S_s: 1.582 **S_1:** 0.551
Screener(s): Colby Litzenberger, Justin Cook **Date/Time:** 1/2/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1970
Total Floor Area (sq. ft.): 19451 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.8

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Scale:

Reference:

Address: 14105 Purdy Dr NW
Gig Harbor, WA **Zip:** 98332
Other Identifiers: Icos Building ID: 58794
Building Name: Peninsula, Peninsula High School, 900 Building - Pool Building
Use: School
Latitude: 47.386284 **Longitude:** -122.62442
S_s: 1.582 **S_1:** 0.551
Screener(s): Colby Litzenberger, Justin Cook **Date/Time:** 1/2/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1969
Total Floor Area (sq. ft.): 44692 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.8

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Everett, WA 98204
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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Scale:

Reference:

Address: 14105 Purdy Dr NW
Gig Harbor, WA **Zip:** 98332
Other Identifiers: Icos Building ID: 58796
Building Name: Peninsula, Peninsula High School, Main Building (100, 200, 300, 400)
Use: School
Latitude: 47.386284 **Longitude:** -122.62442
S_s: 1.582 **S_1:** 0.551
Screener(s): Colby Litzenberger, Justin Cook **Date/Time:** 1/2/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1946
Total Floor Area (sq. ft.): 92460 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.5

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 5615 Kopachuck Dr NW
Gig Harbor, WA **Zip:** 98335
Other Identifiers: Icos Building ID: 58817
Building Name: Peninsula, Voyager Elementary School, Main Building
Use: School
Latitude: 47.308647 **Longitude:** -122.67879
S_S: 1.483 **S_1:** 0.521
Screener(s): Josh Comfort **Date/Time:** 1/3/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1988
Total Floor Area (sq. ft.): 41088 **Code Year:** 1985
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter
☐ Industrial ☐ Office ☑ School ☐ Government
☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer
☐ Parapets ☐ Appendages
☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 5.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 3939 San Juan Ave
Port Townsend, WA **Zip:** 98368
Other Identifiers: Icos Building ID: 58917
Building Name: Port Townsend, Blue Heron Middle School, Main Building
Use: School
Latitude: 48.1289 **Longitude:** -122.7791
S_S: 1.354 **S_1:** 0.495
Screener(s): Ben Fisher **Date/Time:** 5/22/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1995
Total Floor Area (sq. ft.): 60124 **Code Year:** 1991
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$:

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 409 5th St SW
Puyallup, WA **Zip:** 98371
Other Identifiers: Icos Building ID: 59062
Building Name: Puyallup, Meeker Elementary School, Main Building
Use: School
Latitude: 47.18841 **Longitude:** -122.298804
S_s: 1.273 **S_1:** 0.438
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 8/4/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1923
Total Floor Area (sq. ft.): 35542 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☐ D Stiff Soil ☑ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 3411 119th Ave E
Edgewood, WA **Zip:** 98372
Other Identifiers: Icos Building ID: 58954
Building Name: Puyallup, Mt View Elementary School, Main Building
Use: School
Latitude: 47.226127 **Longitude:** -122.27123
S_s: 1.271 **S_1:** 0.437
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 8/4/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1965
Total Floor Area (sq. ft.): 16507 **Code Year:** 1961
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 3411 119th Ave E
Edgewood, WA **Zip:** 98372
Other Identifiers: Icos Building ID: 58954
Building Name: Puyallup, Mt View Elementary School, Multipurpose Building
Use: School
Latitude: 47.226127 **Longitude:** -122.27123
S_s: 1.271 **S_1:** 0.437
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 8/4/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1965
Total Floor Area (sq. ft.): 5414 **Code Year:** 1961
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 6312 Waller Rd E
Tacoma, WA **Zip:** 98443
Other Identifiers: Icos Building ID: 59011
Building Name: Puyallup, Waller Road Elementary School, Main Building
Use: School
Latitude: 47.199488 **Longitude:** -122.389323
S_S: 1.314 **S_1:** 0.453
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 8/5/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1936
Total Floor Area (sq. ft.): 31241 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 1601 26th Ave SE
Puyallup, WA **Zip:** 98374
Other Identifiers: Icos Building ID: 58921
Building Name: Puyallup, Wildwood Elementary, Main Building
Use: School
Latitude: 47.16645 **Longitude:** -122.273725
S_S: 1.257 **S_1:** 0.433
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 8/4/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1965
Total Floor Area (sq. ft.): 40240 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Scale:

Reference:

Address: 301 South Elderberry Ave
Forks, WA **Zip:** 98331
Other Identifiers: Icos Building ID: 59199
Building Name: Quillayute Valley, Forks Elementary School, Main Building - 1969 Portion
Use: School
Latitude: 47.947635 **Longitude:** -124.37883
S_s: 1.458 **S_1:** 0.718
Screener(s): Ben Fisher (WSP), Bill Henderson (QVSD) **Date/Time:** 8/20/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1969
Total Floor Area (sq. ft.): 43258 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.8

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Address: 121 S Spartan Ave
Forks, WA **Zip:** 98331
Other Identifiers: Icos Building ID: 59203
Building Name: Quillayute Valley, Forks Intermediate School, Main Building - 1952 Portion
Use: School
Latitude: 47.9494 **Longitude:** -124.3838
S_s: 1.458 **S_1:** 0.718
Screener(s): Ben Fisher (WSP), Bill Henderson (QVSD) **Date/Time:** 8/20/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1952
Total Floor Area (sq. ft.): 44142 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Sesimicity: Very High

Scale:

Reference:

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Scale:

Reference:

Address: 261 South Spartan Avenue
Forks, WA **Zip:** 98331
Other Identifiers: Icos Building ID: 59193
Building Name: Quillayute Valley, Forks Junior-Senior High School, Main Junior High Building - 1949 Portion
Use: School
Latitude: 47.948493 **Longitude:** -124.38378
S_S: 1.458 **S_1:** 0.719
Screener(s): Ben Fisher (WSP), Bill Henderson (QVSD) **Date/Time:** 8/20/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1949
Total Floor Area (sq. ft.): 9066 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.5

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 1101 Hoquiam Ave NE
Renton, WA **Zip:** 98059
Other Identifiers: Icos Building ID: 56887
Building Name: Renton, Hazen Senior High School, 700 Building
Use: School
Latitude: 47.501316 **Longitude:** -122.15251
S_S: 1.401 **S_1:** 0.48
Screener(s): Rami Sabra, Brian Matsumoto **Date/Time:** 9/16/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1968
Total Floor Area (sq. ft.): 24316 **Code Year:** 1964
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 1101 Hoquiam Ave NE
Renton, WA **Zip:** 98059
Other Identifiers: Icos Building ID: 56888
Building Name: Renton, Hazen Senior High School, Bldg 1 Gym/Pool
Use: School
Latitude: 47.501316 **Longitude:** -122.15251
S_S: 1.401 **S_1:** 0.48
Screener(s): Rami Sabra, Brian Matsumoto **Date/Time:** 9/16/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1969
Total Floor Area (sq. ft.): 50000 **Code Year:** 1964
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} _____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 1101 Hoquiam Ave NE
Renton, WA **Zip:** 98059
Other Identifiers: Icos Building ID: 56888
Building Name: Renton, Hazen Senior High School, Bldg 1 Main Building
Use: School
Latitude: 47.501316 **Longitude:** -122.15251
S_S: 1.401 **S_1:** 0.48
Screener(s): Rami Sabra, Brian Matsumoto **Date/Time:** 9/16/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1969
Total Floor Area (sq. ft.): 231902 **Code Year:** 1964
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.3

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} _____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 1101 Hoquiam Ave NE
Renton, WA **Zip:** 98059
Other Identifiers: Icos Building ID: 56888
Building Name: Renton, Hazen Senior High School, Bldg 1 Music, Band, Cafeteria
Use: School
Latitude: 47.501316 **Longitude:** -122.15251
S_S: 1.401 **S_1:** 0.48
Screener(s): Rami Sabra, Brian Matsumoto **Date/Time:** 9/16/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1969
Total Floor Area (sq. ft.): 231902 **Code Year:** 1964
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.3

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 1101 Hoquiam Ave NE
Renton, WA **Zip:** 98059
Other Identifiers: Icos Building ID: 56885
Building Name: Renton, Hazen Senior High School, Gym Addition
Use: School
Latitude: 47.501316 **Longitude:** -122.15251
S_s: 1.401 **S_1:** 0.48
Screener(s): Rami Sabra **Date/Time:** 9/16/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1977
Total Floor Area (sq. ft.): 16976 **Code Year:** 1973
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.6

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 16426 128th Ave SE
Renton, WA **Zip:** 98058
Other Identifiers: Icos Building ID: 56944
Building Name: Renton, Lindbergh Senior High School, Gym Addition
Use: School
Latitude: 47.454655 **Longitude:** -122.16714
S_S: 1.383 **S_1:** 0.471
Screener(s): Rami Sabra, Brian Matsumoto **Date/Time:** 9/15/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1979
Total Floor Area (sq. ft.): 7519 **Code Year:** 1973
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 16426 128th Ave SE
Renton, WA **Zip:** 98058
Other Identifiers: Icos Building ID: 56944
Building Name: Renton, Lindbergh Senior High School, Gymnasium
Use: School
Latitude: 47.454655 **Longitude:** -122.16714
S_S: 1.383 **S_1:** 0.471
Screener(s): Rami Sabra, Brian Matsumoto **Date/Time:** 9/15/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1979
Total Floor Area (sq. ft.): 37210 **Code Year:** 1973
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Severe
☑ Plan (type) Torsion

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.3

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 16426 128th Ave SE
Renton, WA **Zip:** 98058
Other Identifiers: Icos Building ID: 56945
Building Name: Renton, Lindbergh Senior High School, Main Building - North
Use: School
Latitude: 47.454655 **Longitude:** -122.16714
S_s: 1.383 **S_1:** 0.471
Screener(s): Rami Sabra, Brian Matsumoto **Date/Time:** 9/15/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1971
Total Floor Area (sq. ft.): 184279 **Code Year:** 1967
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Severe
☑ Plan (type)

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.3

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} _____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 16426 128th Ave SE
Renton, WA **Zip:** 98058
Other Identifiers: Icos Building ID: 56945
Building Name: Renton, Lindbergh Senior High School, Main Building - South
Use: School
Latitude: 47.454655 **Longitude:** -122.16714
S_s: 1.383 **S_1:** 0.471
Screener(s): Rami Sabra, Brian Matsumoto **Date/Time:** 9/15/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1971
Total Floor Area (sq. ft.): 184279 **Code Year:** 1967
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.5

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 400 S 2nd St
Renton, WA **Zip:** 98055
Other Identifiers: Icos Building ID: 56901
Building Name: Renton, Renton Senior High School, Cafeteria/Gym
Use: School
Latitude: 47.481594 **Longitude:** -122.211709
S_s: 1.443 **S_1:** 0.492
Screener(s): Rami Sabra, Brian Matsumoto **Date/Time:** 9/15/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1954
Total Floor Area (sq. ft.): 90714 **Code Year:** 1952
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.3

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATELY HIGH Seismicity

Scale:

Reference:

Address: 502 NW 199TH STREET
Ridgefield, WA **Zip:** 98642
Other Identifiers: Icos Building ID: 59234
Building Name: Ridgefield, South Ridge Elementary School, Main Building
Use: School
Latitude: 45.765719 **Longitude:** -122.67507
S_S: 0.804 **S_1:** 0.376
Screener(s): Brian Knight **Date/Time:** 6/3/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1961
Total Floor Area (sq. ft.): 40588 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: Moderately High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATELY HIGH Seismicity

Scale:

Reference:

Address: 122 Butler Loop Road
Skamania, WA **Zip:** 98648
Other Identifiers: Icos Building ID: 59377
Building Name: Skamania, Skamania Elementary School, Main Building
Use: School
Latitude: 45.617003 **Longitude:** -122.049404
S_s: 0.637 **S_1:** 0.288
Screener(s): **Date/Time:** 1/11/2021

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1947
Total Floor Area (sq. ft.): 14277 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other

Comments: RVS Level of Seismicity: Moderately High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.3

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 8201 188th St SE
Snohomish, WA **Zip:** 98296
Other Identifiers: Icos Building ID: 57090
Building Name: Snohomish, Cathcart Elementary School, 100 Building
Use: School
Latitude: 47.8273 **Longitude:** -122.1222
S_s: 1.323 **S_1:** 0.468
Screener(s): Kenny O'Neill & Suzie Bauer **Date/Time:** 5/20/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1966
Total Floor Area (sq. ft.): 4608 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☑ Plan (type) Torsion

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 8201 188th St SE
Snohomish, WA **Zip:** 98296
Other Identifiers: Icos Building ID: 57091
Building Name: Snohomish, Cathcart Elementary School, 200 Building
Use: School
Latitude: 47.8273 **Longitude:** -122.1222
S_S: 1.323 **S_1:** 0.468
Screener(s): Kenny O'Neill & Suzie Bauer **Date/Time:** 5/20/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1966
Total Floor Area (sq. ft.): 3328 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☑ Plan (type) Torsion

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 8201 188th St SE
Snohomish, WA **Zip:** 98296
Other Identifiers: Icos Building ID: 57089
Building Name: Snohomish, Cathcart Elementary School, 300 Building
Use: School
Latitude: 47.8273 **Longitude:** -122.1222
S_S: 1.323 **S_1:** 0.468
Screener(s): Kenny O'Neill & Suzie Bauer **Date/Time:** 5/20/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1966
Total Floor Area (sq. ft.): 2304 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☑ Plan (type) Torsion

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 8201 188th St SE
Snohomish, WA **Zip:** 98296
Other Identifiers: Icos Building ID: 57088
Building Name: Snohomish, Cathcart Elementary School, 400 Building
Use: School
Latitude: 47.8273 **Longitude:** -122.1222
S_S: 1.323 **S_1:** 0.468
Screener(s): Kenny O'Neill & Suzie Bauer **Date/Time:** 5/20/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1966
Total Floor Area (sq. ft.): 7168 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units:

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} _____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 8201 188th St SE
Snohomish, WA **Zip:** 98296
Other Identifiers: Icos Building ID: 57092
Building Name: Snohomish, Cathcart Elementary School, 500 Building
Use: School
Latitude: 47.8273 **Longitude:** -122.1222
S_s: 1.323 **S_1:** 0.468
Screener(s): Kenny O'Neill & Suzie Bauer **Date/Time:** 6/20/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1980
Total Floor Area (sq. ft.): 5766 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 8201 188th St SE
Snohomish, WA **Zip:** 98296
Other Identifiers: Icos Building ID: 57094
Building Name: Snohomish, Cathcart Elementary School, 600 Building
Use: School
Latitude: 47.8273 **Longitude:** -122.1222
S_s: 1.323 **S_1:** 0.468
Screener(s): Kenny O'Neill & Suzie Bauer **Date/Time:** 5/20/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1966
Total Floor Area (sq. ft.): 3072 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☑ Plan (type) Torsion

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 8201 188th St SE
Snohomish, WA **Zip:** 98296
Other Identifiers: Icos Building ID: 57093
Building Name: Snohomish, Cathcart Elementary School, 700 Building
Use: School
Latitude: 47.8273 **Longitude:** -122.1222
S_S: 1.323 **S_1:** 0.468
Screener(s): Kenny O'Neill & Suzie Bauer **Date/Time:** 5/20/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1970
Total Floor Area (sq. ft.): 9600 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☑ Plan (type) Non-Parallel Systems

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 221 Union Avenue
Snohomish, WA **Zip:** 98290
Other Identifiers: Icos Building ID: 57085
Building Name: Snohomish, Central Elementary School, Main Building - Gym (Concrete)
Use: School
Latitude: 47.9141 **Longitude:** -122.0922
S_S: 1.214 **S_1:** 0.429
Screener(s): Kenny O'Neill & Suzie Bauer **Date/Time:** 5/20/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1948
Total Floor Area (sq. ft.): 42000 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.3

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 221 Union Avenue
Snohomish, WA **Zip:** 98290
Other Identifiers: Icos Building ID: 57085
Building Name: Snohomish, Central Elementary School, Main Building - Wood
Use: School
Latitude: 47.9141 **Longitude:** -122.0922
S_S: 1.214 **S_1:** 0.429
Screener(s): Kenny O'Neill & Suzie Bauer **Date/Time:** 5/20/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1948
Total Floor Area (sq. ft.): 42000 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☑ Plan (type) Torsion

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 1103 Pine Street
Snohomish, WA **Zip:** 98290
Other Identifiers: Icos Building ID: 57133
Building Name: Snohomish, Emerson Elementary School, Annex
Use: School
Latitude: 47.9251 **Longitude:** -122.0844
S_S: 1.188 **S_1:** 0.42
Screener(s): Kenny O'Neill & Suzie Bauer **Date/Time:** 5/20/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1958
Total Floor Area (sq. ft.): 10393 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 1103 Pine Street
Snohomish, WA **Zip:** 98290
Other Identifiers: Icos Building ID: 57132
Building Name: Snohomish, Emerson Elementary School, Main Building
Use: School
Latitude: 47.9251 **Longitude:** -122.0844
S_S: 1.189 **S_1:** 0.42
Screener(s): Kenny O'Neill & Suzie Bauer **Date/Time:** 5/20/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1954
Total Floor Area (sq. ft.): 29645 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Scale:

Reference:

Address: 400 E. 1st
South Bend, WA **Zip:** 98586
Other Identifiers: Icos Building ID: 51397
Building Name: South Bend, South Bend Jr/Sr High School, Main Building High School
Use: School
Latitude: 46.662053 **Longitude:** -123.791702
S_s: 1.358 **S_1:** 0.658
Screener(s): Brian Knight **Date/Time:** 7/20/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1968
Total Floor Area (sq. ft.): 51000 **Code Year:** 1964
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☐ D Stiff Soil ☑ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.4

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 5476 S Maxwelton Rd
Langley, WA **Zip:** 98260
Other Identifiers: Icos Building ID: 57247
Building Name: South Whidbey, South Whidbey Grades 5 & 6 - (Formerly S. Whid. Primary), A- Classrooms
Use: School
Latitude: 48.025867 **Longitude:** -122.455621
S_S: 1.425 **S_1:** 0.513
Screener(s): Rami Sabra, Erik Bishop **Date/Time:** 7/27/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1969
Total Floor Area (sq. ft.): 4900 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 5476 S Maxwelton Rd
Langley, WA **Zip:** 98260
Other Identifiers: Icos Building ID: 57245
Building Name: South Whidbey, South Whidbey Grades 5 & 6 - (Formerly S. Whid. Primary), C - Classrooms/Admin
Use: School
Latitude: 48.025867 **Longitude:** -122.455621
S_S: 1.425 **S_1:** 0.513
Screener(s): Rami Sabra **Date/Time:** 7/27/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1969
Total Floor Area (sq. ft.): 7253 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 5476 S Maxwelton Rd
Langley, WA **Zip:** 98260
Other Identifiers: Icos Building ID: 57249
Building Name: South Whidbey, South Whidbey Grades 5 & 6 - (Formerly S. Whid. Primary), D - WIA Office/Classrooms
Use: School
Latitude: 48.025867 **Longitude:** -122.455621
S_S: 1.425 **S_1:** 0.513
Screener(s): Rami Sabra, Erik Bishop **Date/Time:** 7/27/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1969
Total Floor Area (sq. ft.): 8827 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 5476 S Maxwelton Rd
Langley, WA **Zip:** 98260
Other Identifiers: Icos Building ID: 57250
Building Name: South Whidbey, South Whidbey Grades 5 & 6 - (Formerly S. Whid. Primary), E - Classrooms
Use: School
Latitude: 48.025867 **Longitude:** -122.455621
S_S: 1.425 **S_1:** 0.513
Screener(s): Rami Sabra, Erick Bishop **Date/Time:** 7/27/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1969
Total Floor Area (sq. ft.): 8827 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 5476 S Maxwelton Rd
Langley, WA **Zip:** 98260
Other Identifiers: Icos Building ID: 57248
Building Name: South Whidbey, South Whidbey Grades 5 & 6 - (Formerly S. Whid. Primary), F - Multipurpose
Use: School
Latitude: 48.025867 **Longitude:** -122.455621
S_S: 1.425 **S_1:** 0.513
Screener(s): Rami Sabra, Erik Bishop **Date/Time:** 7/27/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1969
Total Floor Area (sq. ft.): 6722 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATE Seismicity

Scale:

Reference:

Address: 6903 E 4th Ave
Spokane Valley, WA **Zip:** 99212
Other Identifiers: Icos Building ID: 53586
Building Name: Spokane, Bancroft (The Community School), Main Building
Use: School
Latitude: 47.672072 **Longitude:** -117.427894
S_s: 0.307 **S_1:** 0.112
Screener(s): Josh Comfort **Date/Time:** 6/30/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1960
Total Floor Area (sq. ft.): 26081 **Code Year:** 1958
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: Moderate

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATE Seismicity

Scale:

Reference:

Address: N 910 Ash St
Spokane, WA **Zip:** 99201
Other Identifiers: Icos Building ID: 53558
Building Name: Spokane, Bryant Center, Main Building
Use: School
Latitude: 47.665184 **Longitude:** -117.436596
S_S: 0.307 **S_1:** 0.112
Screener(s): Josh Comfort, Dylan Larson **Date/Time:** 6/30/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1960
Total Floor Area (sq. ft.): 21200 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: Moderate

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATE Seismicity

Scale:

Reference:

Address: 1300 West Knox Ave.
Spokane, WA **Zip:** 99205
Other Identifiers: Icos Building ID: 53500
Building Name: Spokane, Havermale (Montessori), Main Building 1928 and 1940 Areas
Use: School
Latitude: 47.676614 **Longitude:** -117.431725
S_s: 0.307 **S_1:** 0.112
Screener(s): Josh Comfort, Dylan Larson **Date/Time:** 7/8/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1928
Total Floor Area (sq. ft.): 43822 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter
☐ Industrial ☐ Office ☑ School ☐ Government
☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer
☐ Parapets ☐ Appendages
☐ Other ____

Comments: RVS Level of Seismicity: Moderate

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATE Seismicity

Scale:

Reference:

Address: 1300 West Knox Ave.
Spokane, WA **Zip:** 99205
Other Identifiers: Icos Building ID: 53500
Building Name: Spokane, Havermale (Montessori), Main Building 1928 Gym
Use: School
Latitude: 47.676614 **Longitude:** -117.431725
S_s: 0.307 **S_1:** 0.112
Screener(s): Josh Comfort, Dylan Larson **Date/Time:** 7/8/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1928
Total Floor Area (sq. ft.): 10592 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: Moderate

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.6

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATE Seismicity

Scale:

Reference:

Address: 1300 West Knox Ave.
Spokane, WA **Zip:** 99205
Other Identifiers: Icos Building ID: 53500
Building Name: Spokane, Havermale (Montessori), Main Building 1965 Areas
Use: School
Latitude: 47.676614 **Longitude:** -117.431725
S_s: 0.307 **S_1:** 0.112
Screener(s): Josh Comfort, Dylan Larson **Date/Time:** 7/8/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1928
Total Floor Area (sq. ft.): 29398 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: Moderate

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATE Seismicity

Scale:

Reference:

Address: 319 W Nebraska Ave
Spokane, WA **Zip:** 99205
Other Identifiers: Icos Building ID: 53579
Building Name: Spokane, Madison Elementary School, Main Building
Use: School
Latitude: 47.708597 **Longitude:** -117.416174
S_s: 0.309 **S_1:** 0.112
Screener(s): Josh Comfort, Dylan Larson **Date/Time:** 7/8/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1948
Total Floor Area (sq. ft.): 32900 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: Moderate

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.6

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 10227 273RD PL NW
Stanwood, WA **Zip:** 98292
Other Identifiers: Icos Building ID: 51456
Building Name: Stanwood-Camano, Stanwood Elementary School, Main Building Unit C 1966
Use: School
Latitude: 48.244738 **Longitude:** -122.372416
S_S: 1.161 **S_1:** 0.415
Screener(s): Casey Hansen, Brian Matsumoto **Date/Time:** 12/23/2019

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1966
Total Floor Area (sq. ft.): 10000 **Code Year:** 1964
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units:

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☐ D Stiff Soil ☑ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 3

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} _____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 10227 273RD PL NW
Stanwood, WA **Zip:** 98292
Other Identifiers: Icos Building ID: 51456
Building Name: Stanwood-Camano, Stanwood Elementary School, Main Building Unit C 1981
Use: School
Latitude: 48.244738 **Longitude:** -122.372416
S_S: 1.161 **S_1:** 0.415
Screener(s): Casey Hansen, Brian Matsumoto **Date/Time:** 12/23/2019

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1981
Total Floor Area (sq. ft.): 10500 **Code Year:** 1979
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☐ D Stiff Soil ☑ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 4.2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 10227 273RD PL NW
Stanwood, WA **Zip:** 98292
Other Identifiers: Icos Building ID: 51456
Building Name: Stanwood-Camano, Stanwood Elementary School, Main Building Units A, B
Use: School
Latitude: 48.244738 **Longitude:** -122.372416
S_S: 1.161 **S_1:** 0.415
Screener(s): Casey Hansen, Brian Matsumoto **Date/Time:** 12/23/2019

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1956
Total Floor Area (sq. ft.): 20000 **Code Year:** 1952
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☐ D Stiff Soil ☑ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 9405 271ST ST NW
Stanwood, WA **Zip:** 98292
Other Identifiers: Icos Building ID: 51449
Building Name: Stanwood-Camano, Stanwood Middle School, Building 3 - Music (Band and Choir)
Use: School
Latitude: 48.242474 **Longitude:** -122.361046
S_S: 1.15 **S_1:** 0.411
Screener(s): Casey Hansen, Brian Matsumoto **Date/Time:** 12/23/2019

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1957
Total Floor Area (sq. ft.): 4765 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☐ D Stiff Soil ☑ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.6

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 9405 271ST ST NW
Stanwood, WA **Zip:** 98292
Other Identifiers: Icos Building ID: 51448
Building Name: Stanwood-Camano, Stanwood Middle School, Main Building (Building 1) Unit D
Use: School
Latitude: 48.242474 **Longitude:** -122.361046
S_S: 1.15 **S_1:** 0.411
Screener(s): Casey Hansen, Brian Matsumoto **Date/Time:** 12/23/2019

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1992
Total Floor Area (sq. ft.): 8840 **Code Year:** 1988
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☐ D Stiff Soil ☑ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.6

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 9405 271ST ST NW
Stanwood, WA **Zip:** 98292
Other Identifiers: Icos Building ID: 51448
Building Name: Stanwood-Camano, Stanwood Middle School, Main Building (Building 1) Unit G
Use: School
Latitude: 48.242474 **Longitude:** -122.361046
S_S: 1.15 **S_1:** 0.411
Screener(s): Casey Hansen, Brian Matsumoto **Date/Time:** 12/23/2019

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1989
Total Floor Area (sq. ft.): 15091 **Code Year:** 1985
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☐ D Stiff Soil ☑ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 5.2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 9405 271ST ST NW
Stanwood, WA **Zip:** 98292

Other Identifiers: Icos Building ID: 51448

Building Name: Stanwood-Camano, Stanwood Middle School, Main Building (Building 1) Units E and F

Use: School

Latitude: 48.242474 **Longitude:** -122.361046

S_S: 1.15 **S_1:** 0.411

Screener(s): Casey Hansen, Brian Matsumoto **Date/Time:** 12/23/2019

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1968

Total Floor Area (sq. ft.): 12271 **Code Year:** 1967

Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☐ D Stiff Soil ☑ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.6

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial

Interior: ☐ None ☐ Visible ☑ Entered

Drawings Reviewed: ☑ Yes ☐ No

Soil Type Source: DNR

Geologic Hazards Source: DNR

Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 26211 72ND AVE NW
Stanwood, WA **Zip:** 98292
Other Identifiers: Icos Building ID: 51411
Building Name: Stanwood-Camano, Twin City Elementary School, Main Building
Use: School
Latitude: 48.2345 **Longitude:** -122.329
S_S: 1.126 **S_1:** 0.402
Screener(s): Casey Hansen, Brian Matsumoto **Date/Time:** 12/23/2019

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1988
Total Floor Area (sq. ft.): 43962 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.4

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATELY HIGH Seismicity

Address: 351 Hot Springs Avenue
Carson, WA **Zip:** 98610
Other Identifiers: Icos Building ID: 59495
Building Name: Stevenson-Carson, Carson Elementary School, Main Building
Use: School
Latitude: 45.726413 **Longitude:** -121.812741
S_s: 0.584 **S_1:** 0.265
Screener(s): Brian Knight **Date/Time:** 9/8/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1951
Total Floor Area (sq. ft.): 49183 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: Moderately High

Scale:

Reference:

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.3

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATELY HIGH Seismicity

Scale:

Reference:

Address: 390 NW Gropper Road
Stevenson, WA **Zip:** 98648
Other Identifiers: Icos Building ID: 59488
Building Name: Stevenson-Carson, Stevenson High School, Main Building
Use: School
Latitude: 45.70118 **Longitude:** -121.887398
S_S: 0.6 **S_1:** 0.272
Screener(s): Brian Knight **Date/Time:** 9/8/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1954
Total Floor Area (sq. ft.): 75594 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter
☐ Industrial ☐ Office ☑ School ☐ Government
☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer
☐ Parapets ☐ Appendages
☐ Other

Comments: RVS Level of Seismicity: Moderately High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.3

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} _____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATELY HIGH Seismicity

Address: 390 NW Gropper Road
Stevenson, WA **Zip:** 98648
Other Identifiers: Icos Building ID: 59491
Building Name: Stevenson-Carson, Stevenson High School, Vocational Building
Use: School
Latitude: 45.70118 **Longitude:** -121.887398
S_S: 0.6 **S_1:** 0.272
Screener(s): Brian Knight **Date/Time:** 9/8/2020

Scale:

Reference:

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1964
Total Floor Area (sq. ft.): 17428 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: Moderately High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.8

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATELY HIGH Seismicity

Address: 390 NW Gropper Road
Stevenson, WA **Zip:** 98648
Other Identifiers: Icos Building ID: 59499
Building Name: Stevenson-Carson, Wind River Education Center, Main Building
Use: School
Latitude: 45.726452 **Longitude:** -121.811141
S_s: 0.584 **S_1:** 0.265
Screener(s): Brian Knight **Date/Time:** 9/8/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1970
Total Floor Area (sq. ft.): 53660 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: Moderately High

Scale:

Reference:

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.8

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 4901 S 14 st St
Tacoma, WA **Zip:** 98405
Other Identifiers: Icos Building ID: 59598
Building Name: Tacoma, DeLong Elementary School, First Bldg-Bldg B
Use: School
Latitude: 47.248884 **Longitude:** -122.501496
S_S: 1.375 **S_1:** 0.476
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 8/5/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1958
Total Floor Area (sq. ft.): 21219 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 4901 S 14 st St
Tacoma, WA **Zip:** 98405
Other Identifiers: Icos Building ID: 59597
Building Name: Tacoma, DeLong Elementary School, Original Bldg-Bldg A
Use: School
Latitude: 47.248884 **Longitude:** -122.501496
S_S: 1.375 **S_1:** 0.476
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 8/5/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1953
Total Floor Area (sq. ft.): 35193 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 5830 S Pine St
Tacoma, WA **Zip:** 98409
Other Identifiers: Icos Building ID: 59747
Building Name: Tacoma, Edison Elementary School, Main Building
Use: School
Latitude: 47.203605 **Longitude:** -122.473772
S_S: 1.348 **S_1:** 0.467
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 7/22/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1997
Total Floor Area (sq. ft.): 65034 **Code Year:** 1994
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 4.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 2112 S Tyler St
Tacoma, WA **Zip:** 98405
Other Identifiers: Icos Building ID: 59802
Building Name: Tacoma, Foss High School, Gym-Pool-Cafeteria
Use: School
Latitude: 47.239366 **Longitude:** -122.495351
S_S: 1.369 **S_1:** 0.474
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 7/21/2020

No. Stories: Above Grade: 3 Below Grade: 0 **Year Built:** 1972
Total Floor Area (sq. ft.): 70000 **Code Year:** 1970
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 2112 S Tyler St
Tacoma, WA **Zip:** 98405
Other Identifiers: Icos Building ID: 59802
Building Name: Tacoma, Foss High School, Main Building - 2003 Addition
Use: School
Latitude: 47.239366 **Longitude:** -122.495351
S_S: 1.369 **S_1:** 0.474
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 7/21/2020

No. Stories: Above Grade: 3 Below Grade: 0 **Year Built:** 2003
Total Floor Area (sq. ft.): 16371 **Code Year:** 1997
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 3.4

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 2112 S Tyler St
Tacoma, WA **Zip:** 98405
Other Identifiers: Icos Building ID: 59802
Building Name: Tacoma, Foss High School, Main Building - North
Use: School
Latitude: 47.239366 **Longitude:** -122.495351
S_S: 1.369 **S_1:** 0.474
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 7/21/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1972
Total Floor Area (sq. ft.): 56500 **Code Year:** 1970
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter
☐ Industrial ☐ Office ☑ School ☐ Government
☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer
☐ Parapets ☐ Appendages
☐ Other

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} _____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 2112 S Tyler St
Tacoma, WA **Zip:** 98405
Other Identifiers: Icos Building ID: 59802
Building Name: Tacoma, Foss High School, Main Building - South
Use: School
Latitude: 47.239366 **Longitude:** -122.495351
S_S: 1.369 **S_1:** 0.474
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 7/21/2020

No. Stories: Above Grade: 3 Below Grade: 0 **Year Built:** 1972
Total Floor Area (sq. ft.): 106530 **Code Year:** 1970
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter
☐ Industrial ☐ Office ☑ School ☐ Government
☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer
☐ Parapets ☐ Appendages
☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 1402 S Lawrence St
Tacoma, WA **Zip:** 98405
Other Identifiers: Icos Building ID: 59589
Building Name: Tacoma, Franklin Elementary School, Main Building
Use: School
Latitude: 47.248254 **Longitude:** -122.479497
S_S: 1.366 **S_1:** 0.473
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 8/5/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1997
Total Floor Area (sq. ft.): 60957 **Code Year:** 1991
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 8601 E B St
Tacoma, WA **Zip:** 98445
Other Identifiers: Icos Building ID: 59804
Building Name: Tacoma, Larchmont Elementary School, Original Building
Use: School
Latitude: 47.178441 **Longitude:** -122.428158
S_S: 1.322 **S_1:** 0.458
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 7/22/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1969
Total Floor Area (sq. ft.): 72318 **Code Year:** 1964
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units:

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} _____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 2106 E 44th St
Tacoma, WA **Zip:** 98404
Other Identifiers: Icos Building ID: 59790
Building Name: Tacoma, Lister Elementary School, Main Building
Use: School
Latitude: 47.215969 **Longitude:** -122.400073
S_S: 1.324 **S_1:** 0.457
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 8/5/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1998
Total Floor Area (sq. ft.): 72548 **Code Year:** 1994
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 5.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 4330 S 66th St
Tacoma, WA **Zip:** 98409
Other Identifiers: Icos Building ID: 59601
Building Name: Tacoma, Manitou Park Elementary School, Main Building
Use: School
Latitude: 47.197315 **Longitude:** -122.495051
S_S: 1.354 **S_1:** 0.47
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 7/22/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1994
Total Floor Area (sq. ft.): 69257 **Code Year:** 1991
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☑ Plan (type) Reentrant Corner

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 4.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 1002 S 52nd St
Tacoma, WA **Zip:** 98408
Other Identifiers: Icos Building ID: 59664
Building Name: Tacoma, Mann Elementary School, Main Building
Use: School
Latitude: 47.209673 **Longitude:** -122.447795
S_S: 1.34 **S_1:** 0.464
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 7/22/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1952
Total Floor Area (sq. ft.): 54705 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 5412 29th St Ne
Tacoma, WA **Zip:** 98422
Other Identifiers: Icos Building ID: 59627
Building Name: Tacoma, Northeast Tacoma Elementary School, Gym Bldg-Bldg 2
Use: School
Latitude: 47.281985 **Longitude:** -122.374586
S_S: 1.339 **S_1:** 0.461
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 8/5/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1993
Total Floor Area (sq. ft.): 13492 **Code Year:** 1988
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 5412 29th St Ne
Tacoma, WA **Zip:** 98422
Other Identifiers: Icos Building ID: 59626
Building Name: Tacoma, Northeast Tacoma Elementary School, Main Bldg-Bldg 1
Use: School
Latitude: 47.281985 **Longitude:** -122.374586
S_S: 1.339 **S_1:** 0.461
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 8/5/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1993
Total Floor Area (sq. ft.): 42607 **Code Year:** 1988
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 5.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 4330 N Visscher St
Tacoma, WA **Zip:** 98407
Other Identifiers: Icos Building ID: 59730
Building Name: Tacoma, Point Defiance Elementary School, Main Building
Use: School
Latitude: 47.289609 **Longitude:** -122.517828
S_S: 1.407 **S_1:** 0.488
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 8/5/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1959
Total Floor Area (sq. ft.): 52423 **Code Year:** 1955
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 1802 S 36th St
Tacoma, WA **Zip:** 98418
Other Identifiers: Icos Building ID: 59628
Building Name: Tacoma, Reed Elementary School, Main Building
Use: School
Latitude: 47.225803 **Longitude:** -122.460806
S_S: 1.351 **S_1:** 0.467
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 7/22/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1950
Total Floor Area (sq. ft.): 53388 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 3550 E Roosevelt Ave
Tacoma, WA **Zip:** 98404
Other Identifiers: Icos Building ID: 59688
Building Name: Tacoma, Roosevelt Elementary School, Main Bldg
Use: School
Latitude: 47.228244 **Longitude:** -122.399388
S_S: 1.327 **S_1:** 0.458
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 8/5/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1972
Total Floor Area (sq. ft.): 51763 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 5317 E McKinley Ave
Tacoma, WA **Zip:** 98404
Other Identifiers: Icos Building ID: 59723
Building Name: Tacoma, Sheridan Elementary School, Main Building
Use: School
Latitude: 47.208803 **Longitude:** -122.420344
S_S: 1.329 **S_1:** 0.459
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 7/22/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1993
Total Floor Area (sq. ft.): 58876 **Code Year:** 1991
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☑ Plan (type) Non-Parallel Systems

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 4.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 1712 S 17th St
Tacoma, WA **Zip:** 98405
Other Identifiers: Icos Building ID: 59636
Building Name: Tacoma, Stanley Elementary School, First Bldg
Use: School
Latitude: 47.24461 **Longitude:** -122.459857
S_S: 1.357 **S_1:** 0.469
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 8/5/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1989
Total Floor Area (sq. ft.): 42378 **Code Year:** 1982
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 5.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 1712 S 17th St
Tacoma, WA **Zip:** 98405
Other Identifiers: Icos Building ID: 59635
Building Name: Tacoma, Stanley Elementary School, Gym Bldg
Use: School
Latitude: 47.24461 **Longitude:** -122.459857
S_S: 1.357 **S_1:** 0.469
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 8/5/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1971
Total Floor Area (sq. ft.): 15061 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 1102 A St
Tacoma, WA **Zip:** 98402
Other Identifiers: Icos Building ID: 59768
Building Name: Tacoma, Tacoma School of the Arts-Pacific, SOTA Pacific Ave
Use: School
Latitude: 47.243533 **Longitude:** -122.436639
S_S: 1.347 **S_1:** 0.465
Screener(s): Josh Comfort, Colby Litzenberg **Date/Time:** 8/6/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1904
Total Floor Area (sq. ft.): 21601 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 1818 Tacoma Ave S
Tacoma, WA **Zip:** 98405
Other Identifiers: Icos Building ID: 59727
Building Name: Tacoma, Willie Stewart Academy, Main Bldg
Use: School
Latitude: 47.244841 **Longitude:** -122.442828
S_S: 1.35 **S_1:** 0.466
Screener(s): Josh Comfort, Colby Litzenberger **Date/Time:** 7/22/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1919
Total Floor Area (sq. ft.): 5985 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 311 S 6th St
Toledo, WA **Zip:** 98591
Other Identifiers: Icos Building ID: 59838
Building Name: Toledo, Toledo Elementary School, Main Building
Use: School
Latitude: 46.438782 **Longitude:** -122.852615
S_s: 1.023 **S_1:** 0.444
Screener(s): Brian Knight **Date/Time:** 7/21/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1954
Total Floor Area (sq. ft.): 51401 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 155 N 5th St
Toledo, WA **Zip:** 98591
Other Identifiers: Icos Building ID: 59842
Building Name: Toledo, Toledo Middle School, Classroom Bldg. (Bldg #2)
Use: School
Latitude: 46.440842 **Longitude:** -122.84978
S_S: 1.024 **S_1:** 0.444
Screener(s): Brian Knight **Date/Time:** 7/21/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1952
Total Floor Area (sq. ft.): 7594 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 155 N 5th St
Toledo, WA **Zip:** 98591
Other Identifiers: Icos Building ID: 59844
Building Name: Toledo, Toledo Middle School, Main Building (Bldg. #1)
Use: School
Latitude: 46.440842 **Longitude:** -122.84978
S_S: 1.024 **S_1:** 0.444
Screener(s): Brian Knight **Date/Time:** 7/21/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1952
Total Floor Area (sq. ft.): 35056 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.3

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} _____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 8425 40TH W
University Place, WA **Zip:** 98466
Other Identifiers: Icos Building ID: 59969
Building Name: University Place, Curtis Senior High School, 500 Building
Use: School
Latitude: 47.221551 **Longitude:** -122.55017
S_S: 1.381 **S_1:** 0.481
Screener(s): Josh Comfort **Date/Time:** 2/15/2021

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1971
Total Floor Area (sq. ft.): 18408 **Code Year:** 1967
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 4523 97TH AVE W
University Place, WA **Zip:** 98466
Other Identifiers: Icos Building ID: 59982
Building Name: University Place, Sunset Primary School, Main Building
Use: School
Latitude: 47.215568 **Longitude:** -122.564381
S_s: 1.384 **S_1:** 0.482
Screener(s): Josh Comfort **Date/Time:** 2/15/2021

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1966
Total Floor Area (sq. ft.): 41824 **Code Year:** 1964
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 265 SOUTH THIRD ST
Cathlamet, WA **Zip:** 98612
Other Identifiers: Icos Building ID: 53717
Building Name: Wahkiakum, Julius A. Wendt Elementary/John C. Thomas Middle School, J A Wendt Elementary School
Use: School
Latitude: 46.2013 **Longitude:** -123.3802
S_S: 1.037 **S_1:** 0.533
Screener(s): **Date/Time:** 1/8/2021

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1952
Total Floor Area (sq. ft.): 28694 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATELY HIGH Seismicity

Scale:

Reference:

Address: 7505 Zier Rd
Yakima, WA **Zip:** 98908
Other Identifiers: Icos Building ID: 51547
Building Name: West Valley (Yakima), West Valley Junior High School, WVJH (Gym Building)
Use: School
Latitude: 46.577574 **Longitude:** -120.60828
S_S: 0.487 **S_1:** 0.202
Screener(s): **Date/Time:** 1/5/2021

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1978
Total Floor Area (sq. ft.): 27797 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other

Comments: RVS Level of Seismicity: Moderately High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.8

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATELY HIGH Seismicity

Scale:

Reference:

Address: 7505 Zier Rd
Yakima, WA **Zip:** 98908
Other Identifiers: Icos Building ID: 51546
Building Name: West Valley (Yakima), West Valley Junior High School, WVJH (Main Building)
Use: School
Latitude: 46.577574 **Longitude:** -120.60828
S_s: 0.487 **S_1:** 0.202
Screener(s): _____ **Date/Time:** 1/5/2021

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1978
Total Floor Area (sq. ft.): 89273 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built _____

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter
☐ Industrial ☐ Office ☑ School ☐ Government
☐ Utility ☐ Warehouse ☐ Residential # Units: _____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer
☐ Parapets ☐ Appendages
☐ Other _____

Comments: RVS Level of Seismicity: Moderately High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.8

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} _____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 HIGH Seismicity

Scale:

Reference:

Address: 11812 Mundy Loss Rd
Buckley, WA **Zip:** 98321

Other Identifiers: Icos Building ID: 51616

Building Name: White River, Mountain Meadow Elementary School, Main Building

Use: School

Latitude: 47.1505 **Longitude:** -122.05911

S_S: 1.165 **S_1:** 0.401

Screener(s): Ben Fisher, Marty Brewer (WRSD) **Date/Time:** 6/4/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1990

Total Floor Area (sq. ft.): 45060 **Code Year:** 1991

Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☑ Plan (type) Non-Parallel Systems

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 4.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial

Interior: ☐ None ☐ Visible ☑ Entered

Drawings Reviewed: ☑ Yes ☐ No

Soil Type Source: DNR

Geologic Hazards Source: DNR

Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame; BR = Braced frame; RC = Reinforced concrete; SW = Shear wall; URM INF = Unreinforced masonry infill; TU = Tilt up; MH = Manufactured housing; LM = Light metal; FD = Flexible diaphragm; RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 VERY HIGH Seismicity

Scale:

Reference:

Address: 845 Willapa 4th Street
Raymond, WA **Zip:** 98577
Other Identifiers: Icos Building ID: 60150
Building Name: Willapa Valley, Willapa Elementary School, Main Building
Use: School
Latitude: 46.675606 **Longitude:** -123.66477
S_s: 1.315 **S_1:** 0.622
Screener(s): Brian Knight **Date/Time:** 6/18/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1963
Total Floor Area (sq. ft.): 14041 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☑ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Sesimicity: Very High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.8

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATELY HIGH Seismicity

Scale:

Reference:

Address: 600 Bozarth St
Woodland, WA **Zip:** 98674
Other Identifiers: Icos Building ID: 60181
Building Name: Woodland, Columbia Elementary School, 1991 Addition
Use: School
Latitude: 45.902743 **Longitude:** -122.753293
S_s: 0.82 **S_1:** 0.392
Screener(s): Brian Knight **Date/Time:** 6/11/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1993
Total Floor Area (sq. ft.): 37879 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☐ D Stiff Soil ☑ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: Moderately High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.4

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATELY HIGH Seismicity

Scale:

Reference:

Address: 600 Bozarth St
Woodland, WA **Zip:** 98674
Other Identifiers: Icos Building ID: 60181
Building Name: Woodland, Columbia Elementary School, Main Building
Use: School
Latitude: 45.902743 **Longitude:** -122.753293
S_s: 0.82 **S_1:** 0.392
Screener(s): Brian Knight **Date/Time:** 6/11/2020

No. Stories: Above Grade: 2 Below Grade: 0 **Year Built:** 1972
Total Floor Area (sq. ft.): 37879 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☐ D Stiff Soil ☑ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☑ Vertical (type/severity) Moderate
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: Moderately High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.8

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATELY HIGH Seismicity

Address: 1500 Dike Access Road
Woodland, WA **Zip:** 98674
Other Identifiers: Icos Building ID: 60193
Building Name: Woodland, Woodland Middle School, Gymnasium Building
Use: School
Latitude: 45.904426 **Longitude:** -122.748344
S_s: 0.819 **S_1:** 0.391
Screener(s): Brian Knight **Date/Time:** 6/11/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1954
Total Floor Area (sq. ft.): 54228 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☐ D Stiff Soil ☑ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: Moderately High

Scale:

Reference:

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.8

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATELY HIGH Seismicity

Address: 1500 Dike Access Road
Woodland, WA **Zip:** 98674
Other Identifiers: Icos Building ID: 60193
Building Name: Woodland, Woodland Middle School, Main Building
Use: School
Latitude: 45.904426 **Longitude:** -122.748344
S_s: 0.819 **S_1:** 0.391
Screener(s): Brian Knight **Date/Time:** 6/11/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1954
Total Floor Area (sq. ft.): 54228 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☐ D Stiff Soil ☑ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: Moderately High

Scale:

Reference:

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.8

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATELY HIGH Seismicity

Address: 1500 Dike Access Road
Woodland, WA **Zip:** 98674
Other Identifiers: Icos Building ID: 60193
Building Name: Woodland, Woodland Middle School, Performing Arts
Use: School
Latitude: 45.904426 **Longitude:** -122.748344
S_s: 0.819 **S_1:** 0.391
Screener(s): Brian Knight **Date/Time:** 6/11/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1954
Total Floor Area (sq. ft.): 54228 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☐ D Stiff Soil ☑ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: Moderately High

Scale:

Reference:

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATELY HIGH Seismicity

Address: 1500 Dike Access Road
Woodland, WA **Zip:** 98674
Other Identifiers: Icos Building ID: 60192
Building Name: Woodland, Woodland Middle School, Shared High School /Middle School
Use: School
Latitude: 45.904426 **Longitude:** -122.748344
S_s: 0.819 **S_1:** 0.391
Screener(s): Brian Knight **Date/Time:** 6/18/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1954
Total Floor Area (sq. ft.): 12167 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☐ D Stiff Soil ☑ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: Moderately High

Scale:

Reference:

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.8

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATELY HIGH Seismicity

Address: 1500 Dike Access Road
Woodland, WA **Zip:** 98674
Other Identifiers: Icos Building ID: 60193
Building Name: Woodland, Woodland Middle School, Vocational Building
Use: School
Latitude: 45.904426 **Longitude:** -122.748344
S_s: 0.819 **S_1:** 0.391
Screener(s): Brian Knight **Date/Time:** 6/11/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1954
Total Floor Area (sq. ft.): 54228 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☐ D Stiff Soil ☑ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: **Yes** / No / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☑ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: Moderately High

Scale:

Reference:

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.9

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATE Seismicity

Scale:

Reference:

Address: 723 S 8th St
Yakima, WA **Zip:** 98901
Other Identifiers: Icos Building ID: 53952
Building Name: Yakima, Adams Elementary School, 8 Plex Bldg D
Use: School
Latitude: 46.594811 **Longitude:** -120.48982
S_s: 0.467 **S_1:** 0.195
Screener(s): **Date/Time:** 12/1/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1971
Total Floor Area (sq. ft.): 8710 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other

Comments: RVS Level of Seismicity: Moderate

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.7

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATE Seismicity

Address: 723 S 8th St
Yakima, WA **Zip:** 98901
Other Identifiers: Icos Building ID: 53950
Building Name: Yakima, Adams Elementary School, BLDG C-1
Use: School
Latitude: 46.594811 **Longitude:** -120.48982
S_s: 0.467 **S_1:** 0.195
Screener(s): **Date/Time:** 12/1/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1960
Total Floor Area (sq. ft.): 4025 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other

Scale:

Reference:

Comments: RVS Level of Seismicity: Moderate

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATE Seismicity

Scale:

Reference:

Address: 723 S 8th St
Yakima, WA **Zip:** 98901
Other Identifiers: Icos Building ID: 53953
Building Name: Yakima, Adams Elementary School, Old Gym C
Use: School
Latitude: 46.594811 **Longitude:** -120.48982
S_s: 0.467 **S_1:** 0.195
Screener(s): Brian Knight **Date/Time:** 11/19/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1960
Total Floor Area (sq. ft.): 5680 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: Moderate

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATE Seismicity

Scale:

Reference:

Address: 400 W Viola Ave
Yakima, WA **Zip:** 98902
Other Identifiers: Icos Building ID: 54025
Building Name: Yakima, Hoover Elementary School, Area D - Annex Building
Use: School
Latitude: 46.580949 **Longitude:** -120.51198
S_s: 0.47 **S_1:** 0.196
Screener(s): Brian Knight **Date/Time:** 10/23/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1975
Total Floor Area (sq. ft.): 5050 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: Moderate

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 3.8

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATE Seismicity

Scale:

Reference:

Address: 400 W Viola Ave
Yakima, WA **Zip:** 98902
Other Identifiers: Icos Building ID: 54021
Building Name: Yakima, Hoover Elementary School, Classrooms - Area F
Use: School
Latitude: 46.580949 **Longitude:** -120.51198
S_s: 0.47 **S_1:** 0.196
Screener(s): _____ **Date/Time:** 10/23/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1975
Total Floor Area (sq. ft.): 2170 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built _____

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter
☐ Industrial ☐ Office ☑ School ☐ Government
☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer
☐ Parapets ☐ Appendages
☐ Other _____

Comments: RVS Level of Seismicity: Moderate

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 3.8

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} _____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATE Seismicity

Scale:

Reference:

Address: 400 W Viola Ave
Yakima, WA **Zip:** 98902
Other Identifiers: Icos Building ID: 54023
Building Name: Yakima, Hoover Elementary School, Main Building - Area A
Use: School
Latitude: 46.580949 **Longitude:** -120.51198
S_s: 0.47 **S_1:** 0.196
Screener(s): Brian Knight **Date/Time:** 10/23/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1948
Total Floor Area (sq. ft.): 42963 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units:

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other

Comments: RVS Level of Seismicity: Moderate

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 3.2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATE Seismicity

Scale:

Reference:

Address: 400 W Viola Ave
Yakima, WA **Zip:** 98902
Other Identifiers: Icos Building ID: 54023
Building Name: Yakima, Hoover Elementary School, Main Building - Area B
Use: School
Latitude: 46.580949 **Longitude:** -120.51198
S_s: 0.47 **S_1:** 0.196
Screener(s): Brian Knight **Date/Time:** 10/23/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1948
Total Floor Area (sq. ft.): 22095 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Comments: RVS Level of Seismicity: Moderate

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 3.2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☐ Yes ☑ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATE Seismicity

Scale:

Reference:

Address: 801 S 34th Ave
Yakima, WA **Zip:** 98902
Other Identifiers: Icos Building ID: 53961
Building Name: Yakima, Nob Hill Elementary School, Main Building
Use: School
Latitude: 46.590279 **Longitude:** -120.55324
S_S: 0.478 **S_1:** 0.199
Screener(s): **Date/Time:** 12/1/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1951
Total Floor Area (sq. ft.): 36889 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other

Comments: RVS Level of Seismicity: Moderate

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.6

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATE Seismicity

Scale:

Reference:

Address: 2807 W Lincoln Ave
Yakima, WA **Zip:** 98902
Other Identifiers: Icos Building ID: 53918
Building Name: Yakima, Robertson Elementary School, 100 Building - Bldg "B"
Use: School
Latitude: 46.60509 **Longitude:** -120.5466
S_s: 0.478 **S_1:** 0.199
Screener(s): **Date/Time:** 12/30/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1958
Total Floor Area (sq. ft.): 4200 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other

Comments: RVS Level of Seismicity: Moderate

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATE Seismicity

Scale:

Reference:

Address: 2807 W Lincoln Ave
Yakima, WA **Zip:** 98902
Other Identifiers: Icos Building ID: 53917
Building Name: Yakima, Robertson Elementary School, 200 Building - Bldg "C"
Use: School
Latitude: 46.60509 **Longitude:** -120.5466
S_s: 0.478 **S_1:** 0.199
Screener(s): **Date/Time:** 6/7/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1958
Total Floor Area (sq. ft.): 4200 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other

Comments: RVS Level of Seismicity: Moderate

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No

Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)

☐ Falling hazards from taller adjacent building

☐ Geologic hazards or Soil Type F

☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building

☐ Yes, score less than cut-off

☐ Yes, other hazards present

☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated

☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary

☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATE Seismicity

Address: 2807 W Lincoln Ave
Yakima, WA **Zip:** 98902
Other Identifiers: Icos Building ID: 53919
Building Name: Yakima, Robertson Elementary School, 300 Building - Bldg "D"
Use: School
Latitude: 46.60509 **Longitude:** -120.5466
S_S: 0.478 **S_1:** 0.199
Screener(s): **Date/Time:** 12/30/2020

Scale:

Reference:

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1958
Total Floor Area (sq. ft.): 6848 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other

Comments: RVS Level of Seismicity: Moderate

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATE Seismicity

Address: 2807 W Lincoln Ave
Yakima, WA **Zip:** 98902
Other Identifiers: Icos Building ID: 53930
Building Name: Yakima, Robertson Elementary School, 400 Building - Bldg "E"
Use: School
Latitude: 46.60509 **Longitude:** -120.5466
S_s: 0.478 **S_1:** 0.199
Screener(s): **Date/Time:** 12/30/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1958
Total Floor Area (sq. ft.): 6848 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other ____

Scale:

Comments: RVS Level of Seismicity: Moderate

Reference:

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATE Seismicity

Address: 2807 W Lincoln Ave
Yakima, WA **Zip:** 98902
Other Identifiers: Icos Building ID: 53920
Building Name: Yakima, Robertson Elementary School, 500 Building - Bldg "G"
Use: School
Latitude: 46.60509 **Longitude:** -120.5466
S_s: 0.478 **S_1:** 0.199
Screener(s): **Date/Time:** 12/1/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1958
Total Floor Area (sq. ft.): 5668 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other

Comments: RVS Level of Seismicity: Moderate

Scale:

Reference:

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 2.1

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATELY HIGH Seismicity

Scale:

Reference:

Address: 902 S 44th Ave
Yakima, WA **Zip:** 98908
Other Identifiers: Icos Building ID: 53968
Building Name: Yakima, Wilson Middle School, Main Building
Use: School
Latitude: 46.588977 **Longitude:** -120.56711
S_s: 0.48 **S_1:** 0.2
Screener(s): **Date/Time:** 12/30/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1961
Total Floor Area (sq. ft.): 82203 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other

Comments: RVS Level of Seismicity: Moderately High

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm

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Rapid Visual Screening of Buildings for Potential Seismic Hazards

FEMA P-154 Data Collection Form

Level 1 MODERATELY HIGH Seismicity

Address: 902 S 44th Ave
Yakima, WA **Zip:** 98908
Other Identifiers: Icos Building ID: 53969
Building Name: Yakima, Wilson Middle School, Science Building
Use: School
Latitude: 46.588977 **Longitude:** -120.56711
S_s: 0.48 **S_1:** 0.2
Screener(s): **Date/Time:** 12/30/2020

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1961
Total Floor Area (sq. ft.): 5541 **Code Year:** DNK
Additions: ☐ None ☐ Yes, Year(s) Built

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter ☐ Industrial ☐ Office ☑ School ☐ Government ☐ Utility ☐ Warehouse ☐ Residential # Units: ____

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☑ C Dense Soil ☐ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ **DNK** DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes / **No** / DNK
Landslide: Yes / **No** / DNK Surf. Rupt.: Yes / No / **DNK**

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) None
☐ Plan (type) None

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer ☐ Parapets ☐ Appendages ☐ Other

Comments: RVS Level of Seismicity: Moderately High

Scale:

Reference:

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	DNK	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score		3.6	3.2	2.9	2.1	2.0	2.6	2.0	1.7	1.5	2.0	1.2	1.6	1.4	1.7	1.7	1.0	1.5
Severe Vertical Irregularity, V_{L1}		-1.2	-1.2	-1.2	-1.0	-1.0	-1.1	-1.0	-0.8	-0.9	-1.0	-0.7	-1.0	-0.9	-0.9	-0.9	-0.7	NA
Moderate Vertical Irregularity, V_{L1}		-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.6	-0.5	-0.5	-0.5	-0.4	NA
Plan Irregularity, P_{L1}		-1.1	-1.0	-1.0	-0.8	-0.7	-0.9	-0.7	-0.6	-0.6	-0.8	-0.5	-0.7	-0.6	-0.7	-0.7	-0.4	NA
Pre-Code		-1.1	-1.0	-0.9	-0.6	-0.6	-0.8	-0.6	-0.2	-0.4	-0.7	-0.1	-0.5	-0.3	-0.5	-0.5	0.0	-0.1
Post-Benchmark		1.6	1.9	2.2	1.4	1.4	1.1	1.9	NA	1.9	2.1	NA	2.0	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.1	0.3	0.5	0.4	0.6	0.1	0.6	0.5	0.4	0.5	0.3	0.6	0.4	0.5	0.5	0.3	0.3
Soil Type E (1-3 stories)		0.2	0.2	0.1	-0.2	-0.4	0.2	-0.1	-0.4	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.4
Soil Type E (> 3 stories)		-0.3	-0.6	-0.9	-0.6	-0.6	NA	-0.6	-0.4	-0.5	-0.7	-0.3	NA	-0.4	-0.5	-0.6	.0.2	NA
Minimum Score, S_{MIN}		1.1	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.2

EXTENT OF REVIEW

Exterior: ☐ Partial ☑ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☑ Entered
Drawings Reviewed: ☑ Yes ☐ No
Soil Type Source: DNR
Geologic Hazards Source: DNR
Contact Person: Reid Middleton, Inc.

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ____ ☐ No
Nonstructural Hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?

☐ Pounding potential (unless S_{L2} > cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☐ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☐ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend:

MRF = Moment-resisting frame	RC = Reinforced concrete	URM INF = Unreinforced masonry infill	MH = Manufactured housing	FD = Flexible diaphragm
BR = Braced frame	SW = Shear wall	TU = Tilt up	LM = Light metal	RD = Rigid diaphragm