

- City box number C-8
- Title/cover page w/the following info:
- Company (author) name
  - Report Date
  - Project name 4/4
  - Company's job number
  - City DCLU project number (7-digit number)
  - City Permit number (6-digit number)
  - Kroll map index number (3-digit number, w?/E,W,N,S)
  - Green label
  - Site address (may be on 1<sup>st</sup> or 2<sup>nd</sup> page of text)
- Executive Summary and associated figures
- Table of Contents
- Project Location Plan/Map or Vicinity Map
- Site Plans, Boring Location Plans, or Exploration Plans
- Survey
- Geologic Maps
- Cross Sections/Subsurface Profiles
- Fill or Peat Thickness Maps and Contour Maps
- Boring Logs
- Geology Text (if no logs)
- Soil Classification Key/Boring Log Key
- Probe Logs
- Test Pit Logs
- Monitoring Well Logs
- Cone Penetrometer Logs
- Shear Wave Velocity Measurements
- Groundwater Maps
- GW Elevation Tables/Data
- Soils Lab Testing (Geotechnical) Summary Tables
- Grain Size Analyses/Hydrometer Analyses
  - Atterberg Limits
  - Strength tests: Triaxial, Unconfined, Direct Shear
  - Organic Content
  - <sup>14</sup>C or Radiocarbon Testing
  - Other \_\_\_\_\_
- Soil Chemical Analytical Testing Summary Tables
- Water/Groundwater Chemical Analytical Summary Tables
- Comments \_\_\_\_\_
- Date Copied 7-23-99 By aw



# NELSON-COUVRETTE & ASSOCIATES, INC.

CONSULTING GEOTECHNICAL ENGINEERS, GEOLOGISTS  
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August 15, 1996

Mr. Dan Agar  
2015 E Crescent Drive  
Seattle, Washington 98112

Supplemental Letter Report  
Temporary Cut Slopes and Shoring  
Seattle, Washington  
NCA File No. 176396

Dear Dan:

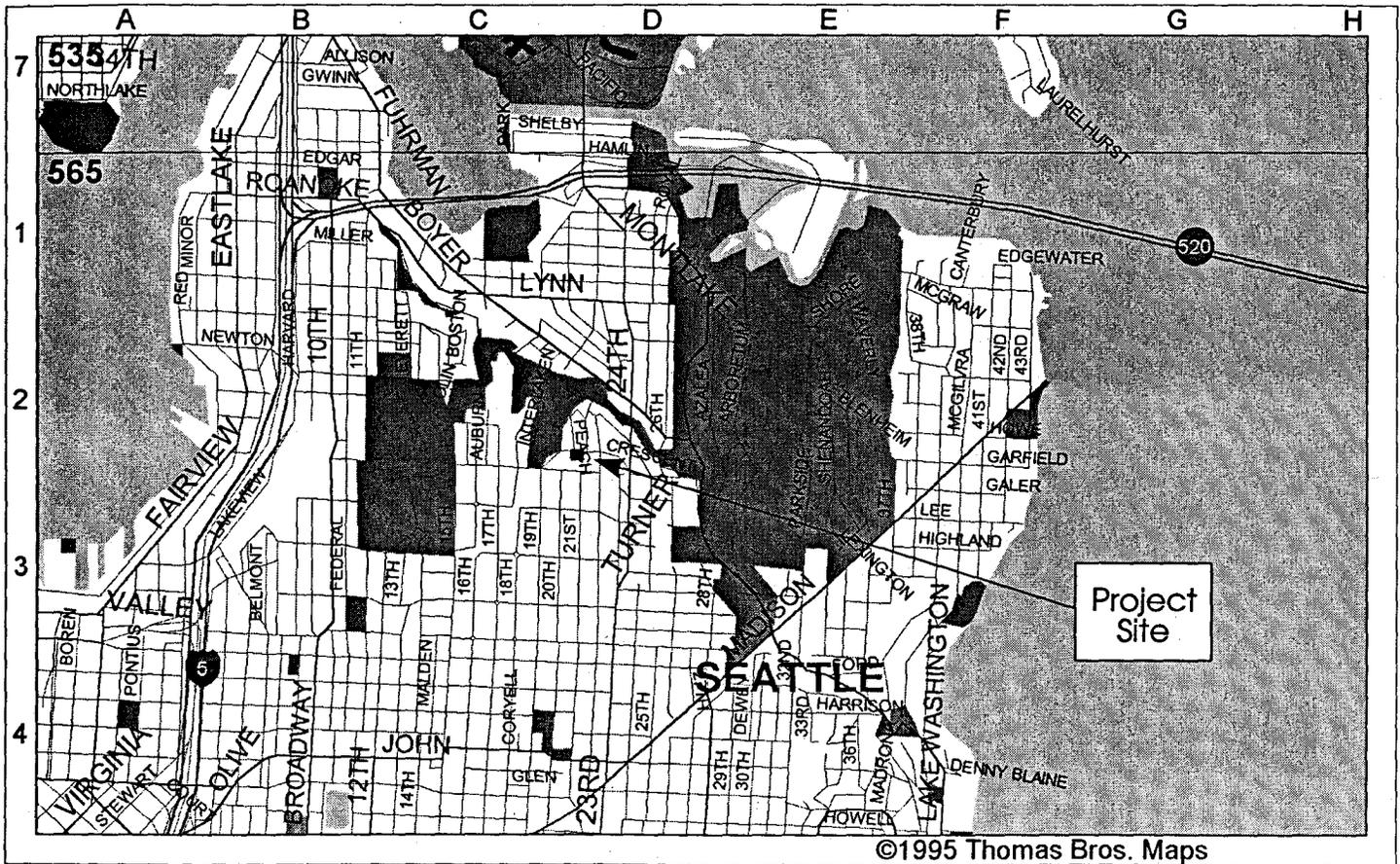
## INTRODUCTION

This letter report presents a supplement to our previous geotechnical engineering study for your planned garage. The site is located at 2015 East Crescent Drive in the city of Seattle, Washington, as shown in the Vicinity Map Figure 1. We have previously written a geotechnical letter report for temporary cut slope angles, dated June 10, 1996. The City of Seattle has requested additional geotechnical information. You have provided us with Plan Sheets A-1 and A-2, drawn by Pedro A. De Magalhaes Castro, with a revised date of April 12, 1996 and structural calculations prepared by Mitchell Engineering, Inc., dated April 10, 1995.

We have discussed your project with the City of Seattle and it is not clear if a variance could be obtained to avoid complying with Director's Rule 3-93. Our understanding is that a grading ordinance may still apply which is very similar to Rule 3-93. Therefore, we have prepared this report in compliance with Director's Rule 3-93 so that you will have the necessary geotechnical information for the project, if it is needed.

The site is currently a carport area that has been excavated into the front yard. Concrete walls exist on three sides of the area. These walls have large cracks within the concrete and appear to be failing. You plan to remove the old structure and rebuild the garage. The garage will have the same building footprint and slab elevation as the existing carport structure. The rear garage wall will be on the order of 10.5 feet

# Vicinity Map



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Agar Garage

FIGURE

1

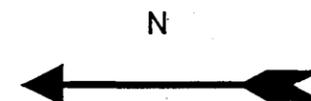
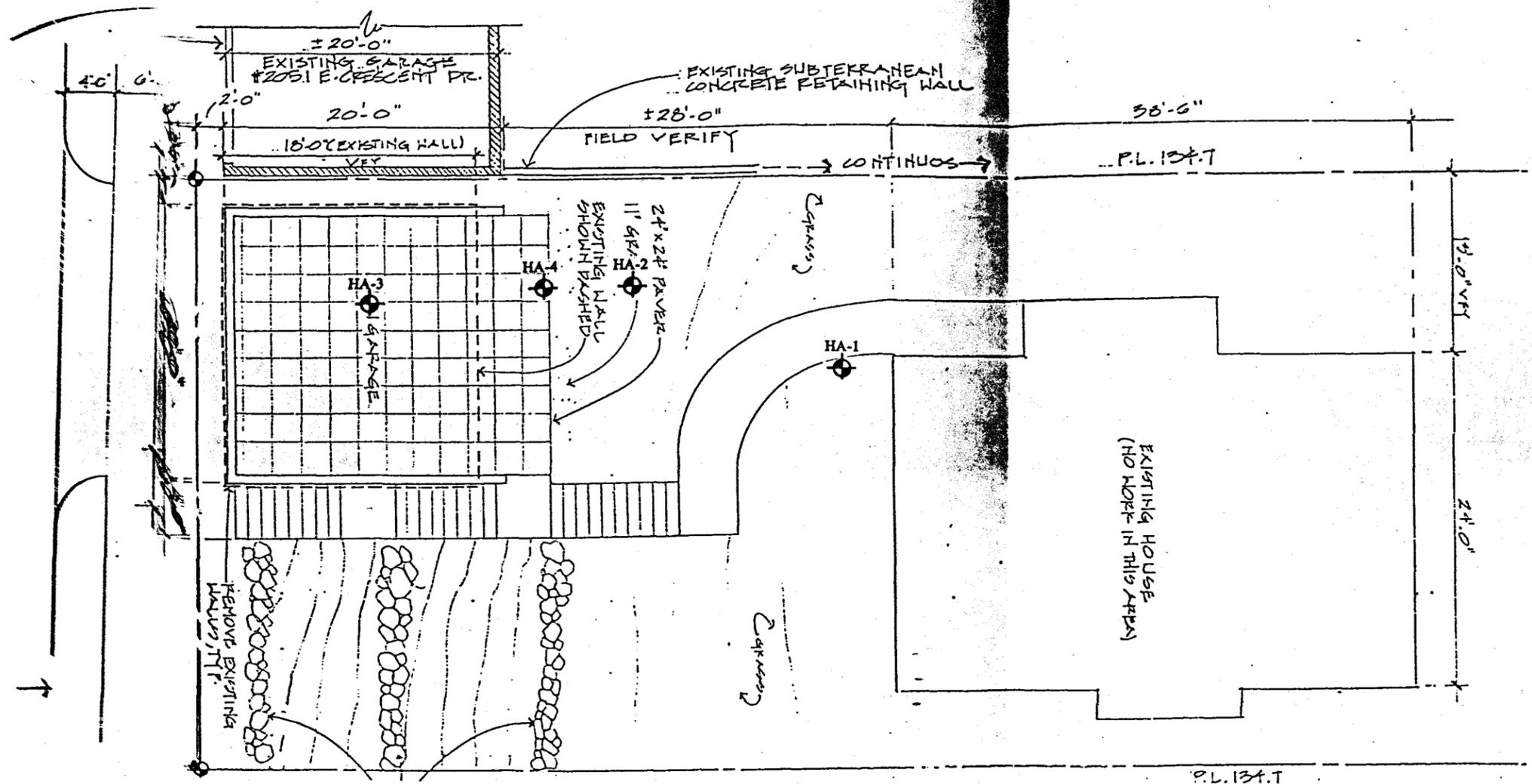
FILE NO.

176396

DATE

August 1996

# SITE PLAN



## LEGEND



HAND AUGER NUMBER AND APPROXIMATE LOCATION



Scale 1" = 10'

Reference: Site Plan taken from Plan Sheet A-1 for Agar/Nguyen garage drawn by Pedro A. Magalhaes Castro, dated 5/22/96.

<p><b>NELSON-COUVRETTE &amp; ASSOCIATES, INC.</b> CONSULTING GEOTECHNICAL ENGINEERS, GEOLOGISTS AND ENVIRONMENTAL SCIENTISTS</p>	Agar Garage	FIGURE 2
	FILE NO. 176396	DATE August 1996

## SOIL CLASSIFICATION SYSTEM

MAJOR DIVISIONS			GROUP SYMBOL	GROUP NAME
<b>COARSE GRAINED SOILS</b>  <small>MORE THAN 50% RETAINED ON NO. 200 SIEVE</small>	<b>GRAVEL</b>  <small>MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE</small>	CLEAN GRAVEL	GW	WELL-GRADED GRAVEL, FINE TO COARSE GRAVEL
		<b>GRAVEL WITH FINES</b>	GP	POORLY-GRADED GRAVEL
			GM	SILTY GRAVEL
			GC	CLAYEY GRAVEL
	<b>SAND</b>  <small>MORE THAN 50% OF COARSE FRACTION PASSES NO. 4 SIEVE</small>	CLEAN SAND	SW	WELL-GRADED SAND, FINE TO COARSE SAND
		<b>SAND WITH FINES</b>	SP	POORLY-GRADED SAND
			SM	SILTY SAND
			SC	CLAYEY SAND
<b>FINE GRAINED SOILS</b>  <small>MORE THAN 50% PASSES NO. 200 SIEVE</small>	<b>SILT AND CLAY</b>  <small>LIQUID LIMIT LESS THAN 50%</small>	INORGANIC	ML	SILT
		CL	CLAY	
		ORGANIC	OL	ORGANIC SILT, ORGANIC CLAY
	<b>SILT AND CLAY</b>  <small>LIQUID LIMIT 50% OR MORE</small>	INORGANIC	MH	SILT OF HIGH PLASTICITY, ELASTIC SILT
		CH	CLAY OF HIGH PLASTICITY, FAT CLAY	
		ORGANIC	OH	ORGANIC CLAY, ORGANIC SILT
HIGHLY ORGANIC SOILS			PT	PEAT

**NOTES:**

- 1) Field classification is based on visual examination of soil in general accordance with ASTM D 2488 - 83.
- 2) Soil classification using laboratory tests is based on ASTM D 2487 - 83.
- 3) Descriptions of soil density or consistency are based on interpretation of blowcount data, visual appearance, of soils, and/or test data.

**SOIL MOISTURE MODIFIERS**

- Dry - Absence of moisture, dusty, dry to the touch
- Moist - Damp, but no visible water
- Wet - Visible free water or saturated, usually soil is obtained from below water table

LOG OF EXPLORATION

DEPTH	USC	SOIL DESCRIPTION
<b>HAND AUGER ONE</b>		
0.0 - 5.5	ML/MH	GRAY-BROWN, SILT WITH FINE SAND AND SOME RUST MOTTLING (MEDIUM STIFF, MOIST TO WET) <u>(FILL)</u>  SAMPLES WERE NOT COLLECTED GROUND WATER ENCOUNTERED AT 5.0 FEET HAND AUGER WAS COMPLETED AT 5.5 FEET ON 5/23/96
<b>HAND AUGER TWO</b>		
0.0 - 7.0	ML/MH	GRAY-BROWN, SILT WITH FINE SAND AND ORGANICS (MEDIUM STIFF, MOIST TO WET) <u>(FILL)</u>  SAMPLE WAS COLLECTED AT 7.0 FEET GROUND WATER SEEPAGE WAS ENCOUNTERED AT 3.0 FEET HAND AUGER WAS COMPLETED AT 7.0 FEET ON 5/23/96
<b>HAND AUGER THREE</b>		
0.0 - 0.7	ML	DARK BROWN, SILT WITH FINE SAND (SOFT TO MEDIUM STIFF, WET) (TOPSOIL)
0.7 - 1.0	SM	GRAY, SILTY FINE SAND WITH OCCASIONAL GRAVEL (VERY DENSE, MOIST) (GLACIAL TILL)  SAMPLE WAS COLLECTED AT 1.0 FEET GROUND WATER WAS NOT ENCOUNTERED HAND AUGER WAS COMPLETED AT 1.0 FEET ON 5/23/96
<b>HAND AUGER FOUR</b>		
		(AUGER WAS EXCAVATED AT A 68 DEGREE SLOPE DOWN TOWARDS THE SOUTH)
0.0 - 4.0	ML/MH	GRAY-BROWN, SILT WITH FINE SAND (SOFT TO MEDIUM STIFF, MOIST TO WET) <u>(FILL)</u>
4.0 - 5.0	SM	GREEN-GRAY, SILTY FINE SAND WITH PETROLEUM ODOR AND SHEEN ON WATER (LOOSE TO MEDIUM DENSE, WET) <u>(FILL)</u>  POUNDED 0.5 INCH STEEL ROD TO 8 FEET ENCOUNTERED VERY DENSE MATERIAL  SAMPLE WAS COLLECTED AT 4.5 FEET GROUND WATER SEEPAGE WAS ENCOUNTERED AT 4.0 FEET HAND AUGER WAS COMPLETED AT 5.0 FEET ON 5/23/96