- ☐ City box number Recent Reports
- ☒ Title/cover page w/the following info:
  - ☒ Company (author) name
  - ☒ Report Date
  - ☒ Project name
  - ☒ 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 1st or 2nd 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
  - ☐ ^{14}C or Radiocarbon Testing
  - ☐ Other_____
- ☐ Soil Chemical Analytical Testing Summary Tables
- ☐ Water/Groundwater Chemical Analytical Summary Tables
- ☐ Comments_____

3407

- ☒ Date Copied 6-22-00 By Suzanne

2/9/99

701963

2/2

GEOTECH
CONSULTANTS, INC.

13256 N.E. 20th St. (Northup Way), Suite 16
Bellevue, WA 98005
(206) 747-5618
FAX 747-8561

February 26, 1992

JN 92066

3407

Bolliger Development Company
2800 East Madison Street
Seattle, Washington 98112

Attention: Steve Bolliger

Subject: Geotechnical Engineering Study
Proposed Apartment Building
409 and 411 - 11th Avenue
Seattle, Washington

409 & 411 - 11th AVENUE

Dear Mr. Bolliger:

We are pleased to present this geotechnical engineering report for your proposed apartment building to be constructed in Seattle, Washington. The purpose of our work was to explore site surface and subsurface conditions and to provide design criteria for foundations and retaining walls in addition to general earthwork recommendations. The work was authorized by your acceptance of our proposal, P-9682 dated January 23, 1992.

The subsurface conditions of the proposed site were explored with two test pits. The explorations generally encountered up to 5 feet of loose fill overlying weathered and/or relatively unweathered glacial till. It is our opinion that the proposed building may be supported on conventional continuous and spread foundations bearing on the native glacial till soils. Based on a proposed garage finish floor elevation of 286 feet, this would require overexcavations of 5 feet or more to reach bearing soil. Because the proposed retaining walls along the north and west sides of the building are to be constructed at or very near the property lines, shoring will be necessary for walls greater than 4 feet in height unless slope easements can be acquired from neighboring property owners.

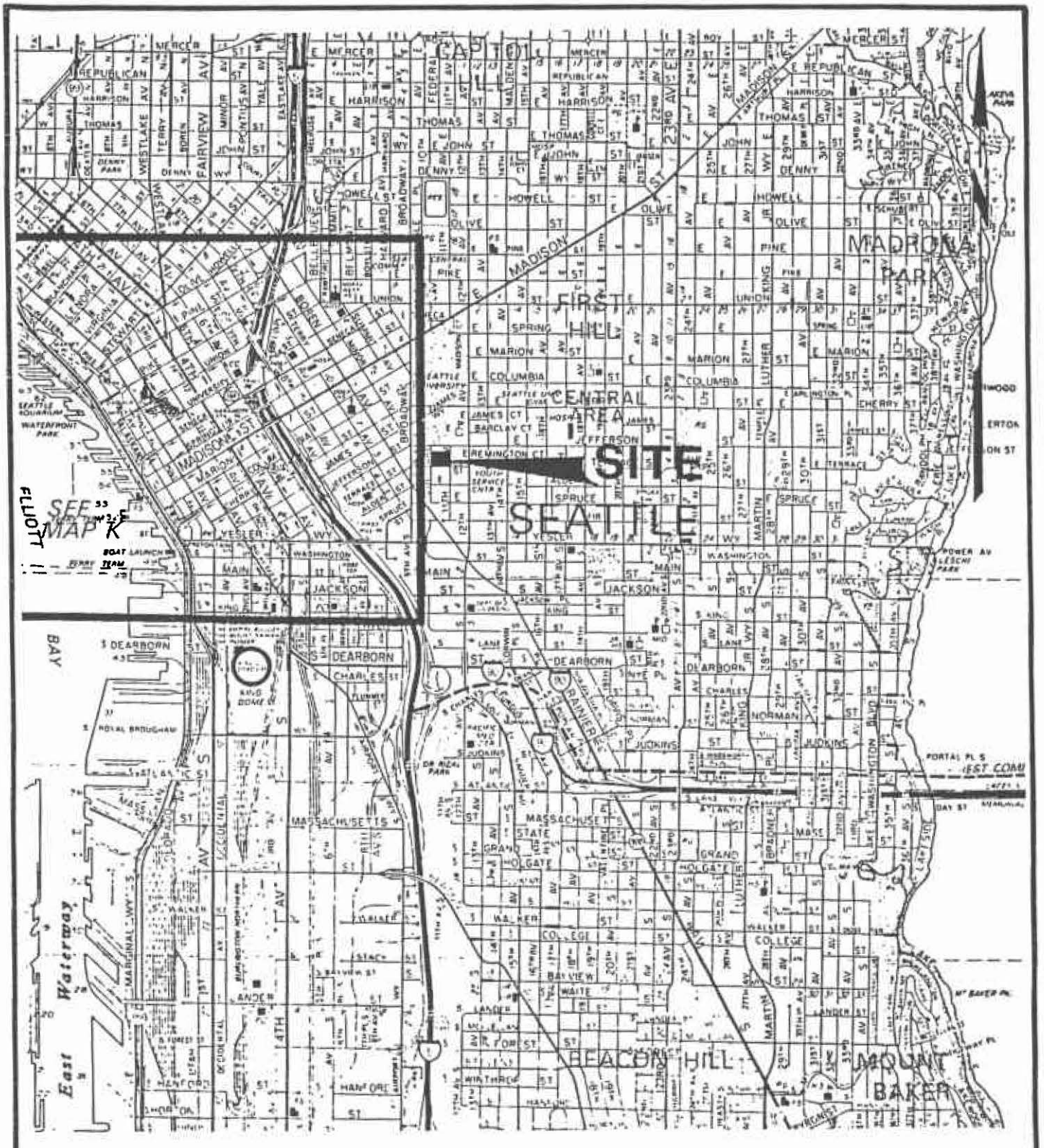
The attached report contains a discussion of the study and our recommendations. If there are any questions, or if we can be of further service, please contact us.

Respectfully submitted,

GEOTECH CONSULTANTS, INC.

Burton R. Holt for RMC

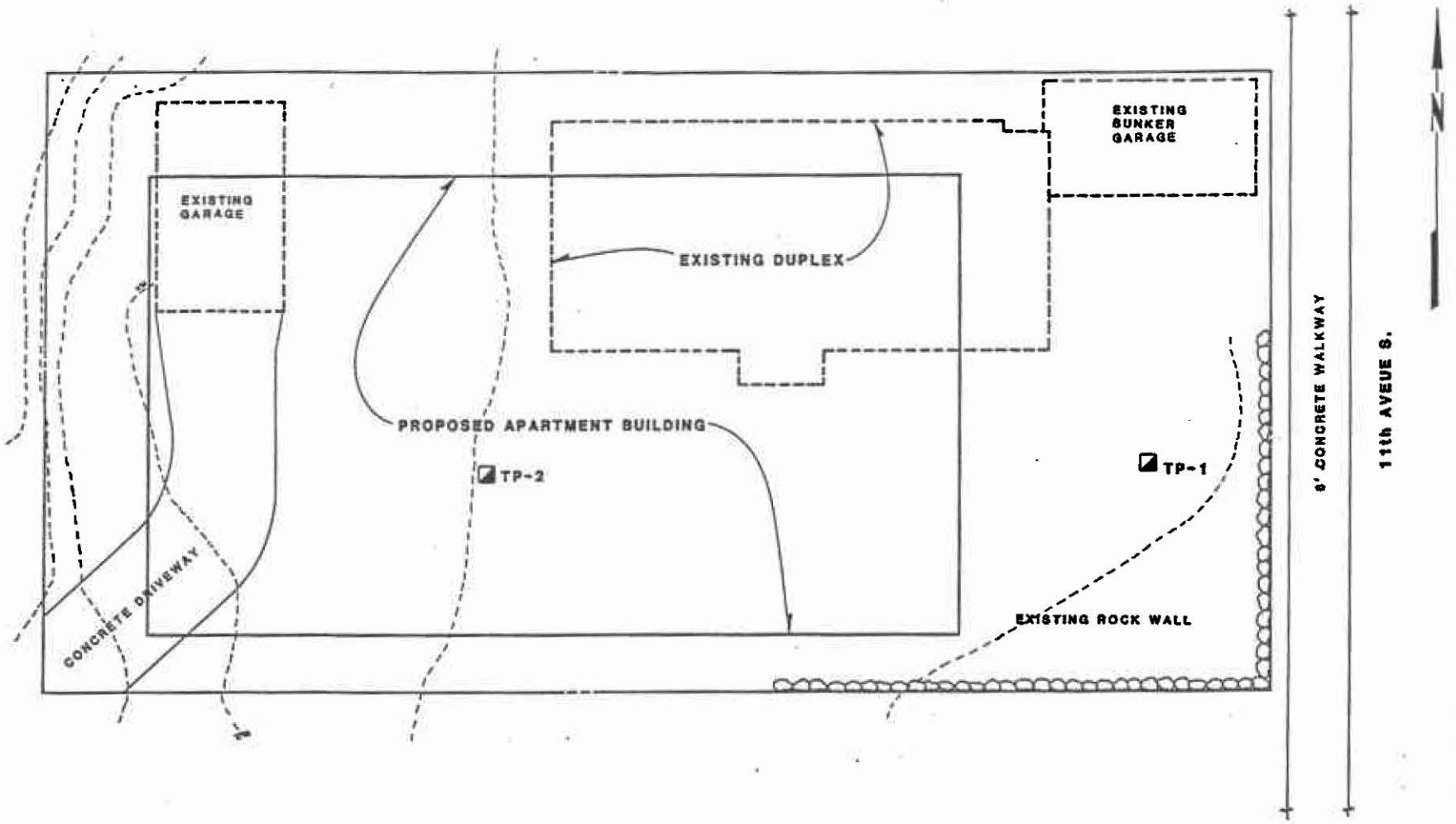
Burton R. Holt, P.E.
Geotechnical Engineer



GEOTECH CONSULTANTS

VICINITY MAP
PROPOSED APARTMENT BUILDING
409 & 411 11th AVENUE S.
SEATTLE, WASHINGTON

Job No.:	Date:	Logged By:	Plate:
92066	FEB 1992		1



LEGEND:

APPROXIMATE TEST PIT LOCATIONS

GEOTECH CONSULTANTS

SITE EXPLORATION PLAN
PROPOSED APARTMENT BUILDING
409 & 411 11th AVENUE S.
SEATTLE, WASHINGTON

Job No.:	Date:	Scale:	Plate:
92066	FEB 1992		2

TEST PIT 1

Elevation 86'

Depth(ft.)	Moisture Content	USCS	Description
0			Dark brown, sandy, organic SILT, very moist, loose (topsoil).
	18.9	fill	Light brown to brown, silty, medium SAND, some gravel, moist, loose (fill). (trash, rubble, wood debris) (to very moist)
5	9.8	SM	Gray to bluish-gray, silty, gravelly, medium SAND, very moist, dense to very dense (glacial till). (hard digging)
10			
15			

Test pit terminated at 10' below existing grade on 2-13-92.
No groundwater seepage encountered during excavation.

TEST PIT 2

Elevation 88'

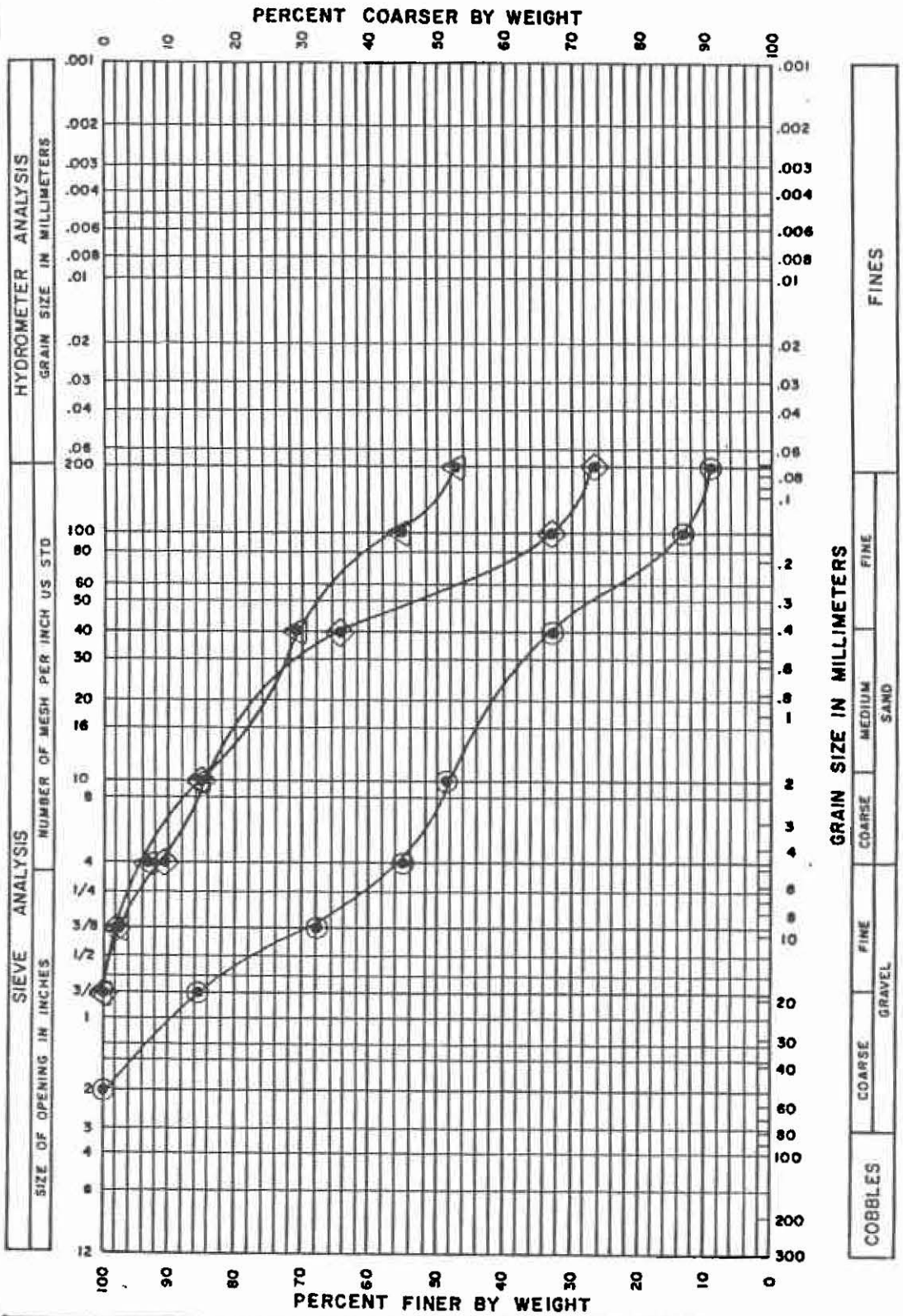
Depth(ft.)	Moisture Content	USCS	Description
0			Dark brown, sandy, organic SILT, very moist, loose (topsoil).
		fill	Dark brown, silty, medium SAND, some gravel, very moist to wet, loose (fill). (abundant trash, rubble and debris)
5	9.9	SM	Brown to gray, silty, gravelly, medium SAND, very moist to wet, medium-dense to dense (weathered till).
	8.8	SM	Gray to bluish-gray, silty, gravelly, medium SAND, moist to very moist, dense to very dense (glacial till).
10			
15			

Test pit terminated at 10' below existing grade on 2-13-92.
Groundwater seepage encountered at 3' during excavation.

GEOTECH
CONSULTANTS, INC.

TEST PIT LOGS
409 & 411 11th AVENUE S.
SEATTLE, WASHINGTON

Job No:	Date:	Logged by:	Plate:
92066	FEB 1992	BRH	3



BORING/ TEST PIT	DEPTH	SAMPLE	MOISTURE	KEY	SYMBOL	SOIL CLASSIFICATION
1	2		18.9	△	SM	SILTY SAND
2	5		9.9	⊙	SP/SM	SILTY SAND
2	9		8.8	◇	SM	SILTY SAND

GEOTECH CONSULTANTS

GRAIN SIZE ANALYSIS

PROPOSED APARTMENT BUILDING
409 & 411 11th AVENUE S.
SEATTLE, WASHINGTON

Job No.:	Date:	By:	Plate:
92066	FEB 1992		4