

Report on Final Design Subsurface and Foundation Investigation

Proposed Village at Ocean Gate Portland, Maine

for

The Village at Ocean Gate, LLC
c/o Atlas Investment Group, LLC
10 High Street
Boston, MA 02110

October 3, 2007

October 3, 2007
05109

Mr. Demetri Dasco, Managing Partner
The Village at Ocean Gate, LLC
c/o Atlas Investment Group, LLC
10 High Street
Boston, MA 02110

Report on Final Design Subsurface and Foundation Investigation
Proposed Village at Ocean Gate, Portland, Maine

Dear Demetri:

This report presents the results of our final design subsurface and foundation investigation for the proposed Village at Ocean Gate project in Portland, Maine. Foundation recommendations are limited to proposed Buildings 1 and 2 that make up Phase I only. Phase II, located along the northwestern side of Newbury Street, was not approved and the design is pending.

In summary, it is our opinion that the structure may be founded on spread and continuous footings bearing on undisturbed, naturally deposited soil in the northern portion of the building, or on soil improved by a process known as rammed aggregate piers at locations in the southern portion of the building. In addition, an earth-supported bituminous pavement may be used for the lowest level (parking level). Specific recommendations regarding foundation design and construction considerations are presented below.

Introduction

The Village at Ocean Gate will be developed on the site of the Village Café located at 112 Newbury Street. The area for proposed redevelopment is bound approximately by Middle Street, Hancock Street, Newbury Street and midway between Hancock and India Streets. The Village Café building will be removed to allow the new development. We understand that this Phase 1 of the development will include one level of underground parking between Newbury Street and Middle Street with two four-story, wood-framed residential buildings and courtyard above the parking. Existing ground surface elevations within the Phase I area vary from approximately El. 28 to El. 41.

The lowest level, with a plan area of approximately 42,000 square feet, will consist of retail and building entrances along Middle Street, with parking occupying the remainder of the lowest level. The retail areas will have floor levels at approximately El. 27. The garage entrance at Middle Street is at approximately El. 27 and ramps to approximately El. 33.3 at Newbury Street. Floor levels will be at or near existing grade near Middle Street, but will

require excavations of up to 11 feet below Newbury Street. Columns will have variable spacing, and column loads vary from approximately 76 kips in the retail area to 370 kips in the residential area. The residential buildings will have plan areas of approximately 16,800 square feet, with the lowest level at the courtyard at approximately El. 44.

Subsurface Explorations

Preliminary Borings

During the period June 20 to 21, 2005 Maine Test Borings, Inc. (MTB) of Brewer, Maine, drilled six borings, B1 to B6, at locations shown on Sheet 1, Subsurface Exploration Plan. MTB drilled the borings to depths below ground surface varying from 29.2 feet to 32.0 feet. Sebago Technics, Inc. monitored the borings and prepared the logs included in Appendix A. Table I summarizes the results of borings. MTB backfilled the borings with the excavated soil.

Borings were drilled using 2.5 inch inside diameter hollow stem augers. Soil samples were generally taken at 5-foot intervals. Standard Penetration Resistance (N) was measured at each sample interval in accordance with ASTM Test D1586. Undrained shear strength of the clay stratum was measured at various depths by field vane shear tests.

Sebago Technics determined the locations of borings by pacing from existing site features. We determined the ground surface elevations at borings by linear interpolation between the City of Portland ground surface contours at the plotted locations.

Final Design Borings

During the period December 21, 2005 to January 5, 2006, MTB drilled eight borings, B101 to B105 and B107 to B109, at locations shown on Sheet 1. MTB drilled the borings to depths below ground surface varying from 20.0 feet to 42.0 feet. Sebago Technics, Inc. monitored the borings and prepared the logs included in Appendix B. Table I summarizes the results of borings. MTB backfilled the borings with the excavated soil.

Boring B101 was drilled using 4-inch inside diameter flush joint casing. Two 3-inch diameter thin wall samples by stationary piston method were recovered. The remaining borings were drilled using 2.5-inch and 3.375-inch inside diameter hollow stem augers. Soil samples were generally taken at 5-foot intervals. Standard Penetration Resistance (N) was measured at each sample interval in accordance with ASTM Test D1586. Undrained shear strength of the clay stratum was measured at various depths by field vane shear tests. Groundwater observation wells were installed in completed borings B102 and B109.

Sebago Technics determined the locations of borings by pacing and taping from existing site features. We determined the ground surface elevations at borings by linear interpolation between the ground surface contours at the plotted locations.

The boring logs and related information depict the subsurface conditions and water levels encountered at the locations and during the times indicated on the logs. Subsurface conditions at other locations may differ from those encountered in the borings. The passage of time may result in a change in groundwater conditions at the exploration.

Subsurface Conditions

The borings encountered six principal soil units at the site overlying bedrock: fill, upper marine sand, marine silt, marine clay, lower marine sand and glacial till. Encountered thickness and generalized descriptions of the strata encountered are presented below in order of increasing depth below ground surface. Due to the complexity of the deposition process, strata thickness will vary and may be absent at specific locations.

Fill – Fill consists of loose to very dense, brown well-graded SAND with gravel (SW); to brown to black silty SAND (SM), with various amounts of brick, ash, wood and glass. Encountered thickness varies from 1.3 feet to 6.6 feet.

Sand – The upper layer of marine sand consists of very loose to dense, brown to gray silty SAND (SM); to poorly-graded SAND (SP). Encountered thickness varies from 1.3 feet to 17.8 feet.

Silt – Marine silt consists of soft to medium stiff, gray SILT (ML). Encountered thickness varies from 8.0 feet to 10.0 feet.

Clay – Marine clay consists of soft to stiff, gray brown to gray lean CLAY (CL) with frequent sand layers and seams. Undrained shear strength of the lower portion, measured by field vane shear tests, varied from 260 pounds per square feet (psf) to 820 psf. Undrained shear strength of the upper portion, based on correlations with N values, likely varies from 1,000 to 2,000 psf. Encountered thickness varies from 5.5 feet to 24.8 feet.

Sand – The lower marine sand consists of very loose to very dense, gray to brown silty SAND (SM); to poorly-graded SAND (SP) with occasional silt seams. Encountered thickness varies from 2.6 feet to 8.9 feet.

Glacial Till – Glacial till consists of loose to very dense, gray silty SAND with gravel (SM); to well-graded SAND (SW) with cobbles and boulders. Encountered thickness varies from 0.7 foot to greater than 35.5 feet.

Borings B2, B4, B6, B101, B105, B107 and B109 encountered refusal judged to be bedrock at depths below ground surface varying from 29.2 feet to 41.1 feet.

Water was observed in the borings at depths below ground surface varying from 7.0 feet to 18.5 feet. Water levels in the groundwater observation wells in B102 and B109 varied from 2.6 feet to 3.3 feet below ground surface (equivalent elevations varied from El. 25.9 to El. 34.2, respectively). Observations of water were made over a relatively short period of time and may not reflect the stabilized groundwater level. In addition, water levels at the site will vary with season, precipitation, temperature and construction activity in the area. Therefore, water levels during and following construction may vary from those observed in the borings.

Strength and Compressibility Characteristics of Clay Stratum

We estimated the stress history of the clay deposit by correlations with strength ratio, the ratio of shear strength to overburden stress, of similar clays in the area. The undrained shear strength of the lower portion of the clay stratum was measured in borings using field vane shear tests. Measured shear strength varies from 260 psf to 820 psf. The undrained shear strength of the upper portion of the deposit was estimated to be as high as 2,000 psf. The stress history of the deposit was estimated by comparing the strength ratio with correlations of strength ratio and stress history of clay from other projects with similar conditions. The estimated stress history is shown in Figure 1.

The stress history and appropriate compression ratios were estimated for the clay deposit as discussed above. The correlations indicate that the deposit is moderately overconsolidated; that is, the existing overburden stress is at least 1,000 psf less than the maximum previous stress in the lower portion of the clay and more than 3,000 psf near the top. The deposit likely became overconsolidated due to desiccation (drying) resulting from a lowering of the groundwater level at some time in the geologic past which created a stiff upper crust and also increased the effective overburden stress throughout the stratum.

The stress-strain or compressibility characteristics (settlement) of clays are highly dependent upon their stress history. If clay is stressed within the limits of the maximum previous stress, σ_{vm} , the strain (settlement) will be a function of the recompression ratio (RR) of the clay. If the applied stress exceeds the maximum previous stress, the strain will be proportional to the virgin compression ratio (CR). The compression ratio is typically 10 to 15 times the recompression ratio.

Recommendations for Foundation Design

Recommended Foundation Type and Design Criteria

The existing fill is not considered suitable for support of the building foundations. All fill within the limits of the building foundations should be excavated and replaced with non-woven geotextile fabric and ¾-inch crushed stone. We recommend that the building be supported on spread and continuous footings bearing on the undisturbed, naturally deposited soils that have been over excavated and protected by 3-inch thick lean concrete mud mats or non-woven geotextile fabric and a minimum 6-inch thickness of ¾-inch crushed stone. The geotextile fabric should have a minimum weight of 6 ounces per square yard. Columns and foundation walls in the southern portion of the building should be supported on soil that has been improved by rammed aggregate piers.

Footings should be proportioned for an allowable bearing stress in pounds per square foot (psf) equal to 3,000 psf. All footings should be a minimum of 2.0 feet wide.

Exterior footings should be founded at least 4.5 feet below the lowest adjacent ground surface exposed to freezing. Interior footings, if they are located in areas not subject to freezing temperatures, should be founded a minimum of 1.5 feet below the ground floor. If the garage is exposed to freezing temperatures, footings should be founded at least 4 feet below the ground floor.

In order to consider foundations bearing above the clay stratum, we estimated the settlement of the clay resulting from the increased stress from the building loads. We estimate that the total settlement of the northern half of the building will vary from 0.3 inch to 1.0 inch due to the compensation for the weight of the building with soil excavated for the parking level. We estimate that the total settlement in the southern half of the building will vary from 1.0 inch to 2.5 inches due to the lack of compensation for the building weight. We anticipate that settlement in the northern half of the building is acceptable. We recommend that the clay below the columns and wall footings in the southern half of the building, except in retail areas where foundation walls are limited to depth of freezing, be improved with the installation of rammed aggregate piers as installed by Geopier Foundation Company (Geopier). We recommend that Geopier design a system that will limit settlement below columns and walls to less than 1.0 inch. We anticipate that settlement of this magnitude is acceptable. However, JSN Associates, Inc. should determine final acceptability of settlement.

Ground Floor Slabs

We understand that most of the lowest level floor will consist of bituminous concrete for parking. The remainder of the lowest level will consist of retail, restaurant operations and building entrances, lobbies, elevators and stairs. We recommend that the lowest level floor slabs in these areas be designed as earth-supported slabs-on-grade, and the parking areas be designed as bituminous concrete pavement, bearing on a minimum of 12 inches of $\frac{3}{4}$ -inch crushed stone underlain by non-woven geotextile fabric. The geotextile fabric should have a minimum weight of 6 ounces per square yard. Borings indicate that the existing fill consists primarily of well-graded sand to silty sand with various amounts of brick, ash, wood and glass. In our opinion, the existing fill is suitable for support of the slabs following proofrolling, as discussed below. Any soft or yielding areas encountered during proofrolling should be excavated and replaced with fabric and $\frac{3}{4}$ -inch crushed stone. Normal dampproofing and vapor barriers should be provided below the slabs.

We recommend that the pavement for the lowest level parking consist of 3 inches of bituminous concrete, placed in two layers.

We recommend that a perimeter foundation drain and under slab drain system be constructed in the building. The perimeter foundation drain should be constructed on the outside of the foundation walls and an underslab drain below the basement slab. Drains should consist of 4-inch diameter perforated pipe surrounded by $\frac{3}{4}$ -inch crushed stone and non-woven geotextile filter fabric. The invert of the foundation drains should be below the basement floor level and the underslab drain should include a loop around the perimeter of the slab and several cross-laterals to provide multiple paths for water flow. Gravity discharge and normal dampproofing and vapor barriers should be provided for the slabs and basement walls. A device to prevent backflow and a provision for pump discharge should be provide for gravity discharge in the event that water rises above the discharge invert level.

If gravity discharge is not available, discharge from the system may be accomplished by pumping. In order to provide for backup discharge, the system should be designed to pump from two sumps, one at each end of the lower ends of the basement, with standby pumps and emergency electric power available in the event of a power failure. We recommend that the discharge from each sump be designed for a flow of 50 gallons per minute.

Seismic Design Considerations

We recommend that the building be designed in accordance with the seismic requirements of the latest edition of the International Building Code; the site classification is Class D based on a calculation of the weighted average of overburden in the top 100 feet of the site; the site response coefficient F_a is 1.5 for a short period spectral response acceleration S_s of 0.375g; the site response coefficient F_v is 2.4 for the 1-second period spectral response acceleration S_1 of 0.10g. The subgrade soils are not considered liquefaction susceptible.

Lateral Foundation Loads

We recommend that lateral loads be resisted by bottom friction on footings and that a coefficient of friction equal to 0.35 be used for footings. If this does not provide sufficient lateral resistance, we will consider the problem in more detail to take into account other factors.

Lateral Soil Pressure

We recommend that basement walls which are restrained at the top and backfilled be designed to resist a lateral earth pressure calculated on the basis of an equivalent fluid unit weight of 55 pounds per cubic foot. This fluid unit weight assumes an at rest earth pressure coefficient of 0.45, a free-draining granular backfill, and an effective drainage system.

Backfill Materials

Structural fill used for backfill adjacent to walls should consist of sandy gravel to gravelly sand. It should be free of organic material, loam, trash, snow, ice, frozen soil and other objectionable material, and should conform to the following gradation:

<u>Sieve Size</u>	<u>Percent Finer by Weight</u>
3 inches	100
No. 4	30 to 90
No. 40	10 to 50
No. 200	0 to 8

Compacted structural fill should be placed in layers not exceeding eight inches in loose measure and compacted by self-propelled vibratory equipment at the approximate optimum moisture content to a dry density of at least 95 percent of the maximum dry density, as determined in accordance with ASTM Test Designation D1557. In confined areas, the loose layer thickness should be reduced to 6 inches and compaction performed by hand-guided vibratory equipment.

Compacted structural fill on the exterior of the foundation and basement walls should extend laterally a minimum of 2 feet from the wall. Backfill beyond this limit on the exterior of the building may consist of common fill. The top 12 inches of fill on the exterior of the building should consist of low permeability material or sidewalk pavement to minimize water infiltration next to the building. Grading should provide for runoff away from the building.

Common fill may consist of inorganic mineral soil that can be placed in layers and compacted. Common fill should be placed and spread in layers not exceeding 12 inches in thickness and compacted at the approximate optimum moisture content to a dry density of at least 92 percent of the maximum dry density, as determined in accordance with ASTM Test Designation D1557.

Construction Considerations

General

The primary purpose of this section of the report is to comment on items related to excavation, earthwork, and related geotechnical aspects of proposed construction. It is written primarily for the engineer having responsibility for preparation of plans and specifications. Since it identifies potential construction problems related to foundations and earthwork, it will also aid personnel who monitor the construction activity. Prospective contractors for this project must evaluate the construction problems on the basis of their own knowledge and experience in the Portland, Maine area, and on the basis of similar projects in other localities, taking into account their proposed construction methods, procedures, equipment and personnel.

Excavation, Lateral Support and Control of Water

Due to the proximity of city streets and adjacent buildings, foundation excavation for the lowest level floor, and foundations in approximately the northern half of the building, a temporary earth support system will be required. Excavations up to 11 feet below street level will be required along Newbury Street, portions of Hancock Street, and the west side of the project. Lateral support schemes that may be considered by the contractor include interlocking steel sheeting and soldier beams. We anticipate that internal lateral bracing may be required due to anticipated restrictions on installing external support such as tiebacks, which would extend below the city streets and adjacent buildings.

The temporary excavation support system must provide lateral support of the excavation, prevent damage to adjacent buildings, streets and utilities, and be designed to the following criteria:

1. Position the highest brace no deeper than 6 feet below existing exterior grade.
2. Excavation should not proceed more than 2 feet below any bracing level prior to the installation and loading of the brace.
3. Maintain the maximum cumulative horizontal movement at any point along the temporary excavation support walls to less than 1.5 inches.
4. Maintain the maximum vertical movement of any buildings to less than 0.75 inch; any utilities and streets to less than 1.0 inch.

If any of the above movement limits are exceeded, the contractor should immediately submit and implement a Movement Mitigation Plan. The plan may include additional vertical and horizontal supports or other measures. The contractor should demonstrate that the proposed measures can be implemented immediately, if required, to prevent damage to the adjacent buildings and streets and utilities.

Based on observed groundwater levels in borings and observation wells, dewatering will be required during excavation and foundation construction and until the permanent perimeter foundation and underslab drain system is operational. Based on the water levels observed, groundwater is likely perched in the fill and sand deposit above the clay stratum and is present in the sand and glacial till below the clay stratum. Perched groundwater may be as much as 3 to 4 feet above the lowest excavation level. Subsurface data indicate that excavation will be made in sand, silt and clay. In our opinion, dewatering and control of water from other sources can likely be controlled by sumps with open pumping. Dewatering must be done in a manner which will preserve the undisturbed bearing capacity of the bearing soils and permit construction "in-the-dry." Sumps and pumps should be installed with adequate filters to minimize loss of fine-grained soil.

We recommend that the contractor's proposed methods for making and dewatering the excavation be designed by a licensed professional engineer and the scheme submitted to the owner's engineer for review and comment prior to installation.

Subgrade Preparation

The subgrade soil is susceptible to disturbance from construction traffic. Equipment and personnel should not be permitted to travel across exposed footing bearing surfaces or exposed slab subgrades. As discussed above, we recommend that footing bearing surfaces be protected with 3-inch thick lean concrete mudmats or non-woven geotextile fabric and 6-inch thickness of $\frac{3}{4}$ -inch crushed stone. Slab subgrade surfaces should be protected with non-woven geotextile fabric and 12-inch thickness of $\frac{3}{4}$ -inch crushed stone. Any subgrade areas that are disturbed should be recompacted or excavated and replaced with crushed stone prior to placing mudmats or crushed stone. Subgrades should be protected against freezing temperatures if exposed during construction. Final excavation to subgrade should be performed using equipment with smooth-edge buckets.

Limitations of Recommendations

This report has been prepared for specific application to the subject project in accordance with generally accepted geotechnical engineering practices. In the event that any changes in the nature, design or location of the structure are planned, the conclusions and recommendations contained in this report should not be considered valid, unless the changes are reviewed and the conclusions of this report modified or verified in writing.


The recommendations presented herein are based in part upon the data obtained from the referenced borings. The nature and extent of variations from that disclosed by the borings may not become evident until construction. If variations then appear evident, it will be necessary to re-evaluate the recommendations of this report.

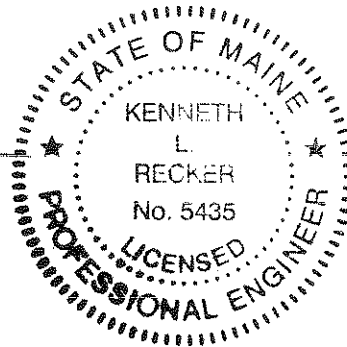
We request that we be provided the opportunity for a general review of final design and specifications in order to determine that our earthwork and foundation recommendations have been interpreted and implemented in the design and specifications as they were intended.

It has been a pleasure to work with you on this project. Please do not hesitate to contact us if you have any questions or need additional information.

Sincerely,

SEBAGO TECHNICS, INC.


Kenneth L. Recker, P.E.
Geotechnical Engineering Manager



KLR:KLR/JC
Enclosures:

- Table I - Summary of Borings
- Sheet 1 - Subsurface Exploration Plan
- Figure 1 - Stress History Phase I
- Appendix A - Logs of Preliminary Borings
- Appendix B - Logs of Final Design Borings

TABLE I
SUMMARY OF BORINGS
PROPOSED VILLAGE AT OCEAN GATE
PORTLAND, MAINE

Boring Number	Depth (ft)	Approx. Gnd. Sur. El. (Ft)	Depth to Water (Ft)	Strata Thickness (Ft)						
				Fill	Marine Deposits			Lower Sand	Glacial Till	Bedrock
					Upper Sand	Silt	Clay			
B101	30.6	34.2	7.2	3.0	--	20.7	3.5	3.3	0.1*	
B102	32.0	28.5	2.6	4.0	2.4	14.6	8.9	1.6*	--	
B103	20.0	34.1	6.0	6.3	--	11.0	2.7*	--	--	
B104	42.0	29.0	7.8	5.2	1.3	--	--	35.5*	--	
B105	24.0	39.5	8.0	2.0	--	17.0	2.6	2.4	0.0*	
B107	41.1	44.1	7.0	6.6	4.9	24.8	3.7	1.1	0.0*	
B108	40.0	49.2		3.0	17.8	15.2	4.0*	--	--	
B109	21.4	38.5	3.3	1.2	--	15.6	3.7	0.9	0.0*	
B1	32.0	40.7	7.0	3.5	7.0	13.5*	--	--	--	
B2	30.1	35.6	11.3	4.0	--	17.0	5.9	3.2	0.0*	
B3	32.0	28.8	10.9	3.3	--	18.2	4.5	6.0*	--	
B4	30.7	39.9	10.0	3.0	3.0	20.0	4.0	0.7	0.0*	
B5	32.0	47.5	11.3	1.3	7.2	14.5	6.0	3.0*	--	
B6	29.2	42.2	9.8	1.3	2.2	10.0	5.5	2.9	0.0*	

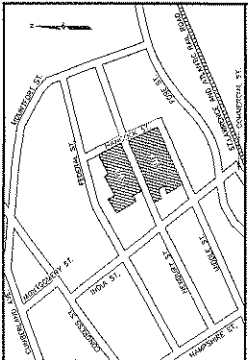
NOTES:

1. -- INDICATES STRATUM NOT ENCOUNTERED WITHIN DEPTH OF BORING.
2. * INDICATES DEPTH OF PENETRATION INTO STRATUM.

PROJECT NO.	03199
FIELD BOOK	DRAWN
DATE	2/21/06
DATE	2/21/06
DATE	2/21/06
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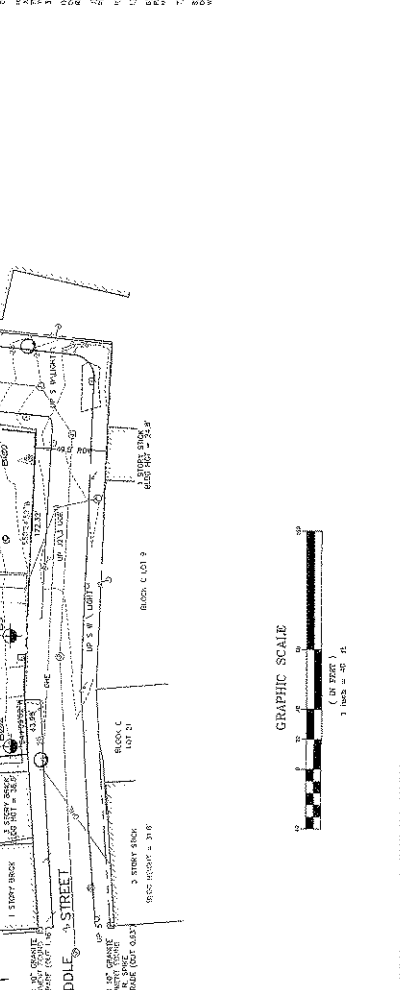
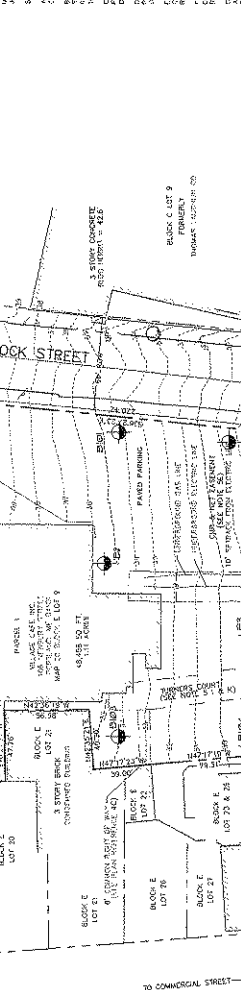
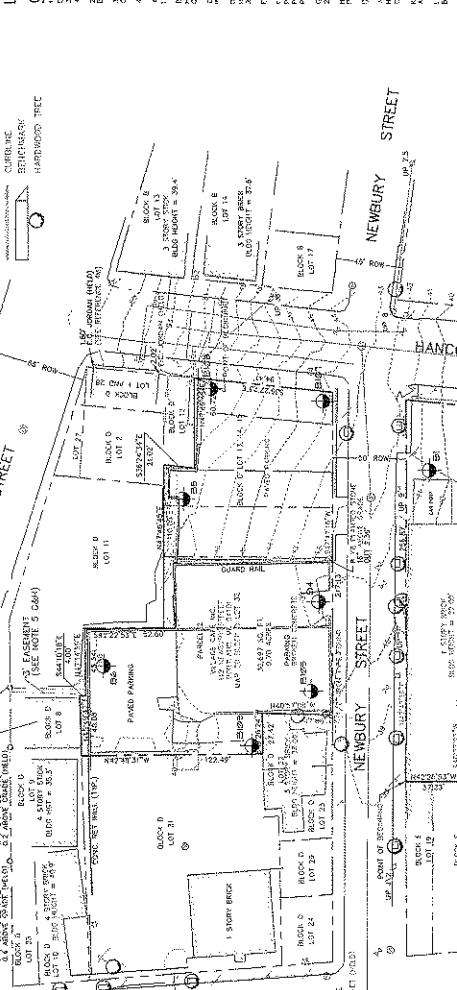
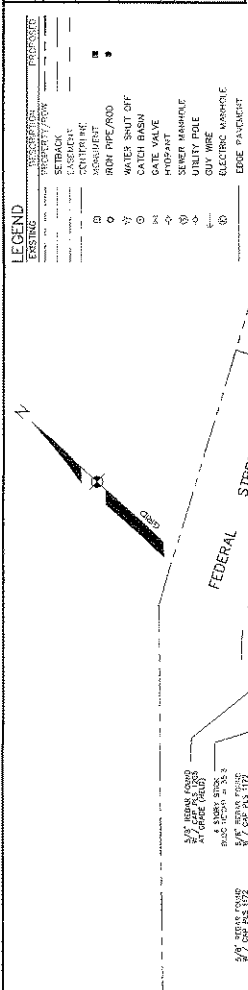
DATE	7/12/09
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DATE	7/12/09

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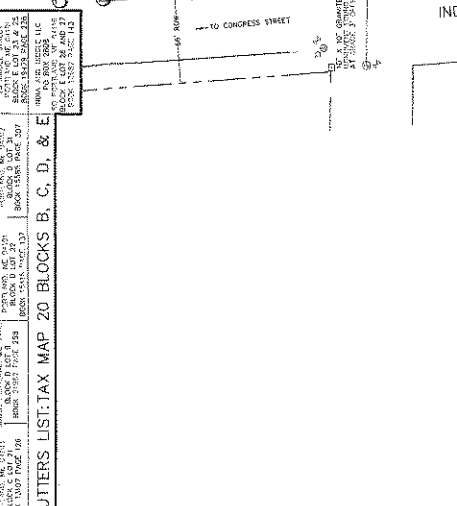
LOCATION MAP

GENERAL NOTES:
 1. THE RECORD OWNER OF THE PROPERTY IS VILLAGE CAFE INC.
 2. THE RECORD ENGINEER OF RECORD IS SEABAGO TECHNICS, INC., 140 COMMERCIAL STREET, SUITE 201, PORTLAND, ME 04101.
 3. THE RECORD DRAWING IS 03199-01-001, DATED 02/21/06.
 4. THIS DRAWING IS A REVISION TO THE RECORD DRAWING.
 5. THE RECORD DRAWING IS TO BE USED IN CONJUNCTION WITH THE RECORD SPECIFICATIONS.
 6. THE RECORD SPECIFICATIONS ARE TO BE USED IN CONJUNCTION WITH THE RECORD DRAWING.
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ABUTTERS LIST: TAX MAP 20, BLOCKS B, C, D, & E

1. 1000 1000 1000	2. 1000 1000 1000	3. 1000 1000 1000	4. 1000 1000 1000
5. 1000 1000 1000	6. 1000 1000 1000	7. 1000 1000 1000	8. 1000 1000 1000
9. 1000 1000 1000	10. 1000 1000 1000	11. 1000 1000 1000	12. 1000 1000 1000
13. 1000 1000 1000	14. 1000 1000 1000	15. 1000 1000 1000	16. 1000 1000 1000
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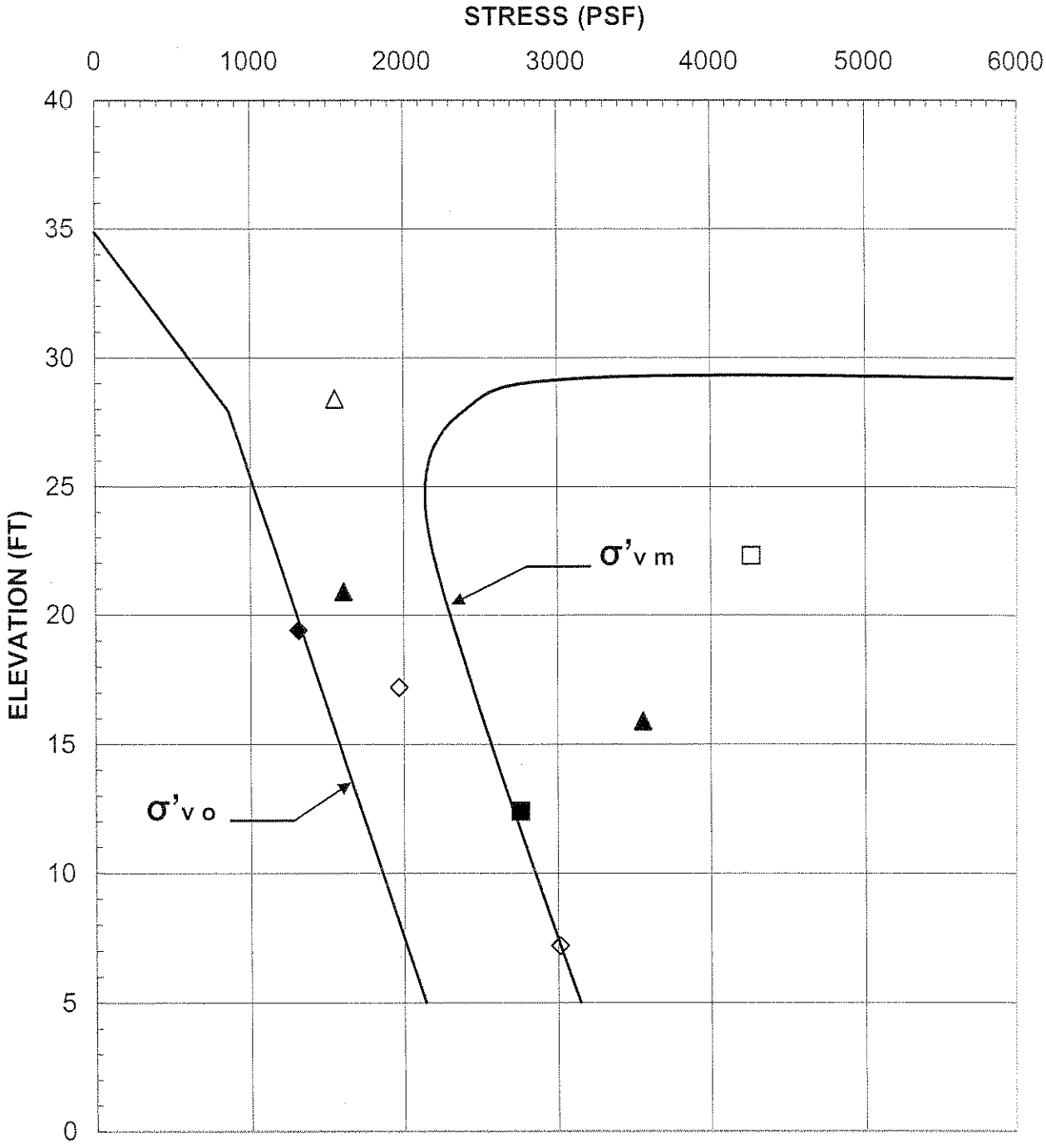


GRAPHIC SCALE
 1 inch = 20 feet

GEOTECHNICAL LEGEND
 1. BORERS AND APPROXIMATE LOCATION OF BORINGS DRILLED BY MAINE TEST BORINGS INCLUDING JUNE 20 TO 21, 2005.
 2. BORERS AND APPROXIMATE LOCATION OF BORINGS DRILLED BY MAINE TEST BORINGS INCLUDING DECEMBER 21 AND JANUARY 3, 2006.

GEOTECHNICAL NOTES
 1. BORINGS PROVIDED BY SEBAGO TECHNICS, INC.
 2. LOCATION OF BORINGS DETERMINED BY REFERENCE TO BORING LOGS AND TYPING PRINT.

STRESS HISTORY VILLAGE AT OCEAN GATE, PH I PORTLAND, MAINE



◆ B2 ■ B3 ▲ B101 ◇ B102 □ B103 △ B105

FIGURE 1

Appendix A

Logs of Preliminary Borings

TEST BORING REPORT

PROJECT	VILLAGE CAFE REDEVELOPMENT	STI JOB NO.	05109
LOCATION	NEWBURY STREET, PORTLAND, MAINE	PROJECT MGR.	C. DIMATTEO
CLIENT	GFI ACQUISITIONS I, LLC	FIELD REP.	K. B. STEPHENSON
CONTRACTOR	MAINE TEST BORINGS, INC.	DATE STARTED	6/20/2005
DRILLER	B. ENOS	DATE FINISHED	6/20/2005

Elevation	40.7	ft.	Datum	Boring Location	See Plan
Item	Casing	Sampler	Core Barrel	Rig Make & Model	Mobil B53
Type	HSA	SS	--	<input checked="" type="checkbox"/> Truck <input type="checkbox"/> Tripod	<input type="checkbox"/> Cat-Head <input checked="" type="checkbox"/> Safety
Inside Diameter (in.)	2.5	1.375	--	<input type="checkbox"/> ATV <input type="checkbox"/> Geoprobe	<input type="checkbox"/> Doughnut <input type="checkbox"/> Bentonite
Hammer Weight (lb.)	--	140		<input type="checkbox"/> Track <input type="checkbox"/> Air Track	<input type="checkbox"/> Automatic <input checked="" type="checkbox"/> None
Hammer Fall (in.)	--	30		<input type="checkbox"/> Skid <input type="checkbox"/>	<input checked="" type="checkbox"/> Cutting Head

Depth (ft.)	Sampler Blows per 6 in.	Sample No. & Recovery (in.)	Sample Depth (ft.)	Well Diagram	Stratum Change (ft.)	USCS Symbol	Visual-Manual Identification & Description (density/consistency, color; GROUP NAME & SYMBOL, maximum particle size*, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel					Sand					Field Test		
								% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength			
0					0.2		-BITUMINOUS CONCRETE-													
7		S1	0.3			SW	Medium dense, brown well-graded SAND with gravel (SW), mps = 1.3 in., dry	10	10	30	25	20	5							
18					1.0		-FILL-													
12					1.2		-FILL-													
13		10	2.3			SM	Medium dense, black silty SAND (SM), mps = 0.1 in., dry					5	80	15						
					3.5		-FILL-													
							Note: gray sandy silt in auger cuttings at 3.5 ft.													
5		S2	5.0			SM	Very loose, gray silty SAND (SM), frequent silt seams, mps = 0.02 in., wet					80	20							
							-MARINE DEPOSITS-													
		15	7.0																	
10		S3	10.0		10.5	SW	Very loose, gray well-graded SAND (SW), mps = 0.2 in., wet	10	40	45	5									
	WOH					ML	Soft, gray SILT (ML), frequent sand partings, mps = 0.02 in., wet					15	85	L	N					
	WOH																			
	WOH	16	12.0				-MARINE DEPOSITS-													
15		S4	15.0			ML	Soft, gray SILT (ML), frequent sand seams, mps = 0.02 in., trace clay, wet					20	80	L	N					
	WOH																			
	WOH																			
	WOH	24	17.0				-MARINE DEPOSITS-													
					18.5															
20		S5	20.0			CL	Soft, gray lean CLAY (CL), frequent sand partings to seams, mps = 0.02 in., wet					15	85	N	M	M				
	WOH																			
	WOH																			
	WOH	24	22.0				-MARINE DEPOSITS-													
25		S6	25.0			CL	Soft, gray lean CLAY (CL), frequent sand seams, mps = 0.2 in., wet	5	10	15	75	N	M	M						
	WOR																			
	WOR																			
	WOR																			
	WOH	12	27.0				-MARINE DEPOSITS-													
30																				

Water Level Data				Sample ID		Well Diagram		Summary		
Date	Time	Elapsed Time (hr.)	Depth in feet to:			O	<input type="checkbox"/>	Riser Pipe	Overburden (Linear ft.)	32.0
			Bottom of Casing	Bottom of Hole	Water					
6/20/2005	1212		Caved	9.8	7.0	U	<input type="checkbox"/>	Filter Sand	Number of Samples	75
						S	<input type="checkbox"/>	Cuttings	BORING NO. B1	
						G	<input type="checkbox"/>	Grout		
						FV	<input type="checkbox"/>	Concrete		
							<input type="checkbox"/>	Bentonite Seal		

Field Tests Dilatancy: R - Rapid S - Slow N - None Plasticity: N - Nonplastic L - Low M - Medium H - High
Toughness: L - Low M - Medium H - High Dry Strength: N - None L - Low M - Medium H - High V - Very High

*NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.
NOTE: Soil identifications based on visual-manual methods of the USCS system as practiced by Sebago Technics, Inc.

TEST BORING REPORT

Depth (ft.)	Sampler Blows per 6 in.	Sample No. & Recovery (in.)	Sample Depth (ft.)	Well Diagram	Stratum Change (ft.)	USCS Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, maximum particle size*, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel		Sand			Field Test				
								% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength
30	WOR i	S7	30.0			CL	Soft, gray lean CLAY (CL), frequent fine sand seams, mps = 0.1 in., wet				5	15	80	N	M	M	
	WOH j	24	32.0				-MARINE DEPOSITS-										
Bottom of exploration at 32.0 ft. below ground surface																	
No refusal																	
35																	
40																	
45																	
50																	
55																	
60																	
65																	
70																	

TEST BORING REPORT

PROJECT: VILLAGE CAFE REDEVELOPMENT
 LOCATION: NEWBURY STREET, PORTLAND, MAINE
 CLIENT: GPI ACQUISITIONS I, LLC
 CONTRACTOR: MAINE TEST BORINGS, INC.
 DRILLER: B. ENOS

STI JOB NO.: 05109
 PROJECT MGR.: C. DIMATTEO
 FIELD REP.: K. B. STEPHENSON
 DATE STARTED: 6/20/2005
 DATE FINISHED: 6/20/2005

Elevation	35.6	ft	Datum	Boring Location	See Plan
Item	Casing	Sampler	Core Barrel	Rig Make & Model	Mobil B53
Type	HSA	SS	--	<input checked="" type="checkbox"/> Truck <input type="checkbox"/> Tripod	<input checked="" type="checkbox"/> Cat-Head
Inside Diameter (in.)	2.5	1.375	--	<input type="checkbox"/> ATV <input type="checkbox"/> Geoprobe	<input checked="" type="checkbox"/> Winch
Hammer Weight (lb.)	--	140	--	<input type="checkbox"/> Track <input type="checkbox"/> Air Track	<input type="checkbox"/> Roller Bit
Hammer Fall (in.)	--	30	--	<input type="checkbox"/> Skid <input type="checkbox"/>	<input checked="" type="checkbox"/> Cutting Head
Hammer Type: <input checked="" type="checkbox"/> Safety <input type="checkbox"/> Bentonite					
Drilling Mud: <input type="checkbox"/> Doughnut <input type="checkbox"/> Polymer					
Automatic: <input type="checkbox"/> None					
Casing Advance: HSA/SPIN/30.0					
Type Method Depth					
Drilling Notes: 2.0 x 7.0 in. Field Vane					

Depth (ft.)	Sampler Blows per 6 in.	Sample No. & Recovery (in.)	Sample Depth (ft.)	Well Diagram	Stratum Change (ft.)	USCS Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, maximum particle size*, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel					Sand					Field Test		
								% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength			
0					0.2		-BITUMINOUS CONCRETE-													
	3	S1	0.3		0.8	SW	Loose, brown well-graded SAND (SW), mps = 0.2 in., dry			30	40	25	5							
	2						-FILL-													
	2	15	2.3			SM	Loose, dark brown silty SAND (SM), mps = 0.2 in., traces brick, glass, ash, damp			20	15	50	15							
					4.0		-FILL-													
5	2	S2	5.0			CL	Stiff, gray-brown mottled lean CLAY (CL), damp							100	N	M	M			
	4																			
	6																			
	7	24	7.0																	
							-MARINE DEPOSITS-													
					8.5															
10	WOH	S3	10.0			CL	Soft, gray lean CLAY (CL), occasional sand seams, mps = 0.02 in., wet					5	95	N	M	M				
	WOH																			
	2	24	12.0																	
							-MARINE DEPOSITS-													
15	WOR	FV1	15.0-15.6			CL	FV1 from 15.0 to 15.6 ft. = 7/3 ft. lb., Su = 260 psf													
	WOH	S4	15.0			CL	Soft, gray CLAY (CL), occasional sand partings, mps = 0.02 in., wet					5	95	N	M	M				
	WOH																			
	2	24	17.0																	
							-MARINE DEPOSITS-													
20	WOR	S5	20.0			CL	Soft, gray lean CLAY (CL), frequent sand seams, mps = 0.02 in., wet					10	90	N	M	M				
	WOR				21.0															
	WOH					SM	Very loose, gray silty SAND (SM), frequent clay seams, mps = 0.02 in., wet					80	20							
	WOH	24	22.0																	
							-MARINE DEPOSITS-													
25	WOR	S6	25.0			SP	Very loose, gray poorly-graded SAND (SP), occasional silt seams, mps = 0.02 in., wet							95	5					
	1																			
	WOH																			
	5	10	27.0		26.9															
							-MARINE DEPOSITS-													
							-GLACIAL TILL DEPOSITS-													

Water Level Data				Sample ID		Well Diagram		Summary	
Date	Time	Elapsed Time (hr.)	Depth in feet to:			O Open End Rod T Thin Wall Tube U Undisturbed Sample S Split Spoon Sample G Geoprobe FV Field Vane	<input type="checkbox"/> Riser Pipe <input type="checkbox"/> Screen <input type="checkbox"/> Filter Sand <input type="checkbox"/> Cuttings <input type="checkbox"/> Grout <input type="checkbox"/> Concrete <input type="checkbox"/> Bentonite Seal	Overburden (Linear ft.)	30.1
			Bottom of Casing	Bottom of Hole	Water			Rock Cored (Linear ft.)	--
6/21/2005	0840		Caved	19.0	11.3			Number of Samples	7S
								BORING NO.	B2
Field Tests		Dilatancy: R - Rapid S - Slow N - None			Plasticity: N - Nonplastic L - Low M - Medium H - High				
		Toughness: L - Low M - Medium H - High			Dry Strength: N - None L - Low M - Medium H - High V - Very High				
*NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.									
NOTE: Soil identifications based on visual-manual methods of the USCS system as practiced by Sebago Technics, Inc.									

TEST BORING REPORT

Depth (ft.)	Sampler Blows per 6 in.	Sample No. & Recovery (in.)	Sample Depth (ft.)	Well Diagram	Stratum Change (ft.)	USCS Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, maximum particle size*, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel		Sand			Field Test						
								% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength		
30	S07.1	S7 2	30.0 30.1		30.1	SM	Very dense, gray silty SAND (SM), mps = 1.0 in., wet -GLACIAL TILL DEPOSITS-	5		10	10	60	15						
							Split spoon refusal at 30.1 ft. on probable bedrock Bottom of exploration at 30.1 ft. below ground surface												
35																			
40																			
45																			
50																			
55																			
60																			
65																			
70																			

NOTES:

FILE NO.

05109

BORING NO.

B2

*NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.

NOTE: Soil identifications based on visual-manual methods of the USCS system as practiced by Sebago Technics, Inc.

TEST BORING REPORT

PROJECT	VILLAGE CAFÉ REDEVELOPMENT	STI JOB NO.	05109
LOCATION	NEWBURY STREET, PORTLAND, MAINE	PROJECT MGR.	C. DIMATTEO
CLIENT	GFI ACQUISITIONS I, LLC	FIELD REP.	K. B. STEPHENSON
CONTRACTOR	MAINE TEST BORINGS, INC.	DATE STARTED	6/21/2005
DRILLER	B. ENOS	DATE FINISHED	6/21/2005

Elevation	28.8	ft.	Datum	Boring Location	See Plan
Item	Casing	Sampler	Core Barrel	Rig Make & Model	Mobil B53
Type	HSA	SS	--	<input checked="" type="checkbox"/> Truck <input type="checkbox"/> Tripod	<input type="checkbox"/> Cat-Head
Inside Diameter (in.)	2.5	1.375	--	<input type="checkbox"/> ATV <input type="checkbox"/> Geoprobe	<input checked="" type="checkbox"/> Winch
Hammer Weight (lb.)	--	140	--	<input type="checkbox"/> Track <input type="checkbox"/> Air Track	<input type="checkbox"/> Roller Bit
Hammer Fall (in.)	--	30	--	<input type="checkbox"/> Skid <input type="checkbox"/>	<input checked="" type="checkbox"/> Cutting Head
Hammer Type					
<input checked="" type="checkbox"/> Safety <input type="checkbox"/> Bentonite					
<input type="checkbox"/> Doughnut <input type="checkbox"/> Polymer					
<input type="checkbox"/> Automatic <input checked="" type="checkbox"/> None					
Drilling Notes: 2.0 x 7.0 Field Vane					
Casing Advance					
Type Method Depth					
HSA/SPIN/30.0					

Depth (ft.)	Sampler Blows per 6 in.	Sample No. & Recovery (in.)	Sample Depth (ft.)	Well Diagram	Stratum Change (ft.)	USCS Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, maximum particle size*, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel					Sand			Field Test					
								% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength				
0					0.2		-BITUMINOUS CONCRETE-														
13		S1	0.3		0.7	SW	Dense, brown well-graded SAND with gravel (SW), mps = 1.3 in., dry	10	5	30	30	20	5								
18					1.0		-FILL-														
15							Dense, red BRICK, dry														
12		S4	2.3		3.3	SM	Dense, black silty SAND (SM), mps = 0.3 in., traces ash, brick, dry	5	20	20	40	15									
							-FILL-														
							Note: 7 in. cobble at approximately 1.0 ft. Brown silty sand in auger cuttings from 1.5 to 3.3 ft.														
5		S2	5.0			CL	Stiff, gray lean CLAY (CL), mps = 0.02 in., damp					5	95	N	M	M					
							-MARINE DEPOSITS-														
10		S3	10.0			CL	Medium stiff, gray lean CLAY (CL), frequent sand partings, mps = 0.02 in., wet					5	95	N	M	M					
							-MARINE DEPOSITS-														
15		FV1	15.0-15.6				FV1 from 15.0 to 15.6 ft. = 177 lb., Su = 630 psi														
		S4	15.0			CL	Medium stiff, gray lean CLAY (CL), frequent sand partings to seams, mps = 0.02 in., wet					10	90	N	M	M					
							-MARINE DEPOSITS-														
20		S5	20.0			CL	Medium stiff, gray lean CLAY (CL), frequent sand seams, three 0.25 in. dropstones at 21.2 ft., wet					15	85	N	M	M					
					21.5		-MARINE DEPOSITS-														
		S6	22.0			SP	Very loose, gray poorly-graded SAND (SP), mps = 0.02 in., wet					100									
							-MARINE DEPOSITS-														
25		S6	25.0			SM	Loose, gray silty SAND (SM), frequent silt seams, mps = 0.1 in., wet					5	80	15							
					26.0		-MARINE DEPOSITS-														
						SM	Loose, gray silty SAND with gravel (SM), mps = 1.3 in., wet	5	10	25	20	25	15								
							-GLACIAL TILL-														
30																					

Water Level Data			Sample ID			Well Diagram			Summary													
Date	Time	Elapsed Time (hr.)	Depth in feet to:			O	T	U	S	G	FV	Riser Pipe	Screen	Filter Sand	Cuttings	Grout	Concrete	Bentonite Seal	Overburden (Linear ft.)	Rock Cored (Linear ft.)	Number of Samples	
			Bottom of Casing	Bottom of Hole	Water																	BORING NO.
6/21/2005	7047		Caved	19.8	10.9														32.0	--	75	
																			BORING NO.	B3		

Field Tests
Dilatancy: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

*NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.
NOTE: Soil identifications based on visual-manual methods of the USCS system as practiced by Sebago Technics, Inc.

Depth (ft.)	Sampler Blows per 6 in.	Sample No. & Recovery (in.)	Sample Depth (ft.)	Well Diagram	Stratum Change (ft.)	USCS Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, maximum particle size*, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel		Sand			Field Test					
								% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength	
30	5	S7	30.0			SM	Medium dense, gray silty SAND with gravel (SM), mps = 1.2 in., wet	10	10	30	20	15	15					
	7																	
	5																	
	8	24	32.0				-GLACIAL TILL DEPOSITS-											
							Bottom of exploration at 32.0 ft. below ground surface No refusal											
35																		
40																		
45																		
50																		
55																		
60																		
65																		
70																		

NOTES:

FILE NO.

05109

BORING NO.

B3

*NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.

NOTE: Soil identifications based on visual-manual methods of the USCS system as practiced by Sebago Technics, Inc.

PROJECT: VILLAGE CAFE REDEVELOPMENT
 LOCATION: NEWBURY STREET, PORTLAND, MAINE
 CLIENT: GFI ACQUISITIONS I, LLC
 CONTRACTOR: MAINE TEST BORINGS, INC.
 DRILLER: B. ENOS

STI JOB NO. 05109
 PROJECT MGR. C. DIMATTEO
 FIELD REP. K. B. STEPHENSON
 DATE STARTED 6/20/2005
 DATE FINISHED 6/20/2005

Elevation	39.9	ft.	Datum	Boring Location	See Plan
Item	Casing	Sampler	Core Barrel	Rig Make & Model	Mobil B53
Type	HSA	SS	--	<input checked="" type="checkbox"/> Truck <input type="checkbox"/> Tripod	<input checked="" type="checkbox"/> Cat-Head
Inside Diameter (in.)	2.5	1.375	--	<input type="checkbox"/> ATV <input type="checkbox"/> Geoprobe	<input type="checkbox"/> Winch
Hammer Weight (lb.)	--	140	--	<input type="checkbox"/> Track <input type="checkbox"/> Air Track	<input type="checkbox"/> Roller Bit
Hammer Fall (in.)	--	30	--	<input type="checkbox"/> Skid <input type="checkbox"/>	<input checked="" type="checkbox"/> Cutting Head
Hammer Type: <input checked="" type="checkbox"/> Safety <input type="checkbox"/> Doughnut <input type="checkbox"/> Automatic					
Drilling Mud: <input type="checkbox"/> Bentonite <input type="checkbox"/> Polymer <input checked="" type="checkbox"/> None					
Casing Advance: HSA/SPIN/30.0					
Drilling Notes: 2.0 x 7.0 in. Field Vane					

Depth (ft.)	Sampler Blows per 6 in.	Sample No. & Recovery (in.)	Sample Depth (ft.)	Well Diagram	Stratum Change (ft.)	USCS Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, maximum particle size, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel					Sand					Field Test		
								% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength			
0	9	S1	0.0		0.4	SM	Very dense, brown silty SAND with gravel (SM), mps = 1.2 in., dry	10	5	30	20	20	15							
	50/4	8	0.9		0.6	SM	Very dense, brown silty SAND with gravel (SM), mps = 1.0 in., damp	10	5	30	20	20	15							
					3.0		-FILL-													
							Note: brown silty sand in auger cuttings at 3.0 ft.													
5	2	S2	5.0		6.0	SM	Loose, brown silty SAND (SM), mps = 0.02 in., wet						85	15						
	2				6.6	CL	MARINE DEPOSITS-													
	3	20	7.0		6.6	CL	Medium stiff, gray-brown mottled lean CLAY (CL), mps = 0.02 in., damp					5	95	N	M	M				
	3					CL	Medium stiff, gray lean CLAY (CL), mps = 0.02 in., wet					5	95	N	M	M				
10	WOR	FV1	10.0-10.6				FV1 from 10.0 to 10.6 ft. = 15/7 ft. lb., Su = 560 psf													
	WOH	S3	10.0			CL	Medium stiff, gray lean CLAY (CL), occasional sand partings, frequent black streaks, mps = 0.02 in., wet					5	95	N	M	M				
	WOH																			
	2	24	12.0																	
							-MARINE DEPOSITS-													
15	WOR	S4	15.0			CL	Medium stiff, gray lean CLAY (CL), frequent sand partings and black streaks, mps = 0.02 in., wet					5	95	N	M	M				
	WOH																			
	WOH																			
	2	24	17.0																	
							-MARINE DEPOSITS-													
20	2	S5	20.0		20.4	CL	Note: attempted field vane at 20.0 ft. - could not advance vane Medium stiff, gray lean CLAY (CL), frequent sand partings and black streaks, mps = 0.02 in., wet					5	95	N	M	M				
	1					CL	Medium stiff, gray lean CLAY (CL), frequent sand seams, mps = 0.02 in., wet					15	85	N	M	M				
	1	24	22.0																	
					24.0		-MARINE DEPOSITS-													
25	WOR	FV2	25.0-25.6				FV2 from 25.0 to 25.6 ft. = 27/10 ft. lb., Su = 1,000 psf													
	WOH	S6	25.0			SM	Very loose, gray silty SAND (SM), frequent clay seams, mps = 0.02 in., wet					80	20							
	WOH																			
	10	27.0																		
							-MARINE DEPOSITS-													

Water Level Data			Sample ID			Well Diagram			Summary												
Date	Time	Elapsed Time (hr.)	Depth in feet to:			O	T	U	S	G	FV	<input type="checkbox"/> Riser Pipe	<input type="checkbox"/> Screen	<input type="checkbox"/> Filter Sand	<input type="checkbox"/> Cuttings	<input type="checkbox"/> Grout	<input type="checkbox"/> Concrete	<input type="checkbox"/> Bentonite Seal	Overburden (Linear ft.)	Rock Cored (Linear ft.)	Number of Samples
			Bottom of Casing	Bottom of Hole	Water																
6/20/2005	1627		Caved	12.0	10.0														30.7	--	75
BORING NO. B4																					
Field Tests			Dilatancy: R - Rapid S - Slow N - None			Plasticity: N - Nonplastic L - Low M - Medium H - High			Toughness: L - Low M - Medium H - High			Dry Strength: N - None L - Low M - Medium H - High V - Very High									
*NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.																					
NOTE: Soil identifications based on visual-manual methods of the USCS system as practiced by Sebago Technics, Inc.																					

TEST BORING REPORT

Depth (ft.)	Sampler Blows per 6 in.	Sample No. & Recovery (in.)	Sample Depth (ft.)	Well Diagram	Stratum Change (ft.)	USCS Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, maximum particle size*, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel		Sand			Field Test				
								% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength
30	3 50.2	S7 8	30.0 30.7		30.0 30.7	SM	Very dense, gray silty SAND with gravel (SM), mps = 1.0 in., wet -GLACIAL TILL DEPOSITS-	5	10	20	10	40	15				
							Split spoon refusal at 30.7 ft. on probable bedrock Bottom of exploration at 30.7 ft. below ground surface										
35																	
40																	
45																	
50																	
55																	
60																	
65																	
70																	

PROJECT	VILLAGE CAFE REDEVELOPMENT	STI JOB NO.	05109
LOCATION	NEWBURY STREET, PORTLAND, MAINE	PROJECT MGR.	C. DIMATTEO
CLIENT	GFI ACQUISITIONS I, LLC	FIELD REP.	K. B. STEPHENSON
CONTRACTOR	MAINE TEST BORINGS, INC.	DATE STARTED	6/20/2005
DRILLER	B. ENOS	DATE FINISHED	6/20/2005

Elevation	47.5	ft.	Datum		Boring Location	See Plan		
Item	Casing	Sampler	Core Barrel	Rig Make & Model	Mobil B53	Hammer Type	Drilling Mud	Casing Advance
Type	HSA	SS	--	<input checked="" type="checkbox"/> Truck <input type="checkbox"/> ATV	<input type="checkbox"/> Tripod <input type="checkbox"/> Geoprobe	<input checked="" type="checkbox"/> Cat-Head <input checked="" type="checkbox"/> Winch	<input checked="" type="checkbox"/> Safety <input type="checkbox"/> Doughnut	<input type="checkbox"/> Bentonite <input type="checkbox"/> Polymer
Inside Diameter (in.)	2.5	1.375	--	<input type="checkbox"/> Track <input type="checkbox"/> Skid	<input type="checkbox"/> Air Track	<input type="checkbox"/> Roller Bit <input checked="" type="checkbox"/> Cutting Head	<input type="checkbox"/> Automatic <input checked="" type="checkbox"/> None	Type Method Depth HSA/SPIN/30.0
Hammer Weight (lb.)	--	140						
Hammer Fall (in.)	--	30						

Depth (ft.)	Sampler Blows per 6 in.	Sample No. & Recovery (in.)	Sample Depth (ft.)	Well Diagram	Stratum Change (ft.)	USCS Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, maximum particle size*, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel		Sand			Field Test				
								% Coarse	% Fine	% Coarse	% Medium	% Fine	% Finest	Dilatancy	Toughness	Plasticity	Strength
0					0.15		-BITUMINOUS CONCRETE-										
	3	S1	0.3			SW	Loose, brown well-graded SAND with gravel (SM), mps = 1.2 in., damp	5	10	20	20	45					
	3																
	5				1.3		-FILL-										
	8	14	2.3			SP	Loose, brown poorly-graded SAND (SP), mps = 0.02 in., rusty discolorations, damp						95	5			
							-MARINE DEPOSITS-										
5																	
	4	S2	5.0		5.5	SP-SM	Very loose, brown poorly-graded SAND with silt (SP-SM), mps = 0.02 in., wet						90	10			
	1																
	1					SM	Very loose, gray silty SAND (SM), mps = 0.02 in., occasional silt seams, wet						85	15			
	2	15	7.0				-MARINE DEPOSITS-										
					8.5												
10																	
	WOH	S3	10.0			CL	Medium stiff, gray lean CLAY (CL), occasional black streaks and sand seams, mps = 0.02 in., wet						10	90	N	M	M
	WOH																
	WOH																
	1	24	12.0				-MARINE DEPOSITS-										
15																	
	WOR	FV1	15.0-15.6				FV1 from 15.0 to 15.6 ft. = 20/10 ft. lb., Su = 740 psf										
	WOH	S4	15.0			CL	Medium stiff, gray lean CLAY (CL), frequent sand seams, mps = 0.02 in., wet						10	90	N	M	M
	WOH																
	2	24	17.0				-MARINE DEPOSITS-										
20																	
	WOH	S5	20.0			CL	Medium stiff, gray lean CLAY (CL), frequent sand seams, mps = 0.02 in., wet						15	85	N	M	M
	WOH																
	WOH																
	1	24	22.0				-MARINE DEPOSITS-										
					23.0												
25																	
	WOR	S6	25.0			SP	Very loose, gray poorly-graded SAND (SP), occasional silt seams, mps = 0.1 in., wet						5	85	10		
	1																
	1																
	1	18	27.0				-MARINE DEPOSITS-										
					29.0												
30							-GLACIAL TILL DEPOSITS-										

Water Level Data			Sample ID			Well Diagram			Summary							
Date	Time	Elapsed Time (hr.)	Depth in feet to:			O	D	U	S	G	FV	<input type="checkbox"/> Riser Pipe <input type="checkbox"/> Screen <input type="checkbox"/> Filter Sand <input checked="" type="checkbox"/> Cuttings <input type="checkbox"/> Grout <input type="checkbox"/> Concrete <input checked="" type="checkbox"/> Bentonite Seal	Overburden (Linear ft.)	Rock Cored (Linear ft.)	Number of Samples	
			Bottom of Casing	Bottom of Hole	Water											32.0
6/20/2005	1820		Caved	17.0	11.3											
													BORING NO.	B5		

Field Tests Dilatancy: R - Rapid S - Slow N - None Plasticity: N - Nonplastic L - Low M - Medium H - High
 Toughness: L - Low M - Medium H - High Dry Strength: N - None L - Low M - Medium H - High V - Very High

*NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.
 NOTE: Soil identifications based on visual-manual methods of the USCS system as practiced by Sebago Technics, Inc.

Depth (ft.)	Sampler Blows per 6 in.	Sample No. & Recovery (in.)	Sample Depth (ft.)	Well Diagram	Stratum Change (ft.)	USCS Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, maximum particle size*, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel		Sand			Field Test				
								% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Penetrate	Strength
30	1	S7	30.0			SM	Very loose, gray silty SAND with gravel (SM), mps = 1.0 in., wet	5	10	20	20	30	15				
	1 WOH	24	32.0				-GLACIAL TILL DEPOSITS-										
							Bottom of exploration at 32.0 ft. below ground surface No refusal										
35																	
40																	
45																	
50																	
55																	
60																	
65																	
70																	

NOTES:

FILE NO.

05109

BORING NO.

B5

*NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.

NOTE: Soil Identifications based on visual-manual methods of the USCS system as practiced by Sebago Technics, Inc.

PROJECT	VILLAGE CAFE REDEVELOPMENT	STI JOB NO.	05109
LOCATION	NEWBURY STREET, PORTLAND, MAINE	PROJECT MGR.	C. DIMATTEO
CLIENT	GFI ACQUISITIONS I, LLC	FIELD REP.	K. B. STEPHENSON
CONTRACTOR	MAINE TEST BORINGS, INC.	DATE STARTED	6/20/2005
DRILLER	B. ENOS	DATE FINISHED	6/20/2005

Elevation	42.2	ft.	Datum	Boring Location	See Plan
Item	Casing	Sampler	Core Barrel	Rig Make & Model	See Plan
Type	HSA	SS	--	<input checked="" type="checkbox"/> Truck <input type="checkbox"/> Tripod	Mobil B53
Inside Diameter (in.)	2.5	1.375	--	<input type="checkbox"/> ATV <input type="checkbox"/> Geoprobe	<input checked="" type="checkbox"/> Cat-Head <input type="checkbox"/> Winch
Hammer Weight (lb.)	--	140		<input type="checkbox"/> Track <input type="checkbox"/> Air Track	<input type="checkbox"/> Doughnut <input type="checkbox"/> Polymer
Hammer Fall (in.)	--	30		<input type="checkbox"/> Skid <input type="checkbox"/>	<input type="checkbox"/> Automatic <input checked="" type="checkbox"/> None
Drilling Notes: 2.0 x 7.0 in. Field Vane					

Depth (ft.)	Sampler Blows per 6 in.	Sample No. & Recovery (in.)	Sample Depth (ft.)	Well Diagram	Stratum Change (ft.)	USCS Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, maximum particle size, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel		Sand		Field Test							
								% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength		
0					0.25		CONCRETE.												
	2	S1	0.5		0.8	SW	Loose, brown well-graded SAND (SM), mps = 0.2 in., wet -FILL-			20	40	40							
	5					SW-SM	Loose, gray to black well-graded SAND with silt and gravel (SW-SM), mps = 1.3 in., wet -FILL-	10	10	20	20	30	10						
	4				1.3														
	5	10	2.5			SM	Loose, gray-brown silty SAND (SM), mps = 0.02 in., damp					85	15						
					3.5		-MARINE DEPOSITS-												
5	WOH	S2	5.0			ML	Soft, gray SILT (ML), occasional sand partings, mps = 0.02 in., wet					10	90	L	N				
	WOH																		
	WOH	24	7.0																
							-MARINE DEPOSITS-												
10	WOH	FV1	10.0-10.6			ML	FV1 from 10.0 to 10.6 ft. = 23/8 ft. lb., Su = 850 psf					15	85	L	N				
	WOH	S3	10.0				Medium stiff, gray SILT (ML), frequent sand seams, mps = 0.02 in., wet												
	WOH																		
	WOH	24	12.0																
					13.5		-MARINE DEPOSITS-												
15	WOH	S4	15.0			CL	Medium stiff, gray lean CLAY (CL), frequent sand layers, 0.75 in. drop-stone at 16.5 ft., wet					40	60	N	M	M			
	WOH																		
	WOH	24	17.0																
					19.0		-MARINE DEPOSITS-												
20	WOH	FV2	20.0-20.6			SM	FV2 from 20.0 to 20.6 ft. = 30/10 ft. lb., Su = 1,110 psf					80	20						
	WOH	S5	20.0				Very loose, gray silty SAND (SM), occasional clay seams, mps = 0.02 in., wet												
	WOH				21.5	SP	Very loose, brown poorly-graded SAND (SP), mps = 0.1 in., wet				5	95							
	WOH	24	22.0																
							-MARINE DEPOSITS-												
25	WOH	S6	25.0			SP	Very loose, gray-brown poorly-graded SAND (SP), mps = 0.1 in., wet				10	90							
	WOH																		
	WOH	24	27.0			SM	Very loose, gray silty SAND (SM), mps = 1.2 in., wet	5	5	20	15	40	15						
					26.3														
					28.0		-GLACIAL TILL DEPOSITS-												
					29.2		-PROBABLE WEATHERED BEDROCK-												
30							HSA refusal on probable bedrock at 29.2 ft. Bottom of exploration at 29.2 ft. below ground surface												

Water Level Data			Sample ID			Well Diagram			Summary							
Date	Time	Elapsed Time (hr.)	Depth in feet to:			O	T	U	S	G	FV	<input type="checkbox"/> Riser Pipe <input type="checkbox"/> Screen <input type="checkbox"/> Filter Sand <input checked="" type="checkbox"/> Cuttings <input type="checkbox"/> Grout <input type="checkbox"/> Concrete <input checked="" type="checkbox"/> Bentonite Seal	Overburden (Linear ft.)	Rock Cored (Linear ft.)	Number of Samples	
			Bottom of Casing	Bottom of Hole	Water											28.0
6/20/2005	14:19		Caved	19.0	9.8											
													BORING NO.	B6		

Field Tests Dilatancy: R - Rapid S - Slow N - None Plasticity: N - Nonplastic L - Low M - Medium H - High
 Toughness: L - Low M - Medium H - High Dry Strength: N - None L - Low M - Medium H - High V - Very High

*NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.
 NOTE: Soil identifications based on visual-manual methods of the USCS system as practiced by Sebago Technics, Inc.

Appendix B

Logs of Final Design Borings

PROJECT: FINAL DESIGN INVESTIGATION, REDEVELOPMENT OF VILLAGE CAFÉ
 LOCATION: NEWBURY STREET, PORTLAND, MAINE
 CLIENT: GFI ACQUISITIONS I, LLC
 CONTRACTOR: MAINE TEST BORINGS, INC.
 DRILLER: R. IDANO
 STI JOB NO.: 05109
 PROJECT MGR.: C. DIMATTEO
 FIELD REP.: K. B. STEPHENSON
 DATE STARTED: 1/4/2006
 DATE FINISHED: 1/5/2006

Elevation	34.2	ft.	Datum	NGVD 1929	Boring Location	See Plan
Item	Casing	Sampler	Core Barrel	Rig Make & Model	Mobile B47	Hammer Type
Type	NW	SS	--	<input type="checkbox"/> Truck <input type="checkbox"/> Tripod	<input type="checkbox"/> Cat-Head	<input type="checkbox"/> Safety
Inside Diameter (in.)	4.0	1.375	--	<input type="checkbox"/> ATV <input type="checkbox"/> Geoprobe	<input checked="" type="checkbox"/> Winch	<input type="checkbox"/> Doughnut
Hammer Weight (lb.)	300	140	--	<input type="checkbox"/> Track <input type="checkbox"/> Air Track	<input type="checkbox"/> Roller Bit	<input type="checkbox"/> Automatic
Hammer Fall (in.)	16	30	--	<input type="checkbox"/> Skid <input checked="" type="checkbox"/> Trailer	<input checked="" type="checkbox"/> Cutting Head	<input checked="" type="checkbox"/> None
Drilling Notes: 2.0 x 7.0 Field Vane						
Type Method Depth NW/DRIVEN/30.0						

Depth (ft.)	Sampler Blows per 6 in.	Sample No. & Recovery (in.)	Sample Depth (ft.)	Well Diagram	Stratum Change (ft.)	USCS Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, maximum particle size*, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel					Sand					Field Test		
								% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength			
0					0.2		-BITUMINOUS CONCRETE-													
		S1	1.0			SM	Note: augered to 1.1 ft. - probable boulder. Moved boring - augered to 1.0 ft. Dense, dark brown silty SAND (SM), mps = 1.0 in., dry	5	5	30	30	15	15							
					3.0		-FILL-													
					4.5		-MARINE DEPOSITS-													
5		NR	5.0				Note: gray-brown clay in wash at 3.0 ft. Note: gray clay in wash at 4.5 ft. No recovery													
					7.0		-MARINE DEPOSITS-													
10	HYDR. PUSH	U1	10.0			CL	Gray lean CLAY (CL)													
					12.0		-MARINE DEPOSITS-													
	WOR	FV1	12.0-12.6			CL	FV1 from 12.0 to 12.6 ft. = 9/1 ft. lb., Su = 330 psf													
	WOH	S2	12.0			CL	Soft, gray lean CLAY (CL), sand parting at 13.0 ft., mps = 0.02 in., occasional dark streaks, wet								100	N	M	M		
	WOH				14.0		-MARINE DEPOSITS-													
15	HYDR. PUSH	U2	15.0			CL	Gray lean CLAY (CL)													
					17.0		-MARINE DEPOSITS-													
	WOR	FV2	17.0-17.6			CL	FV2 from 17.0 to 17.6 ft. = 21/5 ft. lb., Su = 780 psf													
	WOR	S3	17.0			CL	Medium stiff, gray lean CLAY (CL), occasional sand partings, 1 in. dropstone at 17.2 ft., wet								5	95	N	M	M	
	WOH				19.0		-MARINE DEPOSITS-													
20	WOR	S4	20.0			CL	Medium stiff, gray lean CLAY (CL), frequent sand partings to seams, mps = 0.02 in., wet								15	85	N	M	M	
	WOH				22.0		-MARINE DEPOSITS-													
					23.7		-MARINE DEPOSITS-													
25	WOR	S5	25.0			SP	Medium dense, gray poorly-graded SAND (SP), mps = 0.02 in., wet								95	S				
	WOH				27.0		-MARINE DEPOSITS-													
					27.2		-MARINE DEPOSITS-													
30							-GLACIAL TILL DEPOSITS-													

Water Level Data						Sample ID		Well Diagram		Summary			
Date	Time	Elapsed Time (hr.)	Depth in feet to:			O	U	S	G	C	B		
			Bottom of Casing	Bottom of Hole	Water							Riser Pipe	Screen
1/5/2006	1200		30.0	30.5	8.5							30.5	--
1/5/2006	1223		--	25.8	7.2								65, 2U
BORING NO. B101													

Field Tests: Dilatancy: R - Rapid S - Slow N - None
 Toughness: L - Low M - Medium H - High
 Plasticity: N - Nonplastic L - Low M - Medium H - High
 Dry Strength: N - None L - Low M - Medium H - High V - Very High
 *NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.
 NOTE: Soil identifications based on visual-manual methods of the USCS system as practiced by Sebago Technics, Inc.

TEST BORING REPORT

Depth (ft.)	Sampler Blows per 6 in.	Sample No. & Recovery (In.)	Sample Depth (ft.)	Well Diagram	Stratum Change (ft.)	USCS Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, maximum particle size*, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel		Sand			Field Test				
								% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength
30	45	S6	30.0		30.5	SM	Dense, gray silty SAND (SM), mps = 0.2 in., wet -GLACIAL TILL DEPOSITS-			25	20	40	15				
	50/1	2	30.6		30.6			Very dense, dark gray weathered rock fragments-WEATHERED BEDROCK-									
							Split spoon refusal at 30.6 ft. Bottom of exploration at 30.6 ft. below ground surface										
35																	
40																	
45																	
50																	
55																	
60																	
65																	
70																	

NOTES:

FILE NO.

05109

BORING NO.

B101

*NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.

NOTE: Soil identifications based on visual-manual methods of the USCS system as practiced by Sebago Technics, Inc.

TEST BORING REPORT

PROJECT	FINAL DESIGN INVESTIGATION, REDEVELOPMENT OF VILLAGE CAFÉ	STI JOB NO.	05109
LOCATION	NEWBURY STREET, PORTLAND, MAINE	PROJECT MGR.	C. DIMATTEO
CLIENT	GFI ACQUISITIONS I, LLC	FIELD REP.	K. B. STEPHENSON
CONTRACTOR	MAINE TEST BORINGS, INC.	DATE STARTED	12/30/2005
DRILLER	M. PORTER/R. IDANO	DATE FINISHED	1/3/2006

Elevation	28.5	ft.	Datum	NGVD 1929	Boring Location	See Plan		
Item	Casing	Sampler	Core Barrel	Rig Make & Model	Mobile B47	Hammer Type	Drilling Mud	Casing Advance
Type	HSA	SS	--	<input type="checkbox"/> Truck	<input type="checkbox"/> Tripod	<input type="checkbox"/> Cat-Head	<input type="checkbox"/> Bentonite	Type Method Depth
Inside Diameter (in.)	3.375	1.375	--	<input type="checkbox"/> ATV	<input type="checkbox"/> Geoprobe	<input checked="" type="checkbox"/> Winch	<input type="checkbox"/> Polymer	HSA/SPIN/30.0
Hammer Weight (lb.)		140		<input type="checkbox"/> Track	<input type="checkbox"/> Air Track	<input type="checkbox"/> Roller Bit	<input checked="" type="checkbox"/> None	
Hammer Fall (in.)		30		<input type="checkbox"/> Skid	<input checked="" type="checkbox"/> Trailer	<input checked="" type="checkbox"/> Cutting Head		
Drilling Notes:							2.0 x 7.0 Field Vane	

Depth (ft.)	Sampler Blows per 6 in.	Sample No. & Recovery (in.)	Sample Depth (ft.)	Well Diagram	Stratum Change (ft.)	USCS Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, maximum particle size*, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel					Sand					Field Test		
								% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Platyness	Toughness	Plasticity	Strength			
0					0.2		-BITUMINOUS CONCRETE-													
	11	S1	0.5			SW	Very dense, brown well-graded SAND (SW), mps = 0.75 in., damp	5	10	30	30	20	5							
	12				0.7		-FILL-													
	44	8	2.0			SM	Very dense, gray-brown silty SAND (SM), ash, brick, mps = 1.3 in., wet	5	5	10	15	50	15							
							Note: probable cobbles from 2.0 to 4.0 ft.													
					4.0		-FILL-													
5	4	S2	5.0			SM	Loose, brown silty SAND (SM), frequent clay seams to layers, mps = 0.2 in., wet		5	5		65	25							
	4																			
	6																			
	8	24	7.0			CL	-MARINE DEPOSITS- Stiff, gray-brown lean CLAY (CL), wet								100	N	M	M		
							-MARINE DEPOSITS-													
10	WOR	FV1	10.0-10.6				FV1 from 10.0 to 10.6 ft. = 12/2 ft. lb., Su = 440 psf													
	WOH	S3	10.0			CL	Soft, gray lean CLAY (CL), frequent sand partings, occasional black streaks, mps = 0.02 in., wet					5	95	N	M	M				
	WOH																			
	WOH	24	12.0				-MARINE DEPOSITS-													
15	WOR	S4	15.0			CL	Soft, gray lean CLAY (CL), frequent sand partings, mps = 0.02 in., wet					5	95	N	M	M				
	WOR																			
	WOH	24	17.0				-MARINE DEPOSITS-													
	WOH																			
20	WOR	FV2	20.0-20.6				FV2 from 20.0 to 20.6 ft. = 18/2 ft. lb., Su = 670 psf													
	WOR	S5	20.0			CL	Medium stiff, gray lean CLAY (CL), frequent sand seams to layers, mps = 0.02 in., wet					20	80	N	M	M				
	7				21.5															
	6	24	22.0			SP	Loose, gray poorly-graded SAND (SP), mps = 0.02 in., wet					95	5							
							-MARINE DEPOSITS-													
25	1	S6	25.0			SP	Very loose, gray poorly-graded SAND (SP), mps = 0.02 in., occasional silt laminae, wet					95	5							
	WOH																			
	3																			
	7	24	27.0				-MARINE DEPOSITS-													
30																				

Water Level Data			Sample ID			Well Diagram		Summary													
Date	Time	Elapsed Time (hr.)	Depth in feet to:			O	U	S	G	FV	Riser Pipe	Screen	Filter Sand	Cuttings	Grout	Concrete	Bentonite Seal	Overburden (Linear ft.)	Rock Cored (Linear ft.)	Number of Samples	
			Bottom of Casing	Bottom of Hole	Water																
1/3/2006	1115		30.0	26.0	18.5													32.0	--		
1/19/2006			Well	20.0	2.6															7S	
											BORING NO.		B102								
Field Tests		Dilatancy: R - Rapid S - Slow N - None					Plasticity: N - Nonplastic L - Low M - Medium H - High					Dry Strength: N - None L - Low M - Medium H - High V - Very High									
*NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.																					
NOTE: Soil identifications based on visual-manual methods of the USCS system as practiced by Sebago Technics, Inc.																					

Depth (ft.)	Sampler Blows per 6 in.	Sample No. & Recovery (in.)	Sample Depth (ft.)	Well Diagram	Stratum Change (ft.)	USCS Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, maximum particle size*, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel		Sand			Field Test					
								% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength	
30	14 5	S7	30.0		30.4	SP	Medium dense, gray poorly-graded SAND (SP), mps = 0.02 in., wet -MARINE DEPOSITS-					100						
	14 31	24	32.0			SM	Medium dense, gray silty SAND with gravel (SM), mps = 1.2 in., wet -GLACIAL TILL DEPOSITS-	5	10	10	10	50	15					
							Bottom of exploration at 32.0 ft. below ground surface No refusal											
							Note: Installed 1.0 in. PVC observation well at 20.0 ft.											
35																		
40																		
45																		
50																		
55																		
60																		
65																		
70																		

NOTES:

FILE NO.

05109

BORING NO.

B102

*NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.

NOTE: Soil identifications based on visual-manual methods of the USCS system as practiced by Sebago Technics, Inc.

TEST BORING REPORT

PROJECT: FINAL DESIGN INVESTIGATION, REDEVELOPMENT OF VILLAGE CAFE
LOCATION: NEWBURY STREET, PORTLAND, MAINE
CLIENT: GFI ACQUISITIONS I, LLC
CONTRACTOR: MAINE TEST BORINGS, INC.
DRILLER: M. PORTER

STI JOB NO. 05109
PROJECT MGR. C. DIMATTEO
FIELD REP. K. B. STEPHENSON
DATE STARTED 12/30/2005
DATE FINISHED 12/30/2005

Table with columns: Elevation, Datum, Boring Location, Rig Make & Model, Hammer Type, Drilling Mud, Casing Advance. Includes details for Mobile B47 rig and drilling parameters.

Main data table with columns: Depth (ft.), Sampler No. & Recovery, Sample Depth (ft.), Well Diagram, Stratum Change (ft.), USCS Symbol, Visual-Manual Identification & Description, Gravel, Sand, Field Test. Contains soil log data from 0 to 30 feet depth.

Summary table with columns: Date, Time, Elapsed Time, Depth in feet to (Bottom of Casing, Bottom of Hole, Water), Sample ID, Well Diagram, Summary. Includes field tests and boring number B103.

Field Tests: Dilatancy: R - Rapid S - Slow N - None; Plasticity: N - Nonplastic L - Low M - Medium H - High; Toughness: L - Low M - Medium H - High; Dry Strength: N - None L - Low M - Medium H - High V - Very High
*NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.
NOTE: Soil identifications based on visual-manual methods of the USCS system as practiced by Sebago Technics, Inc.

TEST BORING REPORT

PROJECT	FINAL DESIGN INVESTIGATION, REDEVELOPMENT OF VILLAGE CAFÉ	STI JOB NO.	05109
LOCATION	NEWBURY STREET, PORTLAND, MAINE	PROJECT MGR.	C. DIMATTEO
CLIENT	GFI ACQUISITIONS I, LLC	FIELD REP.	K. B. STEPHENSON
CONTRACTOR	MAINE TEST BORINGS, INC.	DATE STARTED	12/29/2005
DRILLER	M. PORTER	DATE FINISHED	12/29/2005

Elevation	29.0	ft.	Datum	NGVD 1929	Boring Location	See Plan	Hammer Type	Drilling Mud	Casing Advance
Item	Casing	Sampler	Core Barrel	Rig Make & Model	Mobile B47	Hammer Type	Drilling Mud	Casing Advance	Type Method Depth
Type	HSA	SS	--	<input type="checkbox"/> Truck <input type="checkbox"/> Tripod	<input type="checkbox"/> Cat-Head	<input type="checkbox"/> Safety	<input type="checkbox"/> Bentonite		
Inside Diameter (in.)	3.375	1.375	--	<input type="checkbox"/> ATV <input type="checkbox"/> Geoprobe	<input checked="" type="checkbox"/> Winch	<input checked="" type="checkbox"/> Doughnut	<input type="checkbox"/> Polymer		HSA/SPIN/40.0
Hammer Weight (lb.)	--	140	--	<input type="checkbox"/> Track <input type="checkbox"/> Air Track	<input type="checkbox"/> Roller Bit	<input type="checkbox"/> Automatic	<input checked="" type="checkbox"/> None		
Hammer Fall (in.)	--	30	--	<input type="checkbox"/> Skid <input checked="" type="checkbox"/> Trailer	<input checked="" type="checkbox"/> Cutting Head	Drilling Notes:			

Depth (ft.)	Sampler Blows per 6 in.	Sample No. & Recovery (in.)	Sample Depth (ft.)	Well Diagram	Stratum Change (ft.)	USCS Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, maximum particle size*, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel					Sand					Field Test		
								% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength			
0					0.2		-BITUMINOUS CONCRETE-													
5	5 12 75/4	S1 7	0.5 1.9			SW-SM	Very dense, brown well-graded SAND with silt and gravel (SW-SM), mps = 1.3 in., wet	10	10	30	30	10	10							
							-FILL-													
							Note: brick, 3 to 6 in. rock fragments from 1.9 to 5.0 ft.													
5	2 1	S2	5.0		5.2	SW-SM	Loose, brown well-graded SAND with silt and gravel (SW-SM), wet	10	10	30	30	10	10							
					6.0	SM	Loose, brown silty SAND (SM), frequent silt seams, wet-MARINE DEPOSITS							70	30					
					6.5	SM	Loose, gray silty SAND (SM), one 1 in. gravel piece, wet							10	65	20				
					7.0	SW-SM	Loose, brown well-graded SAND with silt and gravel (SW-SM), mps = 1.0 in., wet	10	10	30	30	10	10							
							-GLACIAL TILL DEPOSITS-													
10	1 2 9 16	S3	10.0 12.0			SM	Medium dense, gray-brown silty SAND (SM), one in. gravel piece, wet	50		10	10	15	15							
							-GLACIAL TILL DEPOSITS-													
15	1 1 2 1	S4	15.0 17.0			SM	Very loose, gray silty SAND with gravel (SM), mps = 1.3 in., wet	10	5	10	30	30	15							
							-GLACIAL TILL DEPOSITS-													
20	WOR WOH 4 3	S5	20.0 22.0			SM	Very loose, gray silty SAND (SM), mps = 0.2 in., wet			10	45	30	15							
							Note: probably pushed gravel													
							-GLACIAL TILL DEPOSITS-													
25	8 13 15 8	NR	25.0 27.0				No recovery													
							-GLACIAL TILL DEPOSITS-													
30																				

Water Level Data			Sample ID			Well Diagram		Summary	
Date	Time	Elapsed Time (hr.)	Depth in feet to:			O	Riser Pipe	Overburden (Linear ft.)	42.0
			Bottom of Casing	Bottom of Hole	Water				
12/29/2005	1515		--	9.4	7.8	U <td>Filter Sand <th>Number of Samples</th> <th>8S</th> </td>	Filter Sand <th>Number of Samples</th> <th>8S</th>	Number of Samples	8S
						S <td>Cuttings <td></td> <td></td> </td>	Cuttings <td></td> <td></td>		
						G <td>Grout <td></td> <td></td> </td>	Grout <td></td> <td></td>		
						FV <td>Concrete <td>BORING NO.</td> <td>B104</td> </td>	Concrete <td>BORING NO.</td> <td>B104</td>	BORING NO.	B104
							Bentonite Seal <td></td> <td></td>		

Field Tests Dilatancy: R - Rapid S - Slow N - None Plasticity: N - Nonplastic L - Low M - Medium H - High
 Toughness: L - Low M - Medium H - High Dry Strength: N - None L - Low M - Medium H - High V - Very High

*NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.

NOTE: Soil identifications based on visual-manual methods of the USCS system as practiced by Sebago Technics, Inc.

Depth (ft.)	Sampler Blows per 6 in.	Sample No. & Recovery (in.)	Sample Depth (ft.)	Well Diagram	Stratum Change (ft.)	USCS Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, maximum particle size, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel		Sand			Field Test				
								% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength
30	15	S6	30.0			SM	Dense, gray silty SAND with gravel (SM), mps = 1.3 in., slightly bonded, wet	15	10	30	20	10	15				
	23																
	33	12	32.0				-GLACIAL TILL DEPOSITS-										
35	18	S7	35.0			SM	Very dense, gray silty SAND with gravel (SM), mps = 1.3 in., slightly bonded, wet	15	10	30	20	10	15				
	30																
	36				36.9		Very dense, dark gray rock fragments, dry										
	27	9	37.0		38.0		Note: probable cobble -GLACIAL TILL DEPOSITS-										
40	86	S8	40.0			SW	Very dense, gray well-graded SAND (SW), mps = 0.2 in., wet			10	40	45	5				
	53																
	76						-GLACIAL TILL DEPOSITS-										
	87	12	42.0				Bottom of exploration at 42.0 ft. below ground surface No refusal										
45																	
50																	
55																	
60																	
65																	
70																	

NOTES:

FILE NO.

05109

BORING NO.

B104

*NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.

NOTE: Soil identifications based on visual-manual methods of the USCS system as practiced by Sebago Technics, Inc.

TEST BORING REPORT

PROJECT	FINAL DESIGN INVESTIGATION, REDEVELOPMENT OF VILLAGE CAFÉ	STI JOB NO.	05109
LOCATION	NEWBURY STREET, PORTLAND, MAINE	PROJECT MGR.	C. DIMATTEO
CLIENT	GFI ACQUISITIONS I, LLC	FIELD REP.	K. B. STEPHENSON
CONTRACTOR	MAINE TEST BORINGS, INC.	DATE STARTED	12/21/2005
DRILLER	R. IDANO	DATE FINISHED	12/22/2005

Elevation	44.1	ft.	Datum	NGVD 1929	Boring Location	See Plan		
Item	Casing	Sampler	Core Barrel	Rig Make & Model	Mobile B47	Hammer Type	Drilling Mud	Casing Advance
Type	HSA	SS	--	<input type="checkbox"/> Truck	<input type="checkbox"/> Tripod	<input type="checkbox"/> Cat-Head	<input type="checkbox"/> Bentonite	Type Method Depth
Inside Diameter (in.)	3.375	1.375	--	<input type="checkbox"/> ATV	<input type="checkbox"/> Geoprobe	<input checked="" type="checkbox"/> Winch	<input type="checkbox"/> Polymer	HSA/SPIN/40.0
Hammer Weight (lb.)	--	140	--	<input type="checkbox"/> Track	<input type="checkbox"/> Air Track	<input type="checkbox"/> Roller Bit	<input checked="" type="checkbox"/> None	
Hammer Fall (in.)	--	30	--	<input type="checkbox"/> Skid	<input checked="" type="checkbox"/> Trailer	<input checked="" type="checkbox"/> Cutting Head	Drilling Notes: 2.0 x 7.0 in. Field Vane	

Depth (ft.)	Sampler Blows per 6 in.	Sample No. & Recovery (in.)	Sample Depth (ft.)	Well Diagram	Stratum Change (ft.)	USCS Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, maximum particle size*, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel					Sand					Field Test			
								% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength				
0					6.2		-BITUMINOUS CONCRETE-														
	36	S1	0.5			SW-SM	Very dense, brown well-graded SAND with silt and gravel (SW-SM), mps = 0.3 in., dry	20	30	10	30	10									
	29						-FILL-														
	50/1	8	1.6				Note: unable to auger through obstruction at 1.6 ft. Moved boring 4.0 ft.														
5																					
	50	S2	5.0			SW-SM	Medium dense, brown well-graded SAND with silt and gravel (SW-SM), brick, wood, glass, mps = 0.3 in., dry	20	30	10	30	10									
	12						-FILL-														
	9				6.6																
	8	12	7.0			SP	Medium dense, gray-brown poorly-graded SAND (SP), wet														
							-MARINE DEPOSITS-														
10																					
	WOR	S3	10.0		10.0	SP	Very loose, gray-brown poorly-graded SAND (SP), frequent clay seams, mps = 0.02 in., wet														
	WOR																				
	WOH				11.5																
	1	20	12.0			CL	Very soft, gray lean CLAY (CL), frequent sand seams, mps = 0.02 in., wet														
							-MARINE DEPOSITS-														
15																					
	WOR	FV1	15.0-15.6				FV1 from 15.0 to 15.6 ft. = 10/1 ft. lb., Su = 370 psf														
	WOR	S4	15.0			CL	Soft, gray lean CLAY (CL), wet														
	WOR				16.6																
	WOR	24	17.0			CL	Soft, gray lean CLAY with sand (CL), mps = 0.02 in., wet	20	80												
							-MARINE DEPOSITS-														
20																					
	WOR	S5	20.0			CL	Soft, gray lean CLAY (CL), occasional black streaks and fine sand partings, mps = 0.02 in., wet														
	WOR																				
	WOR																				
	WOH	24	22.0																		
							-MARINE DEPOSITS-														
25																					
	WOR	FV2	25.0-25.6				FV2 from 25.0 to 25.6 ft. = 11/2 ft. lb., Su = 410 psf														
	WOR	S6	25.0			CL	Soft, gray lean CLAY (CL), occasional fine sand partings, mps = 0.02 in., wet														
	WOR																				
	WOH																				
	1	24	27.0																		
							-MARINE DEPOSITS-														
30																					

Water Level Data						Sample ID		Well Diagram		Summary												
Date	Time	Elapsed Time (hr.)	Depth in feet to:			O	U	S	G	FV	Riser Pipe	Screen	Filter Sand	Cuttings	Grout	Concrete	Bentonite Seal	Overburden (Linear ft.)	Rock Cored (Linear ft.)	Number of Samples	BORING NO.	
			Bottom of Casing	Bottom of Hole	Water																	41.1
12/22/2005	1120		40.0	41.1	16.3																	
12/22/2005	1145		--	8.5	7.0																	
Field Tests		Dilatancy: R - Rapid S - Slow N - None						Plasticity: N - Nonplastic L - Low M - Medium H - High						Dry Strength: N - None L - Low M - Medium H - High V - Very High								
*NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.																						
NOTE: Soil identifications based on visual-manual methods of the USCS system as practiced by Sebago Technics, Inc.																						

Depth (ft.)	Sampler Blows per 6 in.	Sample No. & Recovery (in.)	Sample Depth (ft.)	Well Diagram	Stratum Change (ft.)	USCS Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, maximum particle size*, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel		Sand			Field Test			
								% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity
30	WOR	S7	30.0		30.4	CL	Soft, gray lean CLAY (CL), occasional fine sand partings, mps = 0.02 in., wet					5	95	N	M	M
	WOH					CL	Soft, gray lean CLAY (CL), frequent sand seams to layers, mps = 0.02 in., wet					20	80	N	M	M
	WOH 4	24	32.0													
-MARINE DEPOSITS-																
35	WOR	S8	35.0			CL	Stiff, gray lean CLAY (CL), frequent sand seams to layers, mps = 0.02 in., wet					20	80	N	M	M
	2				36.3											
	10	24	37.0			SP	Medium dense, gray poorly-graded SAND (SP), mps = 0.02 in., wet					100				
-MARINE DEPOSITS-																
40	34	S9	40.0		40.0	SW	Very dense, gray well-graded SAND (SW), mps = 0.2 in., wet			10	40	50				
	63															
	50/1	24	41.1		41.1											
-MARINE DEPOSITS-																
							Split spoon refusal at 41.1 ft. on probable bedrock Bottom of exploration at 41.1 ft. below ground surface									
45																
50																
55																
60																
65																
70																

NOTES:

FILE NO.

05109

BORING NO.

B107

*NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.

NOTE: Soil identifications based on visual-manual methods of the USCS system as practiced by Sebago Technics, Inc.

PROJECT: FINAL DESIGN INVESTIGATION, REDEVELOPMENT OF VILLAGE CAFE STI JOB NO. 05109
 LOCATION: NEWBURY STREET, PORTLAND, MAINE PROJECT MGR. C. DIMATTEO
 CLIENT: GFI ACQUISITIONS I, LLC FIELD REP. K. B. STEPHENSON
 CONTRACTOR: MAINE TEST BORINGS, INC. DATE STARTED 12/22/2005
 DRILLER: R. IDANG DATE FINISHED 12/22/2005

Elevation	49.2	ft.	Datum	NGVD 1929	Boring Location	See Plan		
Item	Casing	Sampler	Core Barrel	Rig Make & Model	Mobile B47	Hammer Type	Drilling Mud	Casing Advance
Type	HSA	SS	--	<input type="checkbox"/> Truck <input type="checkbox"/> Tripod	<input type="checkbox"/> Cat-Head	<input type="checkbox"/> Safety	<input type="checkbox"/> Bentonite	Type Method Depth
Inside Diameter (in.)	3.375	1.375	--	<input type="checkbox"/> ATV <input type="checkbox"/> Geoprobe	<input checked="" type="checkbox"/> Winch	<input checked="" type="checkbox"/> Doughnut	<input type="checkbox"/> Polymer	HSA/SPIN/40.0
Hammer Weight (lb.)	--	140	--	<input type="checkbox"/> Track <input type="checkbox"/> Air Track	<input type="checkbox"/> Roller Bit	<input type="checkbox"/> Automatic	<input checked="" type="checkbox"/> None	
Hammer Fall (in.)	--	30	--	<input type="checkbox"/> Skid <input checked="" type="checkbox"/> Trailer	<input checked="" type="checkbox"/> Cutting Head	Drilling Notes: 2.0 x 7.0 in. Field Vane		

Depth (ft.)	Sampler No. & Recovery (in.)	Sample Depth (ft.)	Well Diagram	Stratum Change (ft.)	USCS Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, maximum particle size, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel					Sand					Field Test		
							% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Platynomy	Toughness	Plasticity	Strength			
0				0.2		-BITUMINOUS CONCRETE-													
	13	S1	0.5		SM	Dense, brown to black silty SAND (SM), brick, ash, mps = 0.5 in., dry	5	10	10	60	15								
	11																		
	21																		
	36	9	2.5			-FILL-													
				3.0															
5	9	S2	5.0		SP	Dense, brown poorly-graded SAND (SP), occasional coarse to medium sand seams, silt seams from 6.8 to 7.0 ft., mps = 0.2 in., wet	5	5	85	5									
	13																		
	19																		
	17	16	7.0			-MARINE DEPOSITS-													
				8.5															
10	2	S3	10.0		SM	Very loose, gray-brown mottled silty SAND (SM), trace coarse sand, one 1.3 in. gravel piece, wet				85	15								
	1																		
	2																		
	4	18	12.0			-MARINE DEPOSITS-													
15	1	S4	15.0		SM	Loose, brown silty SAND (SM), frequent silt seams, mps = 0.5 in., wet	5	10	15	50	20								
	2																		
	2			16.0															
	2				SM	Loose, gray silty SAND (SM), frequent clay seams, mps = 0.1 in., wet			5	70	25								
	3	24	17.0			-MARINE DEPOSITS-													
20	WOR	S5	20.0		SM	Very loose, gray silty SAND (SM), frequent clay seams, mps = 0.1 in., wet			5	70	25								
	WOH			20.8		-MARINE DEPOSITS-													
	1				CL	Medium stiff, gray lean CLAY (CL), wet													
	3	24	22.0			-MARINE DEPOSITS-													
25	WOH	FV1	25.0-25.6			FV1 from 25.0 to 25.6 ft. = 15/2 ft. lb., Su = 560 psf													
	WOH	S6	25.0		CL	Medium stiff, gray lean CLAY (CL), occasional sand partings, mps = 0.02 in., wet			5	95	N	M	M						
	1																		
	2	24	27.0			-MARINE DEPOSITS-													
30																			

Water Level Data			Sample ID			Well Diagram			Summary					
Date	Time	Elapsed Time (hr.)	Depth in feet to:			O	U	S	G	FV	<input type="checkbox"/> Riser Pipe <input type="checkbox"/> Screen <input type="checkbox"/> Filter Sand <input checked="" type="checkbox"/> Cuttings <input type="checkbox"/> Grout <input checked="" type="checkbox"/> Concrete <input checked="" type="checkbox"/> Bentonite Seal	Overburden (Linear ft.)	40.0	
			Bottom of Casing	Bottom of Hole	Water							T	U	S
												Number of Samples	85	
											BORING NO.	B108		
Field Tests			Dilatancy: R - Rapid S - Slow N - None			Plasticity: N - Nonplastic L - Low M - Medium H - High			Toughness: L - Low M - Medium H - High			Dry Strength: N - None L - Low M - Medium H - High V - Very High		
*NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.														
NOTE: Soil identifications based on visual-manual methods of the USCS system as practiced by Sebago Technics, Inc.														

TEST BORING REPORT

Depth (ft.)	Sampler Blows per 6 in.	Sample No. & Recovery (in.)	Sample Depth (ft.)	Well Diagram	Stratum Change (ft.)	USCS Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, maximum particle size*, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel		Sand			Field Test			
								% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity
30	WOR	S7	30.0			CL	Medium stiff, gray lean CLAY (CL), frequent sand partings to seams, mps = 0.02 in., wet					15	85	N	M	M
	WOR															
	3 4	24	32.0				-MARINE DEPOSITS-									
35	WOR	S8	35.0			CL	Medium stiff, gray lean CLAY (CL), frequent sand layers, mps = 0.02 in., wet					40	60	N	M	M
	2				36.0											
	10 15	24	37.0			SP-SM	Medium dense, gray poorly-graded SAND with silt (SP-SM), mps = 0.1 in., wet			10	80	10				
							-MARINE DEPOSITS-									
40							Note: advanced HSA to 40.0 ft. Running sand conditions in augers									
							Bottom of exploration at 40.0 ft. below ground surface No refusal									
45																
50																
55																
60																
65																
70																

TEST BORING REPORT

PROJECT	FINAL DESIGN INVESTIGATION, REDEVELOPMENT OF VILLAGE CAFÉ	STI JOB NO.	05109
LOCATION	NEWBURY STREET, PORTLAND, MAINE	PROJECT MGR.	C. DIMATTEO
CLIENT	GFI ACQUISITIONS I, LLC	FIELD REP.	K. B. STEPHENSON
CONTRACTOR	MAINE TEST BORINGS, INC.	DATE STARTED	12/23/2005
DRILLER	R. IDANO	DATE FINISHED	12/23/2005

Elevation	38.5	ft	Datum	NGVD 1929	Boring Location	See Plan										
Type	HSA	SS	Core Barrel	--	Truck	<input type="checkbox"/>	Tripod	<input type="checkbox"/>	Cat-Head	<input type="checkbox"/>	Safety	<input type="checkbox"/>	Bentonite	<input type="checkbox"/>	Type Method	HSA/SPIN/20.0
Inside Diameter (in.)	3.375	1.375	--	--	ATV	<input type="checkbox"/>	Geoprobe	<input type="checkbox"/>	Winch	<input checked="" type="checkbox"/>	Doughnut	<input type="checkbox"/>	Polymer	<input type="checkbox"/>	None	
Hammer Weight (lb.)	--	140			Track	<input type="checkbox"/>	Air Track	<input type="checkbox"/>	Roller Bit	<input type="checkbox"/>	Automatic	<input checked="" type="checkbox"/>	None			
Hammer Fall (in.)	--	30			Skid	<input type="checkbox"/>	Trailer	<input checked="" type="checkbox"/>	Cutting Head	<input checked="" type="checkbox"/>						
Drilling Notes: 2.0 x 7.0 in. Field Vane																

Depth (ft.)	Sampler Blows per 6 in.	Sample No. & Recovery (in.)	Sample Depth (ft.)	Well Diagram	Stratum Change (ft.)	USCS Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, maximum particle size*, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel		Sand		Field Test				
								% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity
0							Note: advance HSA through ice/frost to 1.0 ft.									
36		S1	1.0		1.2	SM	Dense, brown silty SAND (SM), mps = 0.5 in., damp -FILL-	5	5	5	75	15				
19						CL	Very stiff, gray lean CLAY (CL), frequent sand partings, mps = 0.02 in., damp						15	85	N	M
11																
16		18	3.0				-MARINE DEPOSITS-									
5																
8		S2	5.0			CL	Very stiff, gray lean CLAY (CL), frequent sand partings, mps = 0.02 in., damp						10	90	N	M
9																
10																
10		24	7.0				-MARINE DEPOSITS-									
10																
10		WOH	10.0			CL	Soft, gray lean CLAY (CL), one 0.5 in. concrete, wet						10	90	N	M
		WOH														
		WOH														
		1	12.0				-MARINE DEPOSITS-									
15																
		WOH	15.0		14.4											
		WOR	15.0-15.6				FV1 from 15.0 to 15.6 ft. = 10/1 ft. lb., Su = 370 psf									
		WOH	15.0			CL	Soft, gray lean CLAY (CL), frequent sand layers, mps = 0.02 in., wet						25	75	N	M
		4														
		10	17.0		16.8	SP	Medium dense, gray poorly-graded SAND (SP), mps = 0.02 in., wet									
							-MARINE DEPOSITS-									
20																
		8	20.0		20.5	SP	Very dense, gray to brown poorly-graded SAND (SP), mps = 0.02 in., wet									
		13														
		50/4	21.4		21.4	SM	Very dense, gray silty SAND with gravel (SM), mps = 0.75 in., wet -GLACIAL TILL DEPOSITS-	5	10	15	15	40	15			
							Split spoon refusal at 21.4 ft. Bottom of exploration at 21.4 ft. below ground surface									
							Note: Installed 1.0 in PVC observation well at 20.0 ft.									
25																
30																

Water Level Data			Sample ID			Well Diagram			Summary												
Date	Time	Elapsed Time (hr.)	Depth in feet to:			O	T	U	S	G	FV	Riser Pipe	Screen	Filter Sand	Cuttings	Grout	Concrete	Bentonite Seal	Overburden (Linear ft.)	Rock Cored (Linear ft.)	Number of Samples
			Bottom of Casing	Bottom of Hole	Water																
1/19/2006			Well	20.0	3.3														21.4	--	55
BORING NO.																			B109		

Field Tests Dilatancy: R - Rapid S - Slow N - None Toughness: L - Low M - Medium H - High Plasticity: N - Nonplastic L - Low M - Medium H - High Dry Strength: N - None L - Low M - Medium H - High V - Very High

*NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.

NOTE: Soil identifications based on visual-manual methods of the USCS system as practiced by Sebago Technics, Inc.