

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK

CITY OF PORTLAND

PERMIT ISSUED

Please Read Application And Notes, If Any, Attached

BUILDING INSPECTION

PERMIT

Permit Number: 316 B002001
JAN 18 2006

CITY OF PORTLAND

This is to certify that BRADCO REALTY CORP M. Construction

has permission to FOUNDATION ONLY for 2000 sq. Ft. Metal Building

AT 238 RIVERSIDE ST 316 B002001

provided that the person or persons, firm or corporation accepting this permit shall comply with all of the provisions of the Statutes of this State and of the Ordinances of the City of Portland regulating the construction, maintenance and use of buildings and structures, and of the application on file in this department.

Apply to Public Works for street line and grade if nature of work requires such information.

Notification of inspection must be given and when permission procured before this building or part thereof is loaded or closed-in. 24 HOUR NOTICE IS REQUIRED.

A certificate of occupancy must be procured by owner before this building or part thereof is occupied.

OTHER REQUIRED APPROVALS

Fire Dept. _____

Health Dept. _____

Animal Board _____

Department Name _____

[Handwritten Signature]
Inspection Services 1/18/06

PENALTY FOR REMOVING THIS CARD

City of Portland, Maine - Building or Use Permit Application

389 Congress Street, 04101 Tel: (207) 874-8703, Fax: (207) 874-8716

PERMIT ISSUED

| | | |
|-----------------------|----------------------------|---------------------|
| Permit No: 06-0073 | Issue Date: JAN 18 2006 | CBL: 316 B002001 |
|-----------------------|----------------------------|---------------------|

| | | | |
|---|-----------------------------------|-----------------------------|--------|
| Location of Construction: 238 RIVERSIDE ST | Owner Name: BRADCO REALTY CORP | Owner Address: PO BOX 67 | Phone: |
|---|-----------------------------------|-----------------------------|--------|

| | | | |
|----------------|---------------------------------------|---|----------------------|
| Business Name: | Contractor Name: P.M. Construction | Contractor Address: 19 Industrial Park Road Saco | Phone: 2072827697 |
|----------------|---------------------------------------|---|----------------------|

| | | | |
|---------------------|--------|--|-------|
| Lessee/Buyer's Name | Phone: | Permit Type: Foundation Only/Commercial | Zone: |
|---------------------|--------|--|-------|

| | | | | |
|---|---|-------------|-------------------------|--------------------|
| Past Use: Commercial / Vacant Storage Yard | Proposed Use: Commercial/ FOUNDATION | Permit Fee: | Cost of Work: \$0.00 | CEO District: 5 |
|---|---|-------------|-------------------------|--------------------|

| | | |
|--------|--|--|
| 051813 | FIRE DEPT: <input type="checkbox"/> Approved <input type="checkbox"/> Denied <i>PREVIOUSLY APPROVED</i> Signature: | INSPECTION: Use Group: <i>51</i> Type: <i>25</i> <i>FOUNDATION ONLY</i> <i>1/18/06</i> Signature: <i>[Signature]</i> |
|--------|--|--|

| | |
|-------------------------------|---|
| Proposed Project Description: | PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.) Action: <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied Signature: |
|-------------------------------|---|

| | | |
|-----------------------------|---------------------------------|------------------------|
| Permit Taken By: Idobson | Date Applied For: 01/18/2006 | Zoning Approval |
|-----------------------------|---------------------------------|------------------------|

| | | | |
|--|--|---|---|
| 1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules. 2. Building permits do not include plumbing, septic or electrical work. 3. Building permits are void if work is not started within six (6) months of the date of issuance. False information may invalidate a building permit and stop all work.. | Special Zone or Reviews <input type="checkbox"/> Shoreland <input type="checkbox"/> Wetland <input type="checkbox"/> Flood Zone <input type="checkbox"/> Subdivision <input type="checkbox"/> Site Plan Maj <input type="checkbox"/> Minor <input type="checkbox"/> MM <input type="checkbox"/> Date: <i>1/18/06</i> | Zoning Appeal <input type="checkbox"/> Variance <input type="checkbox"/> Miscellaneous <input type="checkbox"/> Conditional Use <input type="checkbox"/> Interpretation <input type="checkbox"/> Approved <input type="checkbox"/> Denied late: | Historic Preservation <input type="checkbox"/> Not in District or Landmark <input type="checkbox"/> Does Not Require Review <input type="checkbox"/> Requires Review <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied late: |
|--|--|---|---|

CERTIFICATION

I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in the application is issued, I certify that the code official's authorized representative shall have the authority to enter all areas covered by such permit at any reasonable hour to enforce the provision of the code(s) applicable to such permit.

| | | | |
|---|---------|------|-------|
| SIGNATURE OF APPLICANT | ADDRESS | DATE | PHONE |
| RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE | | DATE | PHONE |



Report on Subsurface and Foundation Investigation

Proposed Building Riverside Street Portland, Maine

for

**BRADCO Supply Corp.
13 Production Way
Avenel, NJ 07001**

April 20, 2005

April 20, 2005
04435

Mr. Howard Roberts
BRADCO Supply Corp.
13 Production Way
Avenel, NJ 07001

**Report on Subsurface and Foundation Investigation
Proposed Building, Riverside Street, Portland, Maine**

Dear Mr. Roberts:

This report presents the results of our evaluation of the subsurface conditions and foundation requirements for the proposed building at your Riverside Street facility in Portland, Maine.

In summary, it is our opinion that the building and storage sheds may be supported on spread and continuous footings bearing on naturally deposited, inorganic soil, or on compacted structural fill placed after removal of unsuitable soil. In addition, slabs-on-grade may be used for the ground floor slabs. Specific recommendations regarding foundation design and construction considerations are presented below.

Introduction

The building will be located in the rear of your facility at 238 Riverside Street in Portland. The building area is presently open, and ground surface elevations vary from approximately El. 73.0 to El. 71.0. We understand that the building will be a pre-engineered metal building with an approximate 22 foot high roof. The ground floor will be at approximately El. 74.0 with truck docks. We understand that the building will be used for storage of wood and other building materials. In addition, storage sheds consisting of metal structures with one side open and concrete floor slabs will be constructed along the north side of the site.

e Explorations

During the period April 7 and 8, 2005, Maine Test Borings, Inc. (MTB) drilled five borings, B1 to B5, at locations shown on Sheet 1, Site and Subsurface Exploration Plan. MTB drilled the borings to depths below ground surface varying from 50.0 feet to 70.0 feet. Sebago Technics monitored the borings and prepared the logs included in Appendix A. Table I summarizes the results of borings.

Borings B1 to B4 were drilled using 2.5-inch inside diameter hollow stem augers to a depth of 32 feet with pushed drill rods to 50 feet below ground surface. Boring B5 was drilled using 2.5-inch inside diameter hollow stem augers to a **depth** of **32** feet with pushed **drill** rods to 70 feet below ground surface. Samples were generally recovered at 5-foot intervals above 32 feet. Standard Penetration Resistance (N) was measured at each sample interval in accordance with ASTM Test Designation D1586. The undrained shear strength of the clay was measured by field vane shear tests at various depths in the borings.

Sebago Technics, Inc. determined the locations of borings by taping from existing site features.

The boring logs and related information depict subsurface conditions and water levels only at their specific locations at the time of excavation. Soil conditions at other locations may differ from conditions at these locations. Also, the passage of time may result in a change in groundwater conditions at exploration locations.

Subsurface Conditions

The borings encountered three principal soil **units** at the site: fill, sand and clay. Encountered thickness and generalized descriptions of these units are presented below in order of increasing depth below ground surface. Due to the complexity of the deposition process, strata thickness will vary.

Fill - Fill consists of loose to medium dense, gray to brown, silty SAND (SM); to well-graded SAND (SW). Encountered thickness varied from 2.5 feet to **4.0** feet.

Sand - The sand consists of loose, brown well-graded SAND (SW). Boring B5 encountered **3.3** feet of sand.

Clay - Clay consists of stiff to soft, gray brown to gray lean **CLAY (CL)** with sand lenses and partings. Borings penetrated **up** to **64.2** feet into the clay.

Water **was** observed in the borings at depths below ground surface varying from 2.0 feet to 13.2 feet. 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 will vary from those measured in the borings.

Recommendations for Foundation Design

Recommended Foundation Type and Design Criteria

The existing fill is not considered suitable for support of the building or floor slab. **All** fill should be removed from within the foundation limits. In our opinion, the building may be supported on spread and continuous footings bearing on undisturbed, naturally-deposited sand and clay or on compacted structural fill placed after removal of unsuitable soil. The floor slab may be supported on the existing fill following proofrolling, as **described** below, and removal of any unsuitable materials or soft and yielding soils.

For uniformity, footings may be proportioned for an allowable bearing stress in pounds per square foot (psf) equal to 1,000 multiplied by the least lateral dimension of the footing in feet, **up 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 should be founded a minimum of 1.5 feet below the ground floor slab.

Compacted structural fill supporting footings should extend laterally from the footings to at least the limits defined by 1 horizontal to 1 vertical lines sloped outward and downward from points located at least 2 feet horizontally beyond the bottom edges of the footings.

In order to consider foundations bearing above the clay stratum, we estimated the settlement of the clay resulting from the increased stress from the raise-in-grade and building loads. We estimated the stress history of the clay stratum by correlating the undrained shear strength with that from other projects in the area. We estimate that the total settlement of the building will be on the order of 1.7 inches, with differential settlement on the order of 1.0 inch in 50 feet. We estimate that approximately **10** to 15 percent of this settlement will occur during the construction period and the remainder will be long-term settlement occurring over 15 to 30 years. We anticipate that settlement of this magnitude is acceptable. However, the structural engineer should determine final acceptability of settlement.

We recommend that the storage sheds be supported on continuous footings bearing on the undisturbed, naturally deposited sand or clay or on compacted structural fill placed after removal of unsuitable soil. Footings should be proportioned for an allowable bearing stress in pounds per square foot (psf) equal to 1,000 multiplied by the least lateral dimension of the footing in feet up to 3,000 psf. All footings should be a minimum of 1.5 feet wide.

Ground Floor Slabs

We recommend that the lowest level floor slab for the building be designed as **an** earth-supported slab-on-grade bearing on a minimum **6** inches of compacted structural fill. All fill containing debris should be removed from within the building limits prior to placing fill. All fill placed below the floor slab for raises-in-grade should consist of compacted structural fill. Normal dampproofing and vapor barriers should be provided below the slab. The existing fill should be proofrolled with a minimum of two passes using fully-loaded ten-wheel dump trucks or approved similar equipment. Any soft or unsuitable areas identified should be excavated and replaced with compacted structural fill.

Because the concrete floor slabs for the storage sheds will be subjected to freezing temperatures, we recommend that the slabs be designed as earth-supported slabs-on-grade bearing on 2 inches of rigid Styrofoam insulation and **6** inches of compacted structural fill. The insulation should be placed on the excavated subgrade and will minimize the potential for freezing of the subgrade below the open sheds.

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 E; the site response coefficient F_a is 2.1 for a short period spectral response acceleration S_s of 0.37g; the site response coefficient F_v is 3.5 for the I-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 the foundation walls at the loading docks which are restrained at the top and backfilled to create an unbalanced soil load 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 and a free draining backfill. The portion of the foundation wall at the loading docks will be subject to surcharge due to the loads from people, materials and equipment. The wall should be designed for a uniform lateral pressure acting over the full height of wall, calculated on the basis of 0.5 times the surcharge stress (floor load), in addition to the lateral soil pressure recommended above.

Backfill Materials

Structural fill used below foundations and floor slabs and 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> |
|-------------------|--------------------------------|
| 6 in. | 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 maximum particle size should be reduced to 3 inches and the loose layer thickness should be reduced to 6 inches, and compaction performed by hand-guided vibratory equipment.

Compacted structural fill on the outside of the foundation walls should extend laterally a minimum of 2 feet from the wall. Backfill beyond this limit may consist of common fill. The **top 12** inches of fill on the exterior of the building should consist of low permeability material or bituminous concrete 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 with a minimum of two systematic passes of the equipment placing the fill.

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. 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

We anticipate that foundation excavation can be accomplished with sloped open excavation through the overburden soils provided safe side slopes can be maintained. Some sloughing and raveling should be anticipated in temporary slopes. Temporary excavations should be made in accordance with all **OSHA** and other applicable regulatory agency requirements.

We anticipate that groundwater may be encountered at proposed subgrade level or bearing level of footings. If encountered, open pumping from sumps can likely control groundwater. In general, the contractor should control groundwater and water from runoff and other sources by methods which prevent disturbance of bearing surfaces or adjacent soils and allow construction in-the-dry.

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. Any subgrade areas that are disturbed should be recompacted or excavated, and replaced with compacted structural fill prior to placing concrete. Subgrades should be protected against freezing temperatures if exposed during construction. Final excavation to subgrade should be performed using equipment with smooth-edge buckets.

Construction Monitoring

The foundation recommendations contained herein are based on the known and predictable behavior of a properly engineered and constructed foundation. Monitoring of the foundation construction is required to enable the geotechnical engineer to keep in contact with procedures and techniques used in construction. Therefore, we recommend that a person qualified by training and experience be present to provide monitoring at the site during preparation of foundation bearing surfaces and placement of compacted structural fill.

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 building 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.

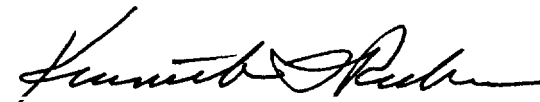
The recommendations presented herein are based in part on the data obtained from the referenced test borings. The nature and extent of variations between the explorations may not become evident until construction. If variations then appear evident, it will be necessary to re-evaluate the recommendations 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.

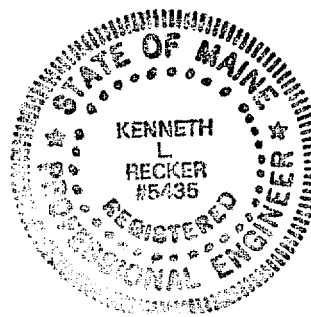
It has been a pleasure to work with you on this project. Please do not hesitate to contact us if **you** have any questions or need additional information.

Sincerely,

SEBAGO TECHNICS, INC.



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



KLR:klr/jc

Enclosures :

- Table I - Summary of Test Borings
- Sheet 1 - Site and Subsurface Exploration Plan
- Appendix A - Logs of Test Borings

04435

TABLE I
SUMMARY OF BORINGS

PROPOSED BUILDING
238 RIVERSIDE STREET
PORTLAND, MAINE

| Boring Number | Depth (Ft) | Depth to Water (Ft) | Strata Thickness (Ft) | | |
|---------------|------------|---------------------|-----------------------|------|-------|
| | | | Fill | Sand | Clay |
| B1 | 50.0 | 6.0 | 3.5 | -- | 46.5* |
| B2 | 50.0 | 4.5 | 4.0 | -- | 46.0* |
| B3 | 50.0 | 13.2 | 2.7 | -- | 47.3* |
| B4 | 50.0 | 5.0 | 3.0 | -- | 47.0* |
| B5 | 70.0 | 2.0 | 2.5 | 3.3 | 64.2* |

NOTES:

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

Appendix A

Logs of Borings

TEST BORING REPORT

| | | | |
|------------|---------------------------------------|---------------|---------------|
| PROJECT | PROPOSED BUILDING, WICKES LUMBER | STI JOB NO. | 04435 |
| LOCATION | 238 RIVERSIDE STREET, PORTLAND, MAINE | PROJECT MGR. | S. DOE |
| CLIENT | BRADCO SUPPLY CORP. | FIELD REP. | K. STEPHENSON |
| CONTRACTOR | MAINE TEST BORINGS, INC. | DATE STARTED | 4/7/2005 |
| DRIILLER | B. ENOS | DATE FINISHED | 4/7/2005 |

| | | | | | |
|---------------------|--------|---------|-------------|--|---|
| levation | ft. | Datum | NGVD 1929 | Boring Location | See Plan |
| em | Casing | Sampler | Core Barrel | Rig Make & Model | Mobile B47 |
| ype | HSA | SS | | <input type="checkbox"/> Truck <input type="checkbox"/> Tripod <input type="checkbox"/> Cal-Head | <input type="checkbox"/> Safety <input type="checkbox"/> Bentonite |
| side Diameter (in.) | 2.5 | 1.375 | | <input type="checkbox"/> ATV <input type="checkbox"/> Geoprobe <input checked="" type="checkbox"/> Winch | <input type="checkbox"/> Doughnut <input type="checkbox"/> Polymer |
| ammer Weight (lb.) | | 140 | | <input checked="" type="checkbox"/> Track <input type="checkbox"/> Air Track <input type="checkbox"/> Roller Bit | <input type="checkbox"/> Automatic <input checked="" type="checkbox"/> None |
| ammer Fall (in.) | | 30 | | <input type="checkbox"/> Skid <input type="checkbox"/> Trailer <input checked="" type="checkbox"/> Cutting Head | Drilling Notes: 2 in. x 7 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 | 3 | S1 | 0.0 | | | SW | Medium dense, brown well-graded SAND (SW), mps = 1.25 in., wet | 5 | 5 | 30 | 40 | 15 | 5 | | | | | | | |
| | 8 | | | | 1.6 | | -FILL- | | | | | | | | | | | | | |
| | 15 | | | | | SM | Medium dense, gray silty SAND (SM), mps = 0.2 in., wet | | | 20 | 5 | 60 | 15 | | | | | | | |
| | 18 | 12 | 2.0 | | 3.5 | | -FILL- | | | | | | | | | | | | | |
| 5 | 8 | S2 | 5.0 | | | CL | Very stiff, gray-brown mottled lean CLAY (CL), occasional sand partings from 5.0 to 6.0 ft., mps = 0.02 in., damp | | | | | 5 | 95 | N | M | M | | | | |
| | 9 | | | | | | -MARINE DEPOSITS- | | | | | | | | | | | | | |
| | 10 | | | | | | | | | | | | | | | | | | | |
| | 13 | 24 | 7.0 | | | | | | | | | | | | | | | | | |
| 10 | 1 | S3 | 10.0 | | 10.4 | CL | Medium stiff, gray-brown mottled lean CLAY (CL), occasional sand partings, wet | | | | | 5 | 95 | N | M | M | | | | |
| | 2 | | | | | CL | Soft, gray lean CLAY (CL), occasional sand partings, wet | | | | | 5 | 95 | N | M | M | | | | |
| | WOH | | | | | | -MARINE DEPOSITS- | | | | | | | | | | | | | |
| | WOH | 24 | 12.0 | | | | | | | | | | | | | | | | | |
| 15 | WOR | FV1 | 15.0-15.6 | | | | FV1 from 15.0 to 15.6 ft. = 1/1 ft. lb., Su = 40 psf | | | | | | | | | | | | | |
| | WOR | S4 | 15.0 | | 16.0 | | Note: liquified clay and fine sand in split spoon from 15.0-16.0 ft. | | | | | 50 | 50 | | | | | | | |
| | WOR | | | | | CL | Soft, gray lean CLAY (CL), wet | | | | | 100 | | N | M | M | | | | |
| | WOR | 24 | 17.0 | | | | -MARINE DEPOSITS- | | | | | | | | | | | | | |
| 20 | WOR | FV2 | 20.0-20.6 | | | | FV2 from 20.0 to 20.6 ft. = 12/7 ft. lb., Su = 440 psf | | | | | | | | | | | | | |
| | WOH | S5 | 20.0 | | | CL | Soft, gray lean CLAY (CL), wet | | | | | 100 | | N | M | M | | | | |
| | WOH | | | | | | -MARINE DEPOSITS- | | | | | | | | | | | | | |
| | WOH | 24 | 22.0 | | | | | | | | | | | | | | | | | |
| 25 | WOR | S6 | 25.0 | | | CL | Soft, gray lean CLAY (CL), wet | | | | | 100 | | N | M | M | | | | |
| | WOR | | | | | | -MARINE DEPOSITS- | | | | | | | | | | | | | |
| | WOR | | | | | | | | | | | | | | | | | | | |
| | WOR | 24 | 27.0 | | | | | | | | | | | | | | | | | |
| 30 | | | | | | | | | | | | | | | | | | | | |

| Water Level Data | | | | Sample ID | | Well Diagram | | Summary | | | | | | | | | | | | | |
|------------------|------|--------------------|-------------------|----------------|-------|--------------|---|---------|---|---|------------|--------|-------------|----------|-------|----------|----------------|-------------------------|-------------------------|-------------------|--|
| Date | Time | Elapsed Time (hr.) | Depth in feet to: | | | O | T | U | S | G | Riser Pipe | Screen | Filter Sand | Cuttings | Grout | Concrete | Bentonite Seal | Overburden (Linear ft.) | Rock Cored (Linear ft.) | Number of Samples | |
| 4/7/05 | 1610 | | Bottom of Casing | Bottom of Hole | Water | | | | | | | | | | | | | 50.0 | - | 7S | |
| | | | -- | 11.8 | 6.0 | | | | | | | | | | | | | | | | |

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 | FV3 | 30.0 to 30.6 | | | | FV3 from 30.0 to 30.6 ft. = 12/7 ft. lbs. Su = 440 psf | | | | | | | | | | | |
| | WOR | S7 | 30.0 | | | CL | Soft, gray lean CLAY (CL), wet | | | | | | 100 | N | M | M | | |
| | WOR | | | | | | -MARINE DEPOSITS- | | | | | | | | | | | |
| | WOR | 24 | 32.0 | | | | Begin rod probe at 32.0 ft. | | | | | | | | | | | |
| | | | | | | | Depth Blow Counts | | | | | | | | | | | |
| | | | | | | | 32.0-33.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 33.0-34.0 ft. Hydraulic Push | | | | | | | | | | | |
| 35 | | | | | | | 34.0-35.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 35.0-36.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 36.0-37.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 37.0-38.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 38.0-39.0 ft. Hydraulic Push | | | | | | | | | | | |
| 40 | | | | | | | 39.0-40.0 Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 40.0-41.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 41.0-42.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 42.0-43.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 43.0-44.0 ft. Hydraulic Push | | | | | | | | | | | |
| 45 | | | | | | | 44.0-45.0 Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 45.0-46.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 46.0-47.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 47.0-48.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 48.0-49.0 ft. Hydraulic Push | | | | | | | | | | | |
| 50 | | | | | | | 49.0-50.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | Bottom of exploration at 50.0 ft. below ground surface | | | | | | | | | | | |
| | | | | | | | No refusal | | | | | | | | | | | |
| 55 | | | | | | | | | | | | | | | | | | |
| 60 | | | | | | | | | | | | | | | | | | |
| 65 | | | | | | | | | | | | | | | | | | |
| 70 | | | | | | | | | | | | | | | | | | |

OTES:

FILE NO.

04435

BORING NO.

B1

*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

DRILLER

B. ENOS

DATE FINISHED

4/8/2005

| | | | | | | | |
|---|---------------------------|------------------------|---|---|---|-----------------------------------|-------------------------------------|
| Elevation Datum Boring Location See Plan | ft. Datum NGVD 1929 | Sampler Core Barrel | Rig Make & Model <input type="checkbox"/> Truck <input type="checkbox"/> Tripod <input type="checkbox"/> Cal-Head <input type="checkbox"/> Safety <input type="checkbox"/> ATV <input type="checkbox"/> Geoprobe <input checked="" type="checkbox"/> Winch <input type="checkbox"/> Air Track <input type="checkbox"/> Roller Bit <input type="checkbox"/> Skid <input type="checkbox"/> Trailer | Mobile B47 <input type="checkbox"/> Safety <input checked="" type="checkbox"/> Doughnut <input type="checkbox"/> Automatic <input checked="" type="checkbox"/> Cutting Head | Hammer Type <input type="checkbox"/> Bentonite <input type="checkbox"/> Polymer <input checked="" type="checkbox"/> None | Drilling Mud HSA/Spin/50.0 ft. | Casing Advance Type Method Depth |
|---|---------------------------|------------------------|---|---|---|-----------------------------------|-------------------------------------|

| 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 | 2 | S1 | 0.0 | | 1.0 | SW | Loose, brown well-graded SAND (SW), mps = 0.2 in., trace roots, wet -FILL- | | | 30 | 50 | 20 | | | | | |
| | 3 | | | | | SM | Loose, gray-brown mottled silty SAND (SM), mps = 0.02 in., trace roots, cinders, damp -FILL- | | | | | 85 | 15 | | | | |
| | 5 | 14 | 2.0 | | 3.0 | | Note: brown silty sand in auger cuttings from 3.0 to 4.0 ft. -Probable Original TOPSOIL- | | | | | | | | | | |
| 5 | 4 | S2 | 5.0 | | | CL | Stiff, gray lean CLAY (CL), occasional sand partings, damp | | | | | 5 | 95 | N | M | M | |
| | 5 | | | | | | | | | | | | | | | | |
| | 9 | | | | | | | | | | | | | | | | |
| | 11 | 24 | 7.0 | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| 10 | 3 | S3 | 10.0 | | | CL | Medium stiff, gray lean CLAY (CL), occasional sand partings, wet | | | | | 5 | 95 | N | M | M | |
| | 3 | | | | | | | | | | | | | | | | |
| | 2 | | | | | | | | | | | | | | | | |
| | 2 | 24 | 12.0 | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| 15 | WOR | FV1 | 15.0-15.6 | | | | FV1 from 15.0 | | | | | | | | | | |
| | WOR | S4 | 15.0 | | | CL | Soft, gray lean | | | | | | | 100 | N | M | M |
| | WUH | | | | | | | | | | | | | | | | |
| | WOR | 24 | 17.0 | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| 20 | WOR | S5 | 20.0 | | | CL | Soft, gray lean CLAY (CL), 0.5 in. seam of gray-brown clay at 26.0 ft., wet | | | | | 10 | 90 | N | M | M | |
| | WOR | | | | | | | | | | | | | | | | |
| | WOR | | | | | | | | | | | | | | | | |
| | WOR | 24 | 22.0 | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| 25 | WOR | S6 | 25.0 | | | CL | Soft, gray lean CLAY (CL), 0.5 in. seam of gray-brown clay at 26.0 ft., wet | | | | | | | 100 | N | M | M |
| | WOR | | | | | | | | | | | | | | | | |
| | WOR | | | | | | | | | | | | | | | | |
| | WOR | 24 | 27.0 | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| 30 | | | | | | | | | | | | | | | | | |

| 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 | G Geoprobe | <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 | Rock Cored (Linear ft.) | 50.0 |
| | | | Bottom of Casing | Bottom of Hole | Water | | | | | Number of Samples | 7S |
| 4/8/05 | 0829 | | | 15.0 | 4.5 | | | | | | |
| | | | | | | | | | 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 | WOR | FV2 | 30.0 to 30.6 | | | | FV2 from 30.0 to 30.6 ft. = 10/5 ft. lbs., Su = 370 psf | | | | | | | | | | | |
| | WOR | S7 | 30.0 | | | CL | Soft, gray lean CLAY (CL), wet | | | | | | 100 | N | M | M | | |
| | WOR | | | | | | -MARINE DEPOSITS- | | | | | | | | | | | |
| | WOR | 24 | 32.0 | | | | Begin rod probe at 32.0 ft. | | | | | | | | | | | |
| | | | | | | | <u>Depth</u> <u>Blow Counts</u> | | | | | | | | | | | |
| | | | | | | | 32.0-33.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 33.0-34.0 ft. Hydraulic Push | | | | | | | | | | | |
| 35 | | | | | | | 34.0-35.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 35.0-36.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 36.0-37.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 37.0-38.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 38.0-39.0 ft. Hydraulic Push | | | | | | | | | | | |
| 40 | | | | | | | 39.0-40.0 Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 40.0-41.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 41.0-42.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 42.0-43.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 43.0-44.0 ft. Hydraulic Push | | | | | | | | | | | |
| 45 | | | | | | | 44.0-45.0 Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 45.0-46.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 46.0-47.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 47.0-48.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 48.0-49.0 ft. Hydraulic Push | | | | | | | | | | | |
| 50 | | | | | | | 49.0-50.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | Bottom of exploration at 50.0 ft. below ground surface No refusal | | | | | | | | | | | |
| 55 | | | | | | | | | | | | | | | | | | |
| 60 | | | | | | | | | | | | | | | | | | |
| 65 | | | | | | | | | | | | | | | | | | |
| 70 | | | | | | | | | | | | | | | | | | |

NOTES:

FILE NO.

04435

BORING NO.

B7

*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 | PROPOSED BUILDING, WICKES LUMBER | STI JOB NO. | 04435 |
| LOCATION | 238 RIVERSIDE STREET, PORTLAND, MAINE | PROJECT MGR. | S. DOE |
| CLIENT | BRADCO SUPPLY CORP. | FIELD REP. | K. STEPHENSON |
| CONTRACTOR | MAINE TEST BORINGS, INC. | DATE STARTED | 4/8/2005 |
| DRILLER | B. ENOS | DATE FINISHED | 4/8/2005 |

| | | | | | | | | |
|-----------------------|--------|---------|-------------|--|--|--|-------------------|----------------|
| Elevation | 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.) | 2.5 | 1.375 | | <input type="checkbox"/> ATV <input type="checkbox"/> Geoprobe <input checked="" type="checkbox"/> Winch | <input checked="" type="checkbox"/> Doughnut | <input type="checkbox"/> Polymer | | |
| Hammer Weight (lb.) | | 140 | | <input checked="" type="checkbox"/> Track <input type="checkbox"/> Air Track <input type="checkbox"/> Roller Bit | <input type="checkbox"/> Automatic | <input checked="" type="checkbox"/> None | HSA/Spin/50.0 ft. | |
| Hammer Fall (in.) | | 30 | | <input type="checkbox"/> Skid <input type="checkbox"/> Trailer <input checked="" type="checkbox"/> Cutting Head | Drilling Notes: 2 in. x 7 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 | 3 | S1 | 0.0 | | | SW | Medium dense, brown well-graded SAND (SW), mps = 0.25 in., wet | | 5 | 40 | 30 | 15 | 10 | | | | | | | | |
| | 11 | | | | | | Note: probable gravel and/or cobbles | | | | | | | | | | | | | | |
| | 50.1 | 3 | 1.6 | | | | | | | | | | | | | | | | | | |
| | | | | | 2.7 | | -FILL- | | | | | | | | | | | | | | |
| 5 | 8 | S2 | 5.0 | | | CL | Stiff, gray-brown mottled lean CLAY (CL), occasional sand partings, damp | | | | | | 5 | 95 | N | M | M | | | | |
| | 8 | | | | | | | | | | | | | | | | | | | | |
| | 8 | | | | 6.4 | | | | | | | | | | | | | | | | |
| | 6 | 24 | 7.0 | | | CL | Stiff, gray lean CLAY (CL), occasional sand partings, wet | | | | | | 5 | 95 | N | M | M | | | | |
| | | | | | | | -MARINE DEPOSITS- | | | | | | | | | | | | | | |
| 10 | 4 | S3 | 10.0 | | | CL | Medium stiff, gray lean CLAY (CL), occasional sand partings, wet | | | | | | 5 | 95 | N | M | M | | | | |
| | 3 | | | | | | | | | | | | | | | | | | | | |
| | 2 | | | | | | | | | | | | | | | | | | | | |
| | 3 | 24 | 12.0 | | | | | | | | | | | | | | | | | | |
| | | | | | | | -MARINE DEPOSITS- | | | | | | | | | | | | | | |
| 15 | WOR | FV1 | 15.0-15.6 | | | | FV1 from 15.0 to 15.6 ft. = 1075 ft. lb., Su = 370 psf | | | | | | | | | | | | | | |
| | WOR | S4 | 15.0 | | | CL | Soft, gray lean CLAY (CL), wet | | | | | | | 100 | N | M | M | | | | |
| | WOR | | | | | | | | | | | | | | | | | | | | |
| | WOH | 12 | 17.0 | | | | | | | | | | | | | | | | | | |
| | | | | | | | -MARINE DEPOSITS- | | | | | | | | | | | | | | |
| 20 | WOR | S5 | 20.0 | | | CL | Soft, gray lean CLAY (CL), wet | | | | | | | 100 | N | M | M | | | | |
| | WOH | | | | | | | | | | | | | | | | | | | | |
| | WOH | 24 | 22.0 | | | | | | | | | | | | | | | | | | |
| | WOH | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | -MARINE DEPOSITS- | | | | | | | | | | | | | | |
| 25 | WOR | S6 | 25.0 | | | CL | Soft, gray lean CLAY (CL), wet | | | | | | | 100 | N | M | M | | | | |
| | WOR | | | | | | | | | | | | | | | | | | | | |
| | WOR | | | | | | | | | | | | | | | | | | | | |
| | WOR | 24 | 27.0 | | | | | | | | | | | | | | | | | | |
| | | | | | | | -MARINE DEPOSITS- | | | | | | | | | | | | | | |
| 30 | | | | | | | | | | | | | | | | | | | | | |

| Water Level Data | | | | | Sample ID | | Well Diagram | | Summary | | | | |
|------------------|------|--------------------|-------------------|----------------|-----------|---|--------------|---|---------|---|---|-------------------------|------|
| Date | Time | Elapsed Time (hr.) | Depth in feet to: | | | O | T | U | S | G | <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.) | 50.0 |
| | | | Bottom of Casing | Bottom of Hole | Water | | | | | | | | |
| 4/8/05 | 1400 | | -- | 16.0 | 13.2 | | | | | | | | |
| | | | | | | | | | | | BORING NO. | B3 | |

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 | S7 | 30.0 | | | CL | Attempted FV at 30.0 ft.- obstruction in augers- probable gravel | | | | | | | | | | | | |
| | WOR | | | | | | Very soft, gray lean CLAY (CL), wet | | | | | | 100 | N | M | M | | | |
| | WOR | 24 | 32.0 | | | | -MARINE DEPOSITS- | | | | | | | | | | | | |
| | | | | | | | Begin rod probe at 32.0 ft. | | | | | | | | | | | | |
| | | | | | | | Depth Blow Counts | | | | | | | | | | | | |
| | | | | | | | 32.0-33.0 ft. Hydraulic Push | | | | | | | | | | | | |
| | | | | | | | 33.0-34.0 ft. Hydraulic Push | | | | | | | | | | | | |
| 35 | | | | | | | 34.0-35.0 ft. Hydraulic Push | | | | | | | | | | | | |
| | | | | | | | 35.0-36.0 ft. Hydraulic Push | | | | | | | | | | | | |
| | | | | | | | 36.0-37.0 ft. Hydraulic Push | | | | | | | | | | | | |
| | | | | | | | 37.0-38.0 ft. Hydraulic Push | | | | | | | | | | | | |
| | | | | | | | 38.0-39.0 ft. Hydraulic Push | | | | | | | | | | | | |
| 40 | | | | | | | 39.0-40.0 Hydraulic Push | | | | | | | | | | | | |
| | | | | | | | 40.0-41.0 ft. Hydraulic Push | | | | | | | | | | | | |
| | | | | | | | 41.0-42.0 ft. Hydraulic Push | | | | | | | | | | | | |
| | | | | | | | 42.0-43.0 ft. Hydraulic Push | | | | | | | | | | | | |
| | | | | | | | 43.0-44.0 ft. Hydraulic Push | | | | | | | | | | | | |
| 45 | | | | | | | 44.0-45.0 Hydraulic Push | | | | | | | | | | | | |
| | | | | | | | 45.0-46.0 ft. Hydraulic Push | | | | | | | | | | | | |
| | | | | | | | 46.0-47.0 ft. Hydraulic Push | | | | | | | | | | | | |
| | | | | | | | 47.0-48.0 ft. Hydraulic Push | | | | | | | | | | | | |
| | | | | | | | 48.0-49.0 ft. Hydraulic Push | | | | | | | | | | | | |
| 50 | | | | | | | 49.0-50.0 ft. Hydraulic Push | | | | | | | | | | | | |
| | | | | | | | Bottom of exploration at 50.0 ft. below ground surface | | | | | | | | | | | | |
| | | | | | | | No refusal | | | | | | | | | | | | |
| 55 | | | | | | | | | | | | | | | | | | | |
| 60 | | | | | | | | | | | | | | | | | | | |
| 65 | | | | | | | | | | | | | | | | | | | |
| 70 | | | | | | | | | | | | | | | | | | | |

NOTES:

FILE NO.

04435

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.

TEST BORING REPORT

| Depth (ft.) | Blows per 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 | S7 | 30.0 | | | | FV2 from 30.0 to 30.6 ft. = 7/3 ft. lb., Su = 260 psf | | | | | | | | | | | |
| | WOR | | | | | CL | Soft, gray lean CLAY (CL), wet | | | | | | 100 | N | M | M | | |
| | WOR | 24 | 32.0 | | | | -MARINE DEPOSITS- | | | | | | | | | | | |
| | WOR | | | | | | Begin rod probe at 32.0 ft. | | | | | | | | | | | |
| - 35 | | | | | | | Depth Blow Counts | | | | | | | | | | | |
| | | | | | | | 32.0-33.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 33.0-34.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 34.0-35.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 35.0-36.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 36.0-37.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 37.0-38.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 38.0-39.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 39.0-40.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 40.0-41.0 ft. Hydraulic Push | | | | | | | | | | | |
| - 40 | | | | | | | 41.0-42.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 42.0-43.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 43.0-44.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 44.0-45.0 ft. Hydraulic Push | | | | | | | | | | | |
| - 45 | | | | | | | 45.0-46.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 46.0-47.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 47.0-48.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 48.0-49.0 ft. Hydraulic Push | | | | | | | | | | | |
| - 50 | | | | | | | 49.0-50.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | Bottom of exploration at 50.0 ft. below ground surface No refusal | | | | | | | | | | | |
| - 55 | | | | | | | | | | | | | | | | | | |
| - 60 | | | | | | | | | | | | | | | | | | |
| - 65 | | | | | | | | | | | | | | | | | | |
| - 70 | | | | | | | | | | | | | | | | | | |

NOTES:

FILE NO.

04415

BORING NO.

B4

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 | PROPOSED BUILDING, WICKES LUMBER | STI JOB NO. | 04435 |
| LOCATION | 238 RIVERSIDE STREET, PORTLAND, MAINE | PROJECT MGR. | S. DOE |
| CLIENT | BRADCO SUPPLY CORP. | FIELD REP. | K. STEPHENSON |
| CONTRACTOR | MAINE TEST BORINGS, INC. | DATE STARTED | 4/8/2005 |
| DRILLER | B. ENOS | DATE FINISHED | 4/8/2005 |

| | | | | | |
|--|--------|---------|-------------|--|--|
| Elevation | ft. | Datum | NGVD 1929 | Boring Location | See Plan |
| Item | Casing | Sampler | Core Barrel | Rig Make & Model | Mobile B47 |
| Type | HSA | SS | | <input type="checkbox"/> Truck <input type="checkbox"/> Tripod | <input type="checkbox"/> Cal-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 checked="" type="checkbox"/> Track <input type="checkbox"/> Air Track | <input type="checkbox"/> Roller Bit |
| Hammer Fall (in.) | | 30 | | <input type="checkbox"/> Skid <input type="checkbox"/> Trailer | <input checked="" type="checkbox"/> Cutting Head |
| Drilling Notes: 2 in. x 7 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 | | 0.6 | SM | Medium dense, gray-brown silty SAND with gravel (SM), mps = 1.38 in., wet | 10 | 10 | 10 | 5 | 50 | 15 | | | | | | | | |
| | 10 | | | | | SW | Medium dense, brown well-graded SAND (SW), mps = 1.0 in., damp | 5 | 5 | 40 | 30 | 15 | 5 | | | | | | | | |
| | 9 | 14 | 2.0 | | 2.5 | | -FILL- Note: brown sand in auger cuttings at 2.5 ft. | | | | | | | | | | | | | | |
| 5 | 6 | S2 | 5.0 | | 5.8 | SW | Loose, brown well-graded SAND (SW), mps = 0.2 in., wet | | | 50 | 40 | 10 | | | | | | | | | |
| | 4 | | | | | CL | Medium stiff, gray lean CLAY (CL), occasional sand partings, wet | | | | | 5 | 95 | N | M | M | | | | | |
| | 4 | | | | | | | | | | | | | | | | | | | | |
| | 6 | 20 | 7.0 | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| 10 | 4 | FV1 | 10.0-10.6 | | | | FV1 from 10.0 to 10.6 ft. = 35/15 ft. lb., Su = 1,300 psf Note: vane probable binding on sand | | | | | | | | | | | | | | |
| | 5 | S3 | 10.0 | | | CL | Stiff, gray lean CLAY (CL), medium to fine sand lenses from 10.0 to 10.5 ft., occasional sand partings, wet | | | | | 10 | 90 | N | M | M | | | | | |
| | 6 | | | | | | | | | | | | | | | | | | | | |
| | 7 | 24 | 12.0 | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| 15 | WOH | FV2 | 15.0-15.6 | | | | FV2 from 15.0 to 15.6 ft. = 7/3 ft. lb., Su = 260 psf | | | | | | | | | | | | | | |
| | WOH | S4 | 15.0 | | | CL | Soft, gray lean CLAY (CL), occasional sand partings, wet | | | | | 5 | 95 | N | M | M | | | | | |
| | WOH | | | | | | | | | | | | | | | | | | | | |
| | 1 | 12 | 17.0 | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| 20 | WOR | S5 | 20.0 | | | CL | Soft, gray lean CLAY (CL), occasional sand partings, wet | | | | | 5 | 95 | N | M | M | | | | | |
| | WOR | | | | | | | | | | | | | | | | | | | | |
| | WOH | 24 | 22.0 | | | | | | | | | | | | | | | | | | |
| | WOH | | | | | | | | | | | | | | | | | | | | |
| 25 | WOR | S6 | 25.0 | | | CL | Soft, gray lean CLAY (CL), wet | | | | | 100 | | N | M | M | | | | | |
| | WOR | | | | | | | | | | | | | | | | | | | | |
| | WOR | 24 | 27.0 | | | | | | | | | | | | | | | | | | |
| | WOR | | | | | | | | | | | | | | | | | | | | |
| 30 | | | | | | | | | | | | | | | | | | | | | |

| Water Level Data | | | | | | Sample ID | | Well Diagram | | Summary | |
|------------------|------|--------------------|-------------------|----------------|-------|-----------|--------------------------|--------------------------|-------------------------|-------------------------|------|
| Date | Time | Elapsed Time (hr.) | Depth in feet to: | | | O | U | <input type="checkbox"/> | Riser Pipe | Overburden (Linear ft.) | 70.0 |
| | | | Bottom of Casing | Bottom of Hole | Water | | | <input type="checkbox"/> | Screen | | |
| 4/8/2005 | 1145 | | - | 4.2 | 2.0 | T | <input type="checkbox"/> | Filter Sand | Rock Cored (Linear ft.) | - | |
| | | | | | | S | <input type="checkbox"/> | Cuttings | Number of Samples | 7S | |
| | | | | | | G | <input type="checkbox"/> | Grout | | | |
| | | | | | | | <input type="checkbox"/> | Concrete | | | |
| | | | | | | | <input type="checkbox"/> | Bentonite Seal | | | |
| 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.

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 | FV3 | 30.0-30.6 | | | | FV3 from 30.0 to 30.6 ft. = 5/5 ft. lb., Su = 190 psf | | | | | | | | | | | |
| | WOR | S7 | 30.0 | | | CL | Soft, gray lean CLAY (CL), wet | | | | | | 100 | N | M | M | | |
| | WOR | | | | | | -MARINE DEPOSITS- | | | | | | | | | | | |
| | WOR | 24 | 32.0 | | | | Begin rod probe at 32.0 ft. | | | | | | | | | | | |
| | | | | | | | Depth Blow Counts | | | | | | | | | | | |
| | | | | | | | 32.0-33.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 33.0-34.0 ft. Hydraulic Push | | | | | | | | | | | |
| 35 | | | | | | | 34.0-35.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 35.0-36.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 36.0-37.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 37.0-38.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 38.0-39.0 ft. Hydraulic Push | | | | | | | | | | | |
| 40 | | | | | | | 39.0-40.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 40.0-41.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 41.0-42.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 42.0-43.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 43.0-44.0 ft. Hydraulic Push | | | | | | | | | | | |
| 45 | | | | | | | 44.0-45.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 45.0-46.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 46.0-47.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 47.0-48.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 48.0-49.0 ft. Hydraulic Push | | | | | | | | | | | |
| 50 | | | | | | | 49.0-50.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 50.0-51.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 51.0-52.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 52.0-53.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 53.0-54.0 ft. Hydraulic Push | | | | | | | | | | | |
| 55 | | | | | | | 54.0-55.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 55.0-56.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 56.0-57.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 57.0-58.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 58.0-59.0 ft. Hydraulic Push | | | | | | | | | | | |
| 60 | | | | | | | 59.0-60.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 60.0-61.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 61.0-62.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 62.0-63.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 63.0-64.0 ft. Hydraulic Push | | | | | | | | | | | |
| 65 | | | | | | | 64.0-65.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 65.0-66.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 66.0-67.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 67.0-68.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | 68.0-69.0 ft. Hydraulic Push | | | | | | | | | | | |
| 70 | | | | | | | 69.0-70.0 ft. Hydraulic Push | | | | | | | | | | | |
| | | | | | | | Bottom of exploration at 70.0 ft. below gr. surface-No refusal | | | | | | | | | | | |

NOTES

SP. NO.

04435

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.