Form # P 04

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK

CITY OF PORTLAND

BUILDING INSPECTION

PERMIT

Please Read Application And Notes, If Any, Attached

Permit Number: 031100

DEPT. OF BUILDING INSPECTION
CITY OF PORTLAND, ME
MAR 2 4 2004
RECEIVED

This is to certify that Ocean East Of Portland 2 LL WRIGHT RYAN CONSTRUCTION

has permission to Contruct Units 14 through 1[illegible]nd 24 th[illegible]per plan

AT 739 Ocean Ave [illegible] 423 A004001

provided that the person or persons, firm or corporation accepting this permit shall comply with all of the provisions of the Statutes of Maine 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 written permission procured before this building or part thereof is lined or otherwise closed-in. 24 HOUR NOTICE REQUIRED.

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

OTHER REQUIRED APPROVALS

Fire Dept. PREVIOUSLY APPROVED

Health Dept. _____

Appeal Board _____

Other _____
Department Name

RE ISSUED 3/24/04

12/16/03
Director - Building & Inspection Services

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 No:	Issue Date:	CBL:
03-1100		423 A004001

Location of Construction:	Owner Name:	Owner Address:	Phone:
739 Ocean Ave	Ocean East Of Portland Llc	247 Commercial St	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	WRIGHT RYAN CONSTRUCTIO	10 DANFORTH STREET Portland	2077733625
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	**Zone:**
		Multi Family	R-5 R-3 IL PRUD

Past Use:	Proposed Use:	Permit Fee:	Cost of Work:	CEO District:
vacant land: parcel includes this lot, 424-A: 6, 7-13, 20, 28, 31, 34, 38	86 unit development (18 buildings) & Community Building PRUD	$88,446.00	$9,100,000.00	

FIRE DEPT: ☑ Approved ☐ Denied

Signature: 9/24/03 for Mike

INSPECTION: Use Group: R3 Type: 5B

Signature: 12/16/03

Proposed Project Description:
86 unit development (18 buildings) & Community Building

PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)

Action: ☐ Approved ☐ Approved w/Conditions ☐ Denied

Signature: Date:

Permit Taken By:	Date Applied For:
kwd	09/10/2003

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..

Zoning Approval

Special Zone or Reviews	Zoning Appeal	Historic Preservation
☐ Shoreland N/A	☐ Variance	☑ Not in District or Landmark
☐ Wetland	☐ Miscellaneous	☐ Does Not Require Review
☐ Flood Zone panel 7 zone X	☐ Conditional Use	☐ Requires Review
☒ Subdivision	☐ Interpretation	☐ Approved
☒ Site Plan 2001-0289	☐ Approved	☐ Approved w/Conditions
Maj ☒ Minor ☐ MM ☐ OK with conditions	☐ Denied	☐ Denied
Date: 10/14/03	Date:	Date:

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

City of Portland, Maine - Building or Use Permit

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

Permit No:	Date Applied For:	CBL:
03-1100	09/10/2003	423 A004001

Location of Construction:	Owner Name:	Owner Address:	Phone:
739 Ocean Ave	Ocean East Of Portland 2 LLC	247 Commercial St	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	WRIGHT RYAN CONSTRUCTIO	10 DANFORTH STREET Portland	(207) 773-3625
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	
		Multi Family	

Proposed Use:	Proposed Project Description:
Units 14 through 17 and 24 through 73 of the overall 86 unit development (18 buildings) & Community Building	Contruct Units 14 through 17 and 24 through 73 as per plan

Dept: Zoning **Status:** Approved with Conditions **Reviewer:** Marge Schmuckal **Approval Date:** 10/14/2003

Note: 09/22/2003 - the submitted site plans are different than what I last reviewed on 9/27/02 - in May, 03 something was submitted to Kandi that changed building layouts. Bldg #5 is now not showing the required setback of 35'. Only 33' is scaled. Corbin Findlan was notified in person. Waiting for the revised site plan before signing off on zoning. Passing on to Mike to start the building code review.
10/14/03 upon request Kandi gave me the revised site plan that I had been waiting for. **Ok to Issue:** ☑

1) Separate permits shall be required for future decks, sheds, pools, and/or garages.
2) Separate permits shall be required for any new signage.
3) This permit is being approved on the basis of revised site plans submitted and received from planning on 10/14/03. Any deviations shall require a separate approval before starting that work. This revised site plan only changed the setback for building #5 so that a minimum setback of 35 feet is maintained to the external subdivision property line.

Dept: Building **Status:** Approved with Conditions **Reviewer:** Mike Nugent **Approval Date:** 12/16/2003

Note: **Ok to Issue:** ☑

1) Site Work and Construction cannot commence until the Performance Guarantees are submitted, reveiwed and approved.

   A Satisfactory preconstruction meeting must occur with all applicable City Departments prior to construction.

Dept: Fire **Status:** Approved with Conditions **Reviewer:** Lt. MacDougal **Approval Date:** 09/24/2003

Note: **Ok to Issue:** ☑

1) a blasting plan shall submitted and approved by the city of portland (fire dept)
2) hydts shall be approved by the Portland Water District
3) street names shall be approved by Jon Giles (engineering)

Comments:

09/10/2003-kwd: check for $30,000.00: estimated unit cost at $125,000 each plus $200,000 for community building. May need to recalculate later when more accurate figures are provided. Permit thus for 24 units plus Community Bldg., may change if additional payments rec'd.

09/24/2003-kwd: two checks totalling $58,640 paid 9/22/2003, balance of cost of work fees and remaining CofOs paid for; please note that CofOs are for 86 units + 1 community building. $14.00 credit balance. Kwd

03/24/2004-kwd: 3/24/2004:name of owner changed on permit and reprinted on customer's request and after receipt of deeds. Kwd Project divided into two permits at the request of the Permittee Also See Permit #040298 mjn

DEPT. OF BUILDING INSPECTION
CITY OF PORTLAND, ME

RECEIVED

City of Portland, Maine - Building or Use Permit Application

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

Permit No:	Issue Date:	CBL:
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Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	WRIGHT RYAN CONSTRUCTIO	10 DANFORTH STREET Portland	2077733625
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	**Zone:**
		Multi Family	

Past Use:	Proposed Use:	Permit Fee:	Cost of Work:	CEO District:
vacant land: parcel includes this lot, 424-A: 6, 7-13, 20, 28, 31, 34, 38	Units 14 through 17 and 24 through 73 of the overall 86 unit development (18 buildings) & Community Building	$88,446.00	$9,100,000.00	4

FIRE DEPT: ☑ Approved ☐ Denied

See Original Approval

Signature:

INSPECTION:
Use Group: R3 Type: 5B

RE ISSUED 3/24/04
12/10/03

Signature:

Proposed Project Description:
Units 14 through 17 and 24 through 73 of the overall 86 unit development (18 buildings) & Community Building

PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)

Action: ☐ Approved ☐ Approved w/Conditions ☐ Denied

Signature: Date:

Permit Taken By:	Date Applied For:
kwd	09/10/2003

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..

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☐ Subdivision	☐ Interpretation	☐ Approved
☐ Site Plan	☐ Approved	☐ Approved w/Conditions
Maj ☐ Minor ☐ MM ☐	☐ Denied	☐ Denied
Date: 10/14/03	Date:	Date:

BY MAGE
SEE ORIGINAL

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

DRAFT STOPPING IN FLOOR SYSTEMS
SEC 721.1.2

Soil type/Presumptive Load Value (Table 401.4.1) ______________		
Component	**Plan Reviewer**	**Inspection/Date/Findings**
STRUCTURAL **Footing Dimensions/Depth (Table 403.1.1 & 403.1.1(1), Section 403.1.2)**	8" x 24" NEED SOILS REPORT #4 REBAR UNBALANCE	BACKFILL ISSUE
Foundation Drainage Dampproofing (Section 406) ~~[illegible]~~	4" SCREENED PVC w/ 3/4 STONE.	
Ventilation (Section 409.1) Crawls Space ONLY FOUNDATION VENT.		
AnchorBolts/Straps (Section 403.1.4)	1/2" 6' o.c. - CORNERS	
Lally Column Type, Spacing and footing sizes (Table 502.3.4(2))	NONE -	IS IT A BEARING WALL SHEAR FLOOR SYSTEM?
Built-Up Wood Center Girder Dimension/Type (Table 502.3.4(2))	- RUSSES -	ALL FLOOR SYSTEM IS THERE ASSEMBLY MISSING?
Sill/Band Joist Type & Dimesions	2x8 P.T. SILLS	
First Floor Joist Species Dimensions and Spacing (Table 503.3.1(1) & Table 503.3.2(1))	TRUSSES	ON STILL
Second Floor Joist Species Dimensions and Spacing Table(503.3.1(1) & Table 503.3.2(1))	QUESTION	FIRE WALL INTEGRETY @ @ UNIT

DETAIL? ON A5.1

Header Schedule	ABOVE SLIDERS	(ROOF LOAD) TO CONCENTRATED LOAD PER [illegible]
Type of Heating System		
Stairs **Number of Stairways** ONE **Interior** 10" **Exterior** **Treads and Risers (Section 314)** **Width** **Headroom** **Guardrails and Handrails (Section 315)**	PER UNIT TREAD 7 3/16 RISE	W/ 3/4" NOSE.
Smoke Detectors **Location and type/Interconnected**		
Plan Reviewer Signature		

See Chimney Summary Checklist

FIRE STOP
DRAFT STOP

Attic or additional Floor Joist Species Dimensions and Spacing(Table 802.4.2 or 503.3.1(1) & Table 503.3.2(1))	NONE	
Roof Rafter;Pitch, Span, Spacing& Dimension(Table 802.3.2(7))	TRUSS)	
Sheathing; Floor, Wall and roof (Table 503.2.1(1)	FLOOR - 3/4" ADVANTEK 1/2 OSB WALLS - 3/8" OSB	ROOF.
Fastener Schedule (Table 602.3(1) & (2))		
Private Garage Section 309 and Section 407 1999 BOCA) Living Space ? (Above or beside) N Fire separation	N/A	
Fire rating of doors to living space Door Sill elevation (407.5 BOCA)	N/A.	
Egress Windows (Section 310)	SPRINKLED	
Roof Covering (Chapter 9)	ASPHALT -	2 LAYS. (CLASS?)
Safety Glazing (Section 308)		
Attic Access (BOCA 1211.1) FUTURE	? FIG 16 A 5.1	
Draft Stopping around chimney NOT	SHOWN.	

03-1100

All Purpose Building Permit Application

If you or the property owner owes real estate or personal property taxes or user charges on any property within the City, payment arrangements must be made before permits of any kind are accepted.

Location/Address of Construction: 166 PRESUMPSCOT AND 733 OCEAN AVE.		
Total Square Footage of Proposed Structure: 100,000 +/-	Square Footage of Lot: 15.62 ACRES	
Tax Assessor's Chart, Block & Lot: 004 Chart# 423 Block# A Lot# SEE ATTACHMENT A	Owner: OCEAN EAST OF PORTLAND, LLC; OCEAN EAST OF PORTLAND 2, LLC	Telephone: 207-236-4067
Lessee/Buyer's Name (If Applicable)	Applicant name, address & telephone: REALTY RESOURCES CHART. 247 COMMERCIAL ST ROCKPORT ME 04856 207-236-4067 ATTN: CORBIN FINDLAN	Cost Of Work: $ 9.1 MILLION; Fee: $ 81921 6450.00 8837.00

Current use: UNDEVELOPED

If the location is currently vacant, what was prior use: N/A

Approximately how long has it been vacant: N/A

Proposed use: HOUSING - TOWNHOUSE UNITS

Project description: 86 HOUSING UNITS IN 17 BUILDINGS, 1 COMMUNITY BUILDING TOTALING APPOX. 106,000 SFT.

Contractor's name, address & telephone: WRIGHT-RYAN CONSTRUCTION, INC. 10 DANFORTH ST. PORTLAND 773-3625

Who should we contact when the permit is ready: BILL ROWLES

Mailing address: 10 DANFORTH ST. Portland, ME 04101

We will contact you by phone when the permit is ready. You must come in and pick up the permit and review the requirements before starting any work with a Plan Reviewer. A stop work order will be issued and a $100.00 fee if any work starts before the permit is picked up. PHONE: 773-3625

IF THE REQUIRED INFORMATION IS NOT INCLUDED IN THE SUBMISSIONS THE PERMIT WILL BE AUTOMATICALLY DENIED AT THE DISCRETION OF THE BUILDING/PLANNING DEPARTMENT, WE MAY REQUIRE ADDITIONAL INFORMATION IN ORDER TO APROVE THIS PERMIT.

I hereby certify that I am the Owner of record of the named property, or that the owner of record authorized the proposed work and that all work will be performed in compliance with all applicable laws and have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in this application is issued, I certify that the Code Official's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

DEPT. OF BUILDING INSPECTION
SEP 5 2003
RECEIVED

Signature of applicant: [signature] Date: 9/4/03

This is NOT a permit, you may not commence ANY work until the permit is issued.
If you are in a Historic District you may be subject to additional permitting and fees with the Planning Department on the 4th floor of City Hall

ATTACHMENT A
Ocean East of Portland

TAX ASSESSOR'S CHART, BLOCK AND LOT NUMBERS

- Chart no. 423, Block A, Lot 4
- Chart no. 424, Block A, Lot 38

} Ocean east = 739 Ocean

Lot 34 True St.
Lot 6 = 685 Ocean
Lot 31 25 True
Lot 7-13 True St.
Lot 20 True St.
Lot 28 = 166 Presumpscot

From: Mike Nugent
To: port-web:gtrick@[maine.rr.com]
Date: Thu, Nov 20, 2003 10:28 AM
Subject: Re: responce to 11/05/03 comments Townhomes at Ocean East

The following issues remain:

3. section 721.7.1.2 says draftstopping is not required when buildings are equipped with a sprinkler system and there are no concealed spaces.
The concealed space is the area between the second floor sheathing and first floor GWB ceiling below, because NFPA 13R systems typically do not include protection in concealed areas.

8. I am not familiar with a ul listing that specifically tests this detail. It is felt this detail provides a better rated assembly due to the fact that the gwb covers all areas except where the 3"x3" top chord penetrates to set on the top of plate. the amount of gwb cut in around framing is reduced significantly providing better continuity for the wall. also the 3"x3" thickness has a better firestop capacity than a 2x10 for instance.

Can you review this assembly in accordance with Section 714.0 and demonstrate compliance.

9. Structure is being reviewed
In both circumstances wher this comment occurred, can you provide structural details

10. The owners request was that no access to the attic be provided to the tenants. I suggested that we frame in the accessway, gwb over the opening and trim it. If necessary the fire department could break through, at which time the owner would put in a panel. What do you think?

The code requires attic access, there are options that preclude tenant access.

14. See sheet A2.5 elevation and partial elevation and detail 7 sh. A5.3 showing deck and stairrail heights.

Are there structural details?

CITY OF PORTLAND
ACCESSIBILITY CERTIFICATE

Designer: RICK GODUTI GODUTI / THOMAS ARCHITECTS

Address of Project OCEAN AVE. PRESUMPSCOT ST.

Nature of Project 86 UNITS RENTAL HOUSING
COMMUNITY BLDG.

Date 9/1/2003

The technical submissions covering the proposed construction work as described above have been have been designed in compliance with applicable referenced standards found in the Maine Human Rights Law and Federal Americans with Disability Act.

(SEAL)

Signature

Title OWNER PARTNER

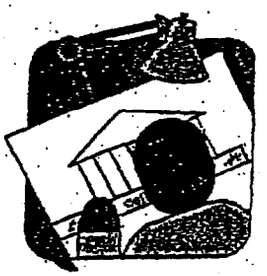
Firm GODUTI / THOMAS ARCHITECTS

Address 44 OAK ST.
PORTLAND, ME. 04101

Telephone 207-775-3184

REGISTERED ARCHITECT * STATE OF MAINE

DEPT. OF BUILDING INSPECTION
CITY OF PORTLAND, ME
SEP 10 2003
RECEIVED



CITY OF PORTLAND MAINE

389 Congress St., Rm 315
Portland, ME 04101
Tel. – 207-874-8704
Fax – 207-874-8716

TO: Inspector of Buildings City of Portland, Maine
Planning & Urban Development
Division of Housing & Community Services

FROM DESIGNER: RICK GODUTI
GODUTI / THOMAS ARCHITECTS

DATE: 9/1/2003

Job Name: TOWNHOMES @ OCEAN EAST

Address of Construction: OCEAN AVE / PRESUMPSCOT ST.

THE BOCA NATIONAL BUILDING CODE/1999 FourteenthEDITION

Construction project was designed according to the building code criteria listed below:

Building Code and Year BOCA Use Group Classification(s) R-3

Type of Construction 5B Bldg. Height VARIES Bldg. Sq. Footage VARIES

Seismic Zone _____ Group Class /

Roof Snow Load Per Sq. Ft. 60 Dead Load Per Sq. Ft. 15

Basic Wind Speed (mph) 90 Effective Velocity Pressure Per Sq. Ft. _____

Floor Live Load Per Sq. Ft. 40 LBS

Structure has full sprinkler system? Yes ✓ No ____ Alarm System? Yes ____ No ____
Sprinkler & Alarm systems must be installed according to BOCA and NFPA Standards with approval from the Portland Fire Department.

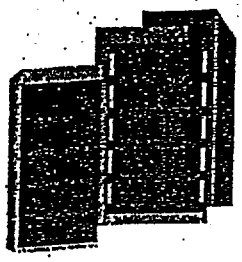
Is structure being considered unlimited area building: Yes ____ No ✓

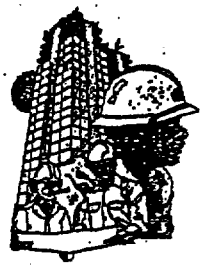
If mixed use, what subsection of 313 is being considered _____

List Occupant loading for each room or space, designed into this Project.

(Designers Stamp & Signature)

PSH 6/07/2K





CITY OF PORTLAND
BUILDING CODE CERTIFICATE
389 Congress St., Rm 315
Portland, ME 04101

TO: Inspector of Buildings City of Portland, Maine
Department of Planning & Urban Development
Division of Housing & Community Service

FROM: RICK GODUTI

RE: Certificate of Design

DATE: 9/1/2003

These plans and/or specifications covering construction work on:

TOWNHOMES @ OCEAN EAST

Have been designed and drawn up by the undersigned, a Maine registered architect/engineer according to the BOCA National Building Code/1999 Fourteenth Edition, and local amendments.

(SEAL) REGISTERED ARCHITECT ... STATE OF MAINE

Signature

Title OWNER/PARTNER

Firm GODUTI/THOMAS ARCHITECTS

Address 44 OAK ST.
PORTLAND MAINE.

As per Maine State Law:

$50,000.00 or more in new construction, repair, expansion, addition, or modification for Building or Structures, shall be prepared by a registered design Professional.

PSH 6/20/2k

From: "Rick Goduti" <gtrick@maine.rr.com>
To: "Mike Nugent" <MJN@portlandmaine.gov>
Date: Tue, Nov 11, 2003 5:57 PM
Subject: responce to 11/05/03 comments Townhomes at Ocean East

Mike,
Please review the following responses in the order of your latest review dated 11/05/03.

1. Will change classification to 5b

2. There are no openings on the side walls of any unit types. The boiler rooms have fresh air intakes on the side walls, but the sizes are less than the max. allowable unprotected opening per table 705.3.

3. section 721.7.1.2 says draftstopping is not required when buildings are equipped with a sprinkler system and there are no concealed spaces.

4. I have asked Corbin Findlan to send you a copy of the soils report.

5. there are no basements without a daylight portion

6. I will add a note to foundation details that require anchor bolts within 1' of all corners

7. Structure is being reviewed

8. I am not familiar with a ul listing that specifically tests this detail. It is felt this detail provides a better rated assembly due to the fact that the gwb covers all areas except where the 3"x3" top chord penetrates to set on the top of plate. the amount of gwb cut in around framing is reduced significantly providing better continuity for the wall. also the 3"x3" thickness has a better firestop capacity than a 2x10 for instance.

9. Structure is being reviewed

10. The owners request was that no access to the attic be provided to the tenants. I suggested that we frame in the accessway, gwb over the opening and trim it. If necessary the fire department could break through, at which time the owner would put in a panel. What do you think?

11. I will adjust chimney to maintain min. distance of 10

12. This detail has been reviewed by the architect, engineer, MSHA and contractor and we concluded that due to the nature of the ledge a cushion was the best option providing bearing from the ledge while avoiding any differential settlement or problems due to water moving through the ledge.

13. specifications call for the following at rated wall penetrations:
fire foam up to 2", fire caulking up not 4" and caulking and a collar over 4".

14. See sheet A2.5 elevation and partial elevation and detail 7 sh. A5.3
showing deck and stairrail heights.

I will have answers on the structure shortly. Let me know if there is anything else.

Rick Goduti

Memorandum

207-623-0016

To: Rick Goduti

From: Mike Nugent/Manager of Inspection Services

Date: 11/05/2003

Re: Ocean East (423 A004)

Thank you for the additional plans, here are some questions that have arisen as I review them, please respond in writing or provide additional technical:

1) This is classified as type 5A construction but the elements of construction are not consistent with type 5A listed in Table 602 of the 1999 BOCA.
2) What is the percentage of glazing/unprotected openings in the walls of the units that are closer than 30 feet to one another, ie buildings 15 and 16. See Table 705.3.
3) For the floor systems that exceed 500 square feet, the area must be divided into approximately equal areas not exceeding 500 sq.ft. The draft stopping must be installed parallel to the framing members.
4) Please forward (again I'm sorry!) the soils info so I can look in to the unbalanced backfill issue
5) Do any of the buildings have basements that are not "daylight"? If so, vents/windows?
6) Anchor bolt location relative to corners
7) In the typical floor details, there is an area adjacent to the stairways with no carrier.
8) Please review detail 7 on A5.1, is there a UL listed assembly for the area where the top chord on the truss rests on the tenant separation wall?
9) Typical Framing details show nothing to carry the concentrated point load from the roof system , second floor window opening through the first floor slider opening to the foundation.
10) Attic access is shown as "future", this must be done as a part of construction.
11) The chimney shown on page A2.5 is still closer than 10 feet to the closest structure and not 2 feet above it.
12) Please provide Code justification for the Footing designs that are shallower that frost depth yet not on "solid rock" (1806.1)
13) Fire separation penetrations protection?
14) Exterior porch/deck /guard framing detail.

CITY OF PORTLAND, MAINE
PLANNING BOARD

October 21, 2002

Mr. Corbin B. Findlan
Vice President
Realty Resources
247 Commercial Street
Rockport, ME 04856

RE: Ocean East of Portland, 739 Ocean Avenue
ID #2001-0289, CBL #423-A-004

Dear Mr. Findlan:

On October 8, 2002, the Portland Planning Board voted 5-0 (Caron, Delogu absent) to approve your application for an 86-unit PRUD located at 739 Ocean Avenue. The Board found that the application was in conformance with the Site Location of Development Act. The Board also found that the application met the standards of the Subdivision and Site Plan ordinance of the Land Use Code with the following conditions:

i. That an executed copy of the public access easement through the site must be submitted for review and approval by Corporation Counsel and that the easement shall be shown on the approved site plan, prior to issuance of a building permit.

ii. There shall be a ten year extended stormwater management performance guarantee in an amount equal to the dollar cost estimate of the drainage related improvements included in the regular performance guarantee but not less than $50,000. During the ten year period commencing with the release of the regular performance guarantee for site improvements, a drainage monitoring program will be undertaken by the City to evaluate post construction drainage and stormwater conditions for a variety of storm events as they occur. The cost of all monitoring shall be borne by the developer and its successors and interests. The extended stormwater management performance guarantee resources shall be used by the City to mitigate any problems, deficiencies, or defects of the stormwater management program and infrastructures on the site, as may be determined to be necessary by the Planning and Public Works Authorities and access to the site for these purposes shall be provided by the applicant.

iii. That the applicant contribute $5,000 for any proposed traffic calming work on Presumpscot Street and if determined necessary by the City's Traffic Engineer, the applicant shall pay for corrections or additional loops to the existing vehicle loop detection at the intersections of Washington Avenue/Ocean Avenue and Washington Avenue/Presumpscot Street.

iv. That the applicant revise the plans in accordance with the Development Review Coordinator's memo dated October 4, 2002.

v. That an executed Drainage Maintenance Agreement be submitted to staff for review and approval prior to issuance of a building permit.

vi. That a blasting plan be submitted for Planning Authority review and approval, which shall include provisions that a notice of blasting procedures and protocols (notice language to be reviewed and approved by the Planning Authority) be sent to residents and property owners within 1,000 feet from the property lines and that a pre-blast survey be offered to all building owners in this proximity.

vii. That the noise standard for the adjacent IL zone be applied to the rock crusher, which is 60db during the day. Also, that the hours of crushing be the same as the blasting: 9:00 a.m. to 4:00 p.m.

viii. That the City Arborist review and approved the landscaping plan, including preservation locations and measures.

ix. That, as an alternative to vinyl siding, the applicant use a wood or other more durable siding material for the entry level of the buildings on the accessed side of the building for review and approval by staff.

x. That the recreation area by Building 14 be revised for the addition of a recreational amenity including a half basketball court at a minimum, for review and approval by staff.

The approval is based on the submitted site plan and the findings related to subdivision and site plan review standards as contained in Planning Report #60-02, which is attached.

Please note the following provisions and requirements for all site plan approvals:

1. A performance guarantee covering the site improvements as well as an inspection fee payment of 2.0% of the guarantee amount and 7 final sets of plans must be submitted to and approved by the Planning Division and Public Works prior to the release of the building permit. If you need to make any modifications to the approved site plan, you must submit a revised site plan for staff review and approval.

2. The site plan approval will be deemed to have expired unless work in the development has commenced within one (1) year of the approval or within a time period agreed upon in writing by the City and the applicant. Requests to extend approvals must be received before the expiration date.

3. A defect guarantee, consisting of 10% of the performance guarantee, must be posted before the performance guarantee will be released.

4. Prior to construction, a preconstruction meeting shall be held at the project site with the contractor, development review coordinator, Public Work's representative and owner to review the construction schedule and critical aspects of the site work. At that time, the site/building contractor shall provide three (3) copies of a detailed construction schedule to the attending City representatives. It shall be the contractor's responsibility to arrange a mutually agreeable time for the preconstruction meeting.

5. If work will occur within the public right-of-way such as utilities, curb, sidewalk and driveway construction, a street opening permit(s) is required for your site. Please contact Carol Merritt at 874-8300, ext. 8828. (Only excavators licensed by the City of Portland are eligible.)

6. The Development Review Coordinator must be notified five (5) working days prior to date required for final site inspection. Please make allowances for completion of site plan requirements determined to be incomplete or defective during the inspection. This is essential as all site plan requirements must be completed and approved by the Development Review Coordinator prior to issuance of a Certificate of Occupancy. Please schedule any property closing with these requirements in mind.

If there are any questions, please contact the Planning Staff.

Sincerely,

Jaimey Caron, Chair
Portland Planning Board

cc: Lee D. Urban, Planning and Development Department Director
Alexander Jaegerman, Planning Division Director
Sarah Hopkins, Development Review Program Manager
Kandice Talbot, Planner
Jay Reynolds, Development Review Coordinator
✓Marge Schmuckal, Zoning Administrator
Jodine Adams, Inspections
Larry Ash, Traffic Engineer
Tony Lombardo, Project Engineer
Eric Labelle, City Engineer
Jeff Tarling, City Arborist
Penny Littell, Associate Corporation Counsel
Lt. Gaylen McDougall, Fire Prevention
Don Hall, Appraiser, Assessor's Office
Approval Letter File
Correspondence File
Mr. Rick Goduti, Goduti/Thomas Architects, 44 Oak Street, Portland, Maine 04101

From: Marge Schmuckal
To: Alex Jaegerman; Kandi Talbot; Lee Urban; Penny ...
Date: Wed, Sep 4, 2002 9:07 AM
Subject: Re: OceanEast -True Street Development

Lee,
I do have a lot of Zoning issues. I was trying to set-up a meeting with Kandi who is the Planner involved with this one, but we haven't done that yet.

There are 18 buildings with a total of 86 units proposed. It is another complicated site because there are several zones involved R-3, R-5, and I-L. Both the R-3 & R-5 PRUD's have completely different ways of figuring out setbacks and compliance. So these types of projects are kind of a zoning nightmare to figure out.

Specifics:

Bldg #14 is showing a residential use in an Industrial Zone which is specifically prohibited.

Bldg #11 located in an R-5 zone is 146' long where the maximum length is 140'

Bldg #17 (4 DU) which is in an R-3 zone is showing 25' from the external property line instead of the 35' required. Bldg #14 (5 DU) appears to be close to the required 35' setback to the external property line, so I want to confirm that the developer realizes that the 35 feet is required (not 25').

I do not see in all the submittals what the gross area breakdown is for each Residential Zone nor do I see what the net area breakdown is for each Residential Zone. I would like to see that for compliance. Radcliff Glen had a similar double residential zone situation and they were able to give me all that information. So I would like to treat this development the same way.

I hope this helps you. We should be sitting down soon on this.

Marge

>>> Lee Urban 09/04 5:45 AM >>>
I need some specifics on issues associated with the above-captioned project. For example, is there an issue with a residential use in an industrial zone and what does that mean for the project?

Thanks. Why do I need specifics, you ask? Because Cheryl is very interested in the project and I need to be ready.

CC: MARK ADELSON

From: Marge Schmuckal
To: Kandi Talbot
Date: Fri, Sep 27, 2002 2:36 PM
Subject: Ocean East - True Street

Kandi,
I have reviewed the latest site plan revision that I received from you at the Wednesday's site plan meeting.

I have found that the project is meeting the requirements of the zoning ordinance. The density requirements were reduced in the R-3 zone when the net land area calculations were refined. The current plans meet the reduced calculation requirements.

Building #14 is now a recreation building and not a residential building. Since part of this structure is in the I-L zone, it is required to meet the zoning uses. Recreational uses are allowable within the I-L zone. This building now meets the zoning requirements.

Building #11 that was longer than the R-5 zone permitted, is now being shown to meet the maximum length requirements.

All other setbacks for the buildings are now meeting the zoning requirements.

This project is now meeting the requirements of the zoning ordinance.

Marge Schmuckal
Zoning Administrator
9/27/02

CC: ALEX JAEGERMAN; Lee Urban; MARK ADELSON; PENN...

From: Marge Schmuckal
To: Kandi Talbot
Date: Mon, Sep 22, 2003 2:37 PM
Subject: Oceans East - True Street

Kandi,
We have a permit application to start construction on this project. Although I see that you have signed off on site plan, there are several requirements that need to be done PRIOR to issuing a building permit. Have all those items been done? Can a building permit be issued? If not, please let us know by e-mail when that can be done.
Marge

CC: MARK ADELSON; Mike Nugent

REALTY RESOURCES CHARTERED

Memorandum

To: Mike Nugent
City of Portland Building Inspections

From: Corbin B. Findlan CBF

Date: 9.09.03

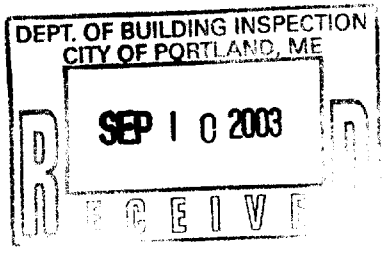
RE: Townhomes at Ocean East Ocean Ave

Mike,

Enclosed check for $30,000 as partial payment for building permit on above referenced project. The anticipated first phase of the project involves buildings # 13, 14, 15, 16, 17 and 18. I will have check for balance of buildings in total project to your office by end of next week at the latest.

I appreciate whatever can be done to move this project through the City review process, and make myself available to you or your staff in whatever way I can assist.

Thanks
Corbin



247 Commercial Street, Rockport, Maine 04856 * Phone (207) 236-4067 Fax (207) 236-6307

From: Marge Schmuckal
To: Kandi Talbot
Date: Mon, Sep 22, 2003 4:28 PM
Subject: Oceans East - True St.

10/14/03 True received revised plan

Kandi,
Everything else is ok on my review of this- number of units is still 86- Number of parking places is still 190 spaces. When you have the revised site plan showing building #5 being a minimum of 35 feet to the external subdivision line, I can sign off for zoning. I have been told by Corbin Findlan that the Density Calcs have not changed.

36' shown
35' min

Before I can do a final sign-off, I will pass this on to Mike to start his review.

Marge

CC: Gaylen Mc Dougall; MARK ADELSON; Mike Nugent; ...

goduti thomas architects

44 oak street
portland, maine 04101
207-775-3184

AUGUST 15, 2003

TO:

MIKE NUGENT
INSPECTION SERVICES MANAGER
CITY OF PORTLAND
389 CONGRESS ST,
PORTLAND, MAINE 04101

RE: TOWNHOMES @ OCEAN EAST, PORTLAND, MAINE

DEAR MIKE

PLEASE FIND ACCOMPANYING 90% DRAWINGS AND SPECIFICATIONS FOR TOWNHOMES AT OCEAN EAST TO BE LOCATED OFF BOTH OCEAN AVE. AND PRESUMPSCOT ST.. THE PROJECT HAS BEEN APPROVED BY THE PLANNING BOARD. THE OWNER IS SATISFYING THE PLANNING BOARD CONDITIONS, WRIGHT RYAN CONSTRUCTION HAS BEEN SELECTED AS CONTRACTOR AND WE HOPE TO BEGIN CONSTRUCTION EARLY THIS FALL.

THE DRAWINGS ARE FULL SCOPE EXCEPT FOR SPRINKLER WHICH WILL BE A DESIGN/ BUILD 13R SYSTEM.

A COMPLETED PERMIT APPLICATION WILL COMING UNDER SEPARATE COVER.

THE PERMIT FEE WILL BE COMING FROM CORBIN FINDLAN AT REALTY RESOURCES IN ROCKPORT , MAINE. THE FEE WILL BE IN $60,000.00 TO $70,000.00 RANGE. WILL THE ENTIRE FEE HAVE TO PAID WITH THE APPLICATION SUBMISSION?

THE DRAWINGS AND SPECIFICATIONS ALSO ARE BEING SUBMITTED TO THE STATE FIRE MARSHALL'S OFFICE FOR REVIEW.

JOHN RYAN OF WRIGHT RYAN CONSTRUCTION AND I WOULD BE HAPPY TO COME AND REVIEW THE DRAWINGS WITH IF THAT WOULD BE HELPFUL.

PLEASE CALL WITH ANY QUESTIONS:

THANK YOU,

RICK GODUTI

From: Marge Schmuckal
To: Kandi Talbot
Date: Tue, Oct 14, 2003 12:25 PM
Subject: Oceans East

Kandi,
You have not shown me the revisions to this subdivision that I need to do a sign off on their permit. There was a setback problem that they had to correct. Corbin said that he got that to you a while back. I am going on vacation for two weeks starting next Monday. I would like to get this off my desk.
Thanks,
Marge

10/14/03
received revised site plan

Revised plans

Applicant: → Now Dated May/03 Date: 9/27/02

Address: Oceanseast - True St C-B-L: 423-A-004

CHECK-LIST AGAINST ZONING ORDINANCE

#03-1100

Date - New

Zone Location - R-5 - majority Zone
R-3 -
I-L

Interior or corner lot -

Proposed Use/Work - to construct 18 buildings (→ 17 residential & 1 community Bld) for a total of 86 units

Sewage Disposal - City

Lot Street Frontage - I min. Building setback from External subdivision property Lines
R-3 - 3 or fewer D.U. in a Bldg - 25' min -
4 or more (6 MAX) " " " - 35' min

Front Yard -

R-5 Bldg length 100' or less = 25' min

Rear Yard - Bldg length > 100' (140' MAX) = 35' min

Side Yard - II MAX length of Bldg

Projections - R-3 - 100' for bldgs w/o garages & 140' for bldgs with garages

Width of Lot - R-5 140' MAX - MAX length of an accessory garage structure = 60'

Height - III Min Distance between detached PRUD D.U.
R-3 - 16' min

Lot Area - R-5 - None req

Lot Coverage/ Impervious Surface - IV - Gross Acres required R-3 - min 3 Gross Acres 43560 x 3 = 130,680#
total 620,512 ok R-5 min 2 Gross Acres - 50 43560 x 2 = 87120# ok

Area per Family - V Distance required from Recreation Areas
R3 & R5 = 25' min

Off-street Parking - VI Min Net Land Area R-3 ~~102,121~~ 53,831 ÷ 6,500# = 8.28
R-5 257,559 ÷ 3,000# = 85.853 - 78 shown

Loading Bays -

Site Plan - VII Min. Recreation Area R-3 & R-5 = 300# per DU =
86 x 300 = 25,800# min
20000# shown in one area
6166#
26166#
OK

Shoreland Zoning/ Stream Protection - VIII parking - 2 ea DU + 1 extra for every 6 units
2x86 = 172
86÷6 = 14.3
186.3 spaces req - 190 spc. shown

Flood Plains - Panel 7
Zone X

(Left margin notes:)
ok see revised site plan dated 10-14-03
↑ 36' shown 35' min req
Bldg #5 reqs 35' setback 9/22/03 using submitted plan
2001-289 ← not in ↓

432 Cony Road
P. O. Box 4687
Augusta, ME 04330-1687
(207) 623-9475
FAX (207) 623-0016
1-800-244-9475

ENGINEERING
COFFIN
SURVEYING
COFFIN ENGINEERING & SURVEYING, INC.

59B Union Street
P. O. Box 1031
Camden, ME 04843-1031
(207) 236-4365
FAX (207) 236-3055
1-888-282-4365

LETTER OF TRANSMITTAL

PROJECT NO. # 2001-034

DATE: September 27,2002

TO: City of Portland

Planning & Urban Development
389 Congress Street
Portland, ME 04101

ATTENTION: Marge Schmuckal – Zoning Administrator

RE: Realty Resources Ocean East

WE ARE SENDING YOU ☒ enclosed ☐ under separate cover

☒ Prints ☐ Mylar ☐ Deed description ☐ Proposal ☐ Billing
☐ Letter ☐ Report ☐ Copy of letter ☐ HHE 200 ☐ Disk

COPIES	DATE	DESCRIPTION
2	02/27/02	Density Calculations

THESE ARE TRANSMITTED AS CHECKED BELOW:

☐ As requested ☒ For your use ☐ For approval
☒ For Review and Comment ☐ Return with Corrections ☐ Other

REMARKS:

SIGNED: _____
William T. Lane, P.E.

Professionals Delivering Quality Solutions

Mike Nugent

SUMMIT GEOENGINEERING SERVICES

GEOTECHNICAL REPORT

PROPOSED EBEN HILL AND OCEAN EAST CONDOMINIUMS PORTLAND, MAINE

Prepared for:

Realty Resources, LLC

Prepared by:

Summit Geoengineering Services
Project #7278
December 2001

RE: 739 Ocean Ave

03 1100
423 A004

640 MAIN STREET ▲ LEWISTON, MAINE 04240 ▲ TEL: (207) 795-6009 ▲ FAX: (207) 795-6128
PO BOX 4698 ▲ AUGUSTA, MAINE 04330 ▲ TEL: (207) 621-8334 ▲ FAX: (207) 626-9094
GEOTECHNICAL ENGINEERING ▲ CONSTRUCTION MATERIALS TESTING ▲ GEOENVIRONMENTAL

SECTION 2
SITE AND PROJECT DESCRIPTION

The Eben Hill and Ocean East Condominium project consists of a total of 96 condominium units planned for a S-shaped parcel of about 19 acres. The condominium units will be constructed on either side of a proposed through street that will run from Ocean Avenue on the west side to Presumpscot Street on the east. The Eben Hill portion of the project will be located of off Presumpscot Street and is comprised of 36 units in 6 buildings and a community center. Sixty units in 13 buildings are proposed for the Ocean East project area. We understand that the condominium buildings will be two story, wood framed structures with a slab-on-grade first floor level. Primary access to Ocean East will be from Ocean Avenue. Access into the site from Presumpscot Street is by the paved True Street. The proposed development is illustrated on Figure 1 in Appendix A.

The project area in the eastern portion of the Eben Hill project area is a mostly open field with an occupied farmhouse and barn approximately 700 feet inside the property from Presumpscot Street. The remaining Eben Hill project area and the Ocean East project area is primarily undeveloped woodland, except for a cleared Central Maine Power utility easement with overhead power lines.

Existing ground surface within the project area ranges from about elevation 29 feet (NGVD) near Presumpscot Street to about elevation 104 feet within the CMP easement. From Presumpscot Street, the land surface rises toward the northwest for approximately 500 feet at about 3 percent slope to about elevation 36 feet. Further to the west and north, the land surface rises more rapidly at an average grade of about 6H:1V to about elevation 100 feet easement with locally steeper areas approaching 2H:1V slope. The terrain in the Ocean East project area is undulating with low-lying areas between bedrock ridges. Bedrock outcrops are prevalent in the elevated portions of the site.

SUMMIT
GEOENGINEERING SERVICES

December 4, 2001
Summit #7278

Mr. Corbin Findlan
Realty Resources, LLC
247 Commercial Street
Rockport, Maine 04856

Reference: Geotechnical Investigation
Proposed Eben Hill and Ocean East Condominiums, True Street
Portland, Maine

Dear Mr. Findlan:

We have completed our geotechnical investigation and evaluation in connection with construction of the condominium project. The following report presents a summary of our investigation, evaluations of the subsurface conditions, and design and construction recommendations for the proposed development.

In general, the soil in the eastern, lower portions of the Eben Hill project area and the western portion of the Ocean East project area near Ocean Avenue consists of 10 to 15 feet of glacial marine deposits, which in turn overlies glacial till or schist bedrock. The glacial marine soils transition to a thin layer glacial till overlying schist bedrock in the elevated portions of the site. These materials are suitable for support of the of the proposed condominium complex buildings on conventional spread footing foundations and slabs-on-grade. General foundation recommendations are presented in this report.

Groundwater was observed at depths of 6 to 10 feet below ground surface in the glacial marine deposits. In general, groundwater was not observed in the thin soils overlying bedrock; where groundwater was observed in the soil, we believe that it was infiltrated surface water from recent rainfall that perched on the underlying bedrock surface.

Bedrock was relatively shallow over a significant portion of the site and blasting and rock excavation will likely be required during installation of underground utilities in these areas.

We have appreciated providing geotechnical engineering services for this phase of the project. If there are any questions, or we may be of further assistance, please do not hesitate to call.

Very Truly Yours,
Summit Geoengineering Services

Erik J. Wiberg, P.E.
Senior Geotechnical Engineer

STATE OF MAINE
ERIK
J.
WIBERG
9178
REGISTERED
PROFESSIONAL ENGINEER

William M. Peterlein, P.E.
Principal Geotechnical Engineer

640 MAIN STREET ▲ LEWISTON, MAINE 04240 ▲ TEL: (207) 795-6009 ▲ FAX: (207) 795-6128
PO BOX 4698 ▲ AUGUSTA, MAINE 04330 ▲ TEL: (207) 621-8334 ▲ FAX: (207) 626-9094
GEOTECHNICAL ENGINEERING ▲ CONSTRUCTION MATERIALS TESTING ▲ GEOENVIRONMENTAL

SECTION 1
INTRODUCTION

1.1 Introduction

Realty Resources, LLC is planning to construct a condominium development over several abutting parcels with a combined area of approximately 19 acres. The site consists of two project areas, namely the Ocean East and Eben Hill condominiums. Summit Geoengineering Services (Summit) was asked to perform a geotechnical investigation at the site in areas of the proposed development. Our investigation was completed in general accordance with our proposal to Realty Resources, LLC dated August 17, 2001.

1.2 Scope of Services

Our scope of proposed field exploration consisted of excavating 20 to 25 test pits along the proposed roadway through the development, building areas, and stormwater detention areas. The primary intent of the investigation was to develop subsurface information for construction and development of the project with emphases placed on the depth to bedrock. The explorations were followed by evaluations of the subsurface conditions and preparing a geotechnical report summarizing our findings. This work was performed in its entirety as proposed.

1.3 Hazardous Waste Disclaimer

The scope of our work on this project does not include an environmental assessment or further investigation into the presence or absence of contaminated soil or groundwater. Hazardous materials including contaminated soil or groundwater were not encountered in the test pits. Visual observations of ground surface at the site did not reveal any obvious areas of potential contamination.

SECTION 3
EXPLORATION

A summary of the exploration methods and logs of the test pits completed in the Eben Hill and Ocean East condominium project areas are presented in Appendix B, Exploration Data. The subsurface conditions encountered at the test pits are summarized in Table 1 of Appendix B. The test pit locations are shown in Figure 1 on the site layout plan prepared by Coffin Engineering & Surveying, LLC.

The subsurface conditions were explored with 27 test pits (TP-1 through TP-28, TP-22 excluded) were excavated by R.J. Grondin & Sons, Inc. under contract to Summit on October 17 and 18, 2001. Summit was on site to coordinate the explorations. TP-1 through TP-16 were excavated in the Ocean East project area and TP-17 through TP-28 were excavated in the Eben Hill project area. The test pits were excavated to bedrock refusal or to a sufficient depth necessary to establish subsurface conditions relative to the proposed development at the test pit location. The depth of the test pits ranged from 0.9 feet below ground surface at TP-19 to 14 feet at TP-26.

The test pit locations were survey located by Coffin Engineering & Surveying prior to excavation based on proposed test pit layout plan prepared by Summit. The test pits were excavated at the survey locations, except where the staked location was inaccessible to the excavation equipment or where relocation was necessary to avoid existing utilities. Coffin provided ground surface elevations at the staked test pit locations. Ground surface elevations at relocated test pits were estimated from the site topographic mapping illustrated on the site layout plan.

SECTION 4
SUBSURFACE CONDITIONS

4.1 Soil

In general, the soil in the eastern portion of the Eben Hill project area and low lying areas in the Ocean East project area consists of topsoil overlying glacial marine deposits, which in turn

overlies glacial till or schist bedrock. The glacial marine soils transition to a relatively thin layer of glacial till overlying bedrock as the land surface increases in elevation from Presumpscot Street. Approximately 1.5 feet of fill was encountered at TP-11, which is located near the west property line near a residential subdivision. A summary of subsurface conditions encountered at the test pits is presented in Table 1 in Appendix B.

The ***topsoil*** at the site consists of dark brown, silty fine sand with little organics and root matter. Within the wooded areas a forest duff organic layer overlies the topsoil. The thickness of the topsoil in the open field area near Presumpscot Street was generally thicker than the topsoil in the wooded areas or where the depth to bedrock was shallow. In the open areas, the thickness of the topsoil layer ranged form 0.7 to 1.1 feet thick; within the wooded area the thickness of the topsoil ranged from 0.3 to 0.9 feet thick.

In general, the topsoil in the open areas will be more readily reclaimable for reuse in landscaping due to its relatively uniform consistency and absence of rock and substantial root matter. Reuse of topsoil from wooded areas without processing will be more difficult due to the shallow bedrock conditions and potential for entraining roots and rock fragments during stripping and grubbing.

Glacial marine deposits were encountered at TP-1 and TP-6 in the Ocean East project area and at TP-23 through TP-28 in the Eben Hill project area. In general, the glacial marine deposit typically consists of stiff to very stiff, olive to gray-brown, cohesive silty clay to clayey silt overlying glacial till or bedrock. At TP-25 the stiff, cohesive glacial marine deposit was underlain by approximately 4 feet of silty sand. Very soft, blue gray clayey silt was encountered in the Eben Hill project area at a depth of approximately 10 to 10.5 feet in TP-26, 27 and 28.

Glacial till occurred directly over bedrock was encountered in a majority of the test pits, particularly in the elevated portions of the site where bedrock was shallow. The glacial till consisted of sand with silt and with varying amounts of gravel and boulders. Boulders encountered in the test pits were typically less than 12 inches in maximum dimension. The thickness of the glacial till ranged from 0.5 to 4 feet.

4.2 Bedrock

Bedrock was encountered in all test pits except for TP-27 and TP-28, which were excavated in the lower portion of the Eben Hill project area. Bedrock depths and elevations at each test pit location are shown on Table 1 in Appendix B. Bedrock outcrops are prevalent throughout the elevated portion of the site. The depth to bedrock in the Ocean East project area test pits ranged from 0.2 feet at TP-5 to about 13 feet at TP-1. Excluding TP-1 where the bedrock depth is significantly deeper than at other test pit location, the average depth to bedrock in the Ocean East test pits was 2.4 feet.

The depth to bedrock in the eastern portion of the Eben Hill project area (TP-24 through TP-28) was greater than 10 feet below ground surface. The depth to bedrock decreased to the west and north with an average depth to bedrock of 2.6 feet for TP-16 through TP-23.

As noted on several test pit logs, bedrock outcrops and ridges where observed in the vicinity of the test pits. Bedrock outcrops identified during the site survey by Coffin Engineering & Surveying are shown on Figure 1. The surface of the bedrock was weathered at many of the test pits. The weathered zones typically ranged from 0.2 to 2.0 feet thick. The weathered zones will be able to be excavated by backhoe or hoe ram. Blasting will be required to remove hard bedrock.

4.3 Groundwater

The depth to groundwater was estimated based on observed changes in soil moisture (i.e., moist to wet) or by depth to water seeping from the test pit sidewalls. The observed groundwater depths are summarized in Table 1 in Appendix B. The depth to groundwater will fluctuate due to season and rainfall and is likely to be closer to ground surface in the spring.

As indicated in Table 1, groundwater was observed in 9 of the 27 test pits. At TP-2, TP-3 and TP-20, groundwater was observed in the thin soil overlying bedrock and is likely the result of

infiltrated surface water perched on the bedrock surface and not permanent groundwater conditions. Groundwater at the other six locations (TP-1 and TP-24 through TP-28) occurred in relatively thick glacial marine deposits. The transition from olive to blue-gray glacial marine clayey soil generally indicates the location of the permanent ground water table. Blue-gray clayey silt was encountered at TP-26, 27 and 28 at a depth of approximately 10 feet below ground surface.

In the low lying areas near Presumpscot Street and poorly drained, wetland areas near Ocean Avenue, infiltrated surface water perches on the less pervious glacial marine soils or bedrock during wet periods. Runoff from sloped portions of the site is probably rapid and a majority of the surface water that infiltrates flows through the soil above the bedrock.

SECTION 5
EVALUATION

Based on the soil conditions observed at the site and our understanding of proposed site grading, conventional spread footing foundations with a slab-on-grade are recommended at all proposed condominium buildings and at the community center near the Presumpscot Street entrance.

Based on conceptual grading plans for the Eben Hill project area, proposed grades are within 1 to 2 feet of existing grades in most areas. It is our understanding that the proposed grades indicated in Figure 1 near the community center, which indicate final grade 4 to 5 feet below existing grade, will be adjusted up to within 2 feet of existing ground surface. Approximately 4 to 6 feet of fill is proposed over glacial marine deposit in the vicinity of TP-23 and TP-25. Development of proposed site grading for the Ocean East project area was in progress at the time of our evaluation and not available for this evaluation. It is our understanding that proposed first floor level of each unit in Ocean East will be located above existing grade. Based on the above, we anticipate that the total settlement due to the earth and building loads at the proposed building locations shown on Figure 1 will be within tolerable less than 1 inch.

Detailed grading information on the slope transition from the area adjacent to the buildings down to existing grade east of the condominium buildings at TP-23 and TP-25 had not been developed. A 4-foot thick layer of very soft to soft blue, blue-gray clayey silt was encountered at TP-26 (excavated approximately 100 feet east of TP-25) at depth of 10 feet below existing ground surface. Depending on the horizontal extent, the fill could extend over soft clayey silt deposit. We recommend a fill slope not steeper than 4H:1V be used in the transition from fill to existing grade. If a steeper slope is required, we recommend that a detailed slope stability evaluation be conducted.

Bedrock excavation should not be a construction issue in the open area near Presumpscot Street or in the vicinity of TP-1 near Ocean Avenue. At other locations of the site, bedrock occurred at or within a few feet of ground surface. On the order of 5 feet of rock excavation could be required to construct Eben Hill condominium structures in the vicinity of TP-17, 19, 21 and 22 depending on design finish slab elevation. Rock excavation should also be anticipated for construction of the Ocean East units. Bedrock removal will likely be required to install underground electric, storm sewer and potable water utilities over a significant portion of the site.

SECTION 6
DESIGN AND CONSTRUCTION RECOMMENDATIONS

6.1 Building Foundations

A. Allowable Bearing Pressure. We recommend that the following allowable bearing pressures be used for proportioning the interior and exterior spread footings at the proposed building locations:

RECOMMENDED ALLOWABLE BEARING PRESSURES	
Soil Type	**Allowable Bearing (psf)**
Glacial Marine	2,500
Glacial Till	4,000
Weathered Bedrock	10,000
Hard Bedrock	20,000

These allowable bearing pressures are for construction of typical foundation systems. They should be reviewed for unusual foundation loadings or configurations. Estimated total settlements for these allowable bearing pressures is less than 1 inch. Differential settlements will be within tolerable limits.

The above bearing pressures are based on the densifying the existing subgrade soils by proof-rolling the proposed building areas prior to footing excavation, and on compacting the bottom of footing excavation trenches prior to footing construction. Pockets left after excavation of boulders from beneath the foundation should be backfilled with Structural Fill or native soil, also compacted to 95 percent of the maximum modified Proctor dry density.

Proof-rolling of the entire footprint should consist of a minimum of three passes along the longitudinal axis of the building and then three passes in the transverse direction using a large vibratory roller (minimum 3-ton at drum static weight). Subgrade soils in footing trenches should be densified following footing excavation and prior to footing construction using the largest practical compaction equipment within the footing trench. Following this, footing construction can proceed normally.

B. **Seismic Design.** The soil and bedrock west and north of TP-25, inclusive, at this site is classified as a Soil Profile Type S_1 in accordance with the 1996 BOCA National Building Code. The associated Site Coefficient for seismic design in these areas is 1.0. Very soft to soft, silty clay to clayey silt deposits were encountered at a depth of about 10 feet in the vicinity of the proposed community center (see logs for TP-26 and TP-28). We recommend a Site Coefficient of 1.5 for the community center.

C. **Frost Protection.** The minimum recommended footing depth for frost protection of foundation elements is 4 feet below exterior finished grade for footings constructed in soils or weathered rock. This frost penetration depth is based on a design air-freezing index of 1,600 degree days. We recommend that a minimum depth of 2 feet be provided for frost protection of foundations constructed directly on a hard bedrock surface. Perimeter underdrains should be installed at perimeter foundation walls in hard bedrock cuts to drain accumulated surface water.

In order to protect foundations from the potentially damaging effects of frost heave, we recommend that the outside of foundation walls be backfilled with Foundation Backfill meeting the following gradation requirements:

FOUNDATION BACKFILL	
Sieve Size	**Percent Finer***
6 inch	100
¼ inch	25 to 70
No. 40	0 to 30
No. 200	0 to 5

* Reference: MDOT Specification 703.06, Type C Base Aggregate

The soil should be compacted to a minimum of 95 percent of its maximum dry density determined in accordance with ASTM D1557, Modified Proctor Density. This soil should be placed in 9 to 12-inch thick lifts. Where hand compaction equipment is used, the lift thickness should be reduced to 6 to 8 inches.

Based on the relatively high percentage of silt in the native soils, these soils are not expected to meet the gradation requirements for Foundation Backfill. If reuse of these soils is proposed during construction, they should be tested for compatibility with their intended use.

D. Foundation Drainage. We recommend that perimeter foundation underdrains be installed at the perimeter of all foundations of structures in the vicinity of TP-1 through TP-9 in Ocean East and at the community center at the Presumpscot Street entrance. At all other proposed condominium locations, we recommend that as a minimum foundation drains be installed at the base of the foundation footings on the upgradient side of the structures. As noted in Section 4.C above, perimeter underdrains should also be installed at perimeter foundation walls in hard bedrock cuts to drain accumulated surface water.

Underdrains should consist of 4 inch rigid perforated PVC surrounded by a minimum of 6 inches crushed stone wrapped in filter fabric to prevent clogging from the migration of the fine soil particles from the native soils and Foundation Backfill. The underdrain pipe should be outlet to a location where it will be free flowing.

The finish grade around the perimeter of all buildings should be sloped away from the building to promote drainage away from the foundations.

E. Slabs-on-grade. We recommend that all native soil beneath building slab areas be proof-rolled prior to placing the sub-slab fill. Proof-rolling should consist of a minimum of three passes in the longitudinal direction of the building and then three passes in the transverse direction using a large (3 ton at drum static weight) vibratory roller. We recommend that slabs be constructed on a minimum of 12 inches of Structural Fill, as specified below.

STRUCTURAL FILL	
Sieve Size	**Percent Finer***
3 inch	100
1/4 inch	60 to 100
No. 40	0 to 50
No. 200	0 to 7

*** Reference:** MDOT Specification 703.06, Type F Subbase Aggregate

The Structural Fill can be placed in a single 12-inch lift, and should be compacted to 95 percent of its maximum dry density determined in accordance with ASTM D1557, Modified Proctor Density. Based on the use of compacted Structural Fill beneath all floor slabs, we recommend that a subgrade modulus of 150 pci (pounds/in^3) be used in floor slab design.

In consideration of the proposed slab-on-grade construction and finish flooring that could be applied to the slab, we recommend that a vapor retarder be placed directly below the concrete slab. The vapor retarder should have a vapor transmission rate less than the flooring applied to the slab to prevent accumulation of moisture beneath the flooring and should be installed in accordance with the manufacturer's recommendations.

Where slabs-on-grade is proposed over bedrock, we recommend a minimum of 6 inches of bedrock

Fill required beneath the Structural Fill should consist of Granular Borrow. That portion of the soil passing the 3-inch sieve should meet the following specification.

GRANULAR BORROW	
Sieve Size	**Percent Finer***
3 inch	100
No. 40	0 to 70
No. 200	0 to 20

*** Reference**: MDOT Specification 703.19, Granular Borrow

The maximum particle size should be limited to 6 inches. Granular Borrow should be placed in a maximum of 12-inch lifts, and should be compacted to 95 percent, in accordance with ASTM D1557.

6.2 Pavement Section Recommendations

The subgrade soils beneath new pavement areas will consist of bedrock, glacial till, glacial marine, or imported fill soils. The mean annual freezing index for the Portland area is estimated to be 900 degree days. We recommend a minimum total pavement section thickness of 50% of the mean annual frost depth or 21 inches.

We further recommend that the minimum pavement section consist of the following materials:

MATERIAL	THICKNESS (in)	SPECIFICATION
Asphalt Surface Coarse	1	MDOT 703.09 Grading D
Asphalt Binder Coarse	2	MDOT 703.09 Grading B
Base Soil	6	MDOT 703.06 Type A
Subbase Soil	12	MDOT 703.06 Type D

The material specifications are referenced to the 1995 Maine Department of Transportation Standard Specifications for Highways and Bridges. All base and subbase soil should be placed in 9 to 12 inch lifts and be compacted to a minimum of 95 percent of its maximum dry density in accordance with ASTM D1557.

Where bedrock excavation is required to construct parking lots, we recommend that a minimum of 6 inches of Type A Base Aggregate be placed and compacted between the pavement and bedrock.

The glacial marine deposits encountered at TP-1, TP-27, and TP-28 will be sensitive to construction disturbance. If the subgrade beneath proposed paved areas becomes soft or yields excessively during construction, we recommend that a woven geotextile be placed on the subgrade prior to placing and the pavement base material.

Underdrains should be provided in parking lot and driveway areas where the pavement surface is more than 2 feet below the existing ground surface. The underdrains should consist of 4 inch rigid perforated PVC placed a minimum of 12 inches below the pavement surface and spaced at a maximum of 50 feet center to center.

All public roadways or paved areas to be maintained or accepted by the City of Portland should be constructed in accordance with City of Portland design standards.

6.3 General Construction Recommendations

The major consideration with respect to earthwork and foundation construction in the area of the site subject to this investigation is the presence of near surface bedrock. The depth to weathered rock or bedrock in a majority of proposed building areas is at or within a few feet existing ground surface. The weathered layer can be removed with conventional mechanical equipment. Excavation of the hard bedrock may require blasting. Existing buildings could be located within 300 feet of potential blasting areas. We recommend that a blast plan and blast vibration/frequency criteria be developed prior to blasting operations, once the extent of rock removal has been determined. General recommendations for blasting are presented in Appendix C.

Excavation into the native soil should not be difficult with conventional excavation equipment. Due to the relatively high fines content, native soil is not expected to meet the specifications for Foundation or Structural Fill. Sandy glacial till soil is more likely to meet the gradation requirements of Granular Borrow. If native soils are proposed for use as Foundation Fill, Structural Fill, or Granular Borrow during construction, they should be tested for compatibility with its intended use. Excavated native soil will be suitable for use as Common Borrow (MDOT 703.18).

Fill material used beneath pavement subbase soil and as site fill in landscaped areas should meet the requirements for Common Borrow (MDOT 703.18) and should be placed in lifts not

exceeding 12 inches in thickness and compacted to a minimum of 95 percent of its maximum Modified Proctor dry density.

We recommend that the banks of open cuts deeper than 4 feet in the native soils at the site be sloped at a maximum of 1H:1V. Excavation extending below the groundwater table should be flattened to 1.5H:1V. Cuts into stable bedrock can be vertical. These recommended slopes are based on the current OSHA guidelines.

We do not expect groundwater to be encountered during construction of the foundations. We recommend that temporary groundwater control measures be used to allow for in-the-dry conditions during footing construction work if groundwater is encountered. Measures such as footing excavation side trenches directed to sump locations should be used to lower groundwater levels in footing excavations. We also recommend that surface water be diverted away from excavations.

SECTION 7
CLOSURE

This report has been prepared for the sole use of our client and other consultants engaged in this project. Our opinions, conclusions, and recommendations are based on our judgment and generally accepted principles of geotechnical engineering. No other warranty is expressed or implied.

Some changes in materials from those presented in this report can be anticipated. Should conditions be encountered which differ materially from those discussed, we should be notified so that we can re-evaluate our recommendations.

APPENDIX A

SITE PLAN

APPENDIX B
EXPLORATION DATA

EXPLORATION DATA

I. General Information

Project No.:	7278
Exploration Contractor:	R.J. Grondin & Sons, Inc. Gorham, Maine
Project Site Representative:	Erik J. Wiberg, P.E.
Exploration Date:	October 17 and 18, 2001
Test Pit Location:	Proposed test pits locations were survey located with ground surface elevations by Coffin Engineering & Surveying, LLC prior to excavation. Some test pits were offset from staked locations to avoid underground utilities.
Soil Classification Methods:	Field ASTM D-2488, Description of Soils, USCS estimated

II. Exploration Methods and Equipment

Excavation Equipment:	Caterpillar 320L Tracked Backhoe John Deere 595D Backhoe (TP-27)
Sampling Method:	Grab

TABLE B-1
TEST PIT SUMMARY

Test Pit	Ground Elevation* (ft, NGVD)	Fill (ft)	Soil Depth Range (ft)				Weathered Rock	Top of Bedrock		Groundwater***	
			Topsoil	Glacial Marine		Glacial Till		Depth	Elevation (ft)	Depth (ft)	Elevation (ft, NGVD)
				Granular	Cohesive						
OCEAN EAST											
TP-1	86.5		0 - 0.8	0.8 - 3.0	3.0 - 9.0	9.0 - 12.8		12.8	73.7	5.5	81.0
TP-2	88.3		0 - 1.3			1.3 - 2.0		2.0	86.3	1.3	87.1
TP-3	88**		0 - 0.5			0.5 - 1.3	1.3 - 1.5	1.5	86.5	1.0	87.0
TP-4	87**		0 - 1.0			1.0 - 1.5		1.5	85.5		
TP-5	86.5		0 - 0.2				0.2 - 0.5	0.5	86.0		
TP-6	79**		0 - 0.5	0.5 - 3.6				3.6	75.4		
TP-7	93**		0 - 0.5			0.5 - 1.8	1.8 - 2.5	2.5	90.5		
TP-8	95.1		0 - 0.3			0.3 - 0.8	0.8 - 1.0	1.0	94.1		
TP-9	94.2		0 - 0.5			0.5 - 1.0	1.0 - 1.5	1.5	92.7		
TP-10	97.2		0 - 0.5			0.5 - 3.5		3.5	93.7		
TP-11	100.4	0 - 1.5	1.5 - 2.0				2.0 - 2.3	2.3	98.1		
TP-12	94.1		0 - 0.5			0.5 - 0.8	0.8 - 1.5	1.5	92.6		
TP-13	96.7		0 - 0.8			0.8 - 6.0		6.0	90.7		
TP-14	96.1		0 - 0.9			0.9 - 1.3	1.3 - 1.5	1.5	94.6		
TP-15	88.6		0 - 0.5			0.5 - 4.2		4.2	84.4		
TP-16	86.9		0 - 0.6			0.6 - 2.0	2.0 - 2.5	2.5	84.4		

* Ground surface elevations provided by Coffin Engineering & Surveying, LLC unless otherwise noted.

** Ground surface elevation estimated from Coffin topographic mapping.

*** Groundwater depth estimated from observed changes in soil moisture or from observed seepage from test pit side wall. Absence of data means no groundwater was observed at the test pit on the date of excavation, but does not imply that groundwater will not be encountered at these locations during construction.

TABLE B-1 (continued)
TEST PIT SUMMARY

Test Pit	Ground Elevation* (ft, NGVD)	Fill (ft)	Soil Depth Range (ft)				Weathered Rock	Top of Bedrock		Groundwater***	
			Topsoil	Glacial Marine		Glacial Till		Depth	Elevation (ft)	Depth (ft)	Elevation (ft, NGVD)
				Granular	Cohesive						
EBEN HILL											
TP-17	76.0		0 - 1.0			1.0 - 2.5		2.5	73.5		
TP-18	64.9		0 -1.0			1.0 - 2.0	2.0 -2.5	2.5	62.4		
TP-19	57.7					0.0 - 0.9		0.9	56.8		
TP-20	80.3		0 - 0.7			0.7 - 1.5	1.5 - 3.5	3.5	76.8	2.0	78.3
TP-21	66.1		0 - 1.1			1.1 - 2.5		2.5	63.6		
TP-22	Not Excavated										
TP-23	47.1		0 - 0.7	0.7 - 3.8				3.8	43.3		
TP-24	40.8		0 - 1.0	1.0 - 6.0		6.0 - 10.2		10.2	30.6	9.2	31.6
TP-25	40.9		0 - 0.7	5.0 - 8.2	0.7 - 5.0	8.2 - 11.0		11.0	29.9	10.0	30.9
TP-26	36.4		0 - 0.7		0.7 - 14.0			14.0	22.4	9.8	26.6
TP-27	30**		0 - 1.1		1.1 - 11.5			> 11.5		7.0	23.0
TP-28	35**		0 - 1.0		1.0 - 12.0			> 12.0		6.0	29.0

* Ground surface elevations provided by Coffin Engineering & Surveying, LLC unless otherwise noted.

** Ground surface elevation estimated from Coffin topographic mapping.

*** Groundwater depth estimated from observed changes in soil moisture or from observed seepage from test pit side wall. Absence of data means no groundwater was observed at the test pit on the date of excavation, but does not imply that groundwater will not be encountered at these locations during construction.

SUMMIT GEOENGINEERING SERVICES 640 Main Street Lewiston, Maine 04240	TEST PIT LOG Project: Geotechnical Investigation Eben Hill and Ocean East Condominiums, Portland, ME	Test Pit # TP-1 Project # 7278 Groundwater: 5.5 ft BGS

Contractor:	R.J. Grondin & Sons, Inc.	Ground Surface Elevation: 86.5 feet (NGVD)			
Equipment:	Caterpillar 320L Excavator	Reference:	Coffin Engineering & Surveying point data		
Summit Staff:	Erik J. Wiberg, P.E.	Date:	10/18/01	Weather:	Clear, 40's

Depth (ft)	DESCRIPTION	
	ENGINEERING	**GEOLOGIC/GENERAL**
1	Dark brown, silty fine SAND with little organics and roots, SM	TOPSOIL
2	Gray, fine SAND with little to some silt, occasional gravel, wet, SM	0.8 GLACIAL MARINE
3	Gray to orange-brown, mottled, fine SAND with some silt and little clay, moist, SM	Qu = 2.75 tsf at 2.5 ft. (see note)
4		Qu = 2.0 tsf at 3.5 ft.
5		Qu = 2.5 tsf at 4.5 ft.
6	Gray to orange-brown, mottled, SILT with little sand and little to some clay, moist, ML	Slow seepage at 5.5 ft.
7	Wet below 5.5 ft.	Qu = 2.25 tsf at 5.5 ft.
8		
9		
10		9.0 GLACIAL TILL
11	Tan, fine SAND with some silt and little gravel, few cobbles and occasional boulders to 12-inch, moist to wet, SM	Moderate seepage at 9.5 ft.
12		
13		
14	Bedrock encountered at 12.75 ft. Bottom of exploration at 12.75 ft.	12.75 BEDROCK
15		
16		
17		Note: Unconfined compressive strengths measured by hand penetrometer on excavation sidewall.
18		
19		
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SUMMIT GEOENGINEERING SERVICES 640 Main Street Lewiston, Maine 04240	TEST PIT LOG	Test Pit # TP-2
	Project: Geotechnical Investigation Eben Hill and Ocean East Condominiums, Portland, ME	Project # 7278 Groundwater: 1.25 ft BGS

Contractor:	R.J. Grondin & Sons, Inc.	Ground Surface Elevation:	88.3 feet (NGVD)		
Equipment:	Caterpillar 320L Excavator	Reference:	Coffin Engineering & Surveying point data		
Summit Staff:	Erik J. Wiberg, P.E.	Date:	10/18/01	Weather:	Clear, 40's

Depth (ft)	DESCRIPTION		
	ENGINEERING		GEOLOGIC/GENERAL
1	Organic duff, OL Dark brown, fine SAND with some silt and little organics, some roots, SM		ORGANICS 0.3 TOPSOIL
2	Tan to orange-brown, fine SAND with some gravel and little silt, wet, SM		1.3 GLACIAL TILL
3	Bedrock encountered at 2.0 ft. Bottom of exploration at 2.0 ft.		2.0 BEDROCK
4			Exposed bedrock ridge 50 ft. east of TP-2
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SUMMIT GEOENGINEERING SERVICES 640 Main Street Lewiston, Maine 04240	TEST PIT LOG	Test Pit # TP-3
	Project: Geotechnical Investigation Eben Hill and Ocean East Condominiums, Portland, ME	Project # 7278 Groundwater: 1.0 ft BGS

Contractor:	R.J. Grondin & Sons, Inc.	Ground Surface Elevation:	Approx. 88 feet (NGVD)		
Equipment:	Caterpillar 320L Excavator	Reference:	Coffin Engineering & Surveying topographic map		
Summit Staff:	Erik J. Wiberg, P.E.	Date:	10/18/01	Weather:	Clear, 40's

Depth (ft)	DESCRIPTION ENGINEERING	GEOLOGIC/GENERAL
1	Dark brown, fine SAND with some silt and little organics, some roots, SM	TOPSOIL 0.5 GLACIAL TILL
2	Reddish-brown, GRAVEL with some sand and little silt, occasional cobbles, moist to wet, GM	1.3 WEATHERED ROCK
3	Weathered rock	1.5 BEDROCK
4	Bedrock encountered at 1.5 ft. Bottom of exploration at 1.5 ft.	Exposed bedrock ridge (N-S alignment) 35 ft. south of TP-3
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SUMMIT GEOENGINEERING SERVICES 640 Main Street Lewiston, Maine 04240	TEST PIT LOG	Test Pit # TP-4
	Project: Geotechnical Investigation Eben Hill and Ocean East Condominiums, Portland, ME	Project # 7278 Groundwater: None observed

Contractor:	R.J. Grondin & Sons, Inc.	Ground Surface Elevation:	Approx. 87 feet (NGVD)		
Equipment:	Caterpillar 320L Excavator	Reference:	Coffin Engineering & Surveying topographic map		
Summit Staff:	Erik J. Wiberg, P.E.	Date:	10/18/01	Weather:	Clear, 40's

Depth (ft)	DESCRIPTION	
	ENGINEERING	GEOLOGIC/GENERAL
1	Dark brown, fine SAND with some silt and little organics, some roots, moist, SM	TOPSOIL
2	Reddish-brown, GRAVEL with some sand and little silt, occasional cobbles, moist, GM	1.0 GLACIAL TILL
	Bedrock encountered at 1.5 ft.	1.5
3	Bottom of exploration at 1.5 ft.	BEDROCK
4		Exposed bedrock 50 ft. west of TP-4
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SUMMIT GEOENGINEERING SERVICES 640 Main Street Lewiston, Maine 04240	TEST PIT LOG Project: Geotechnical Investigation Eben Hill and Ocean East Condominiums, Portland, ME	Test Pit # TP-5 Project # 7278 Groundwater: None observed

Contractor:	R.J. Grondin & Sons, Inc.	Ground Surface Elevation:	86.5 feet (NGVD)		
Equipment:	Caterpillar 320L Excavator	Reference:	Coffin Engineering & Surveying point data		
Summit Staff:	Erik J. Wiberg, P.E.	Date:	10/18/01	Weather:	Clear, 40's

Depth (ft)	DESCRIPTION	
	ENGINEERING	GEOLOGIC/GENERAL
1	Dark brown, fine SAND with organics and silt, moist, SM	TOPSOIL
	Weathered rock	0.2 WEATHERED ROCK
2	Bedrock encountered at 0.5 ft.	0.5 BEDROCK
	Bottom of exploration at 0.5 ft.	Exposed bedrock 15 ft.south of TP-5
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SUMMIT GEOENGINEERING SERVICES 640 Main Street Lewiston, Maine 04240	TEST PIT LOG	Test Pit # TP-6
	Project: Geotechnical Investigation Eben Hill and Ocean East Condominiums, Portland, ME	Project # 7278 Groundwater: None observed

Contractor:	R.J. Grondin & Sons, Inc.	Ground Surface Elevation:	Approx. 79 feet (NGVD)		
Equipment:	Caterpillar 320L Excavator	Reference:	Coffin Engineering & Surveying topographic map		
Summit Staff:	Erik J. Wiberg, P.E.	Date:	10/18/01	Weather:	Clear, 40's

Depth (ft)	DESCRIPTION	
	ENGINEERING	GEOLOGIC/GENERAL
1	Dark brown, fine SAND with little to some silt, and little organics, some roots, moist, SM	TOPSOIL 0.5 GLACIAL MARINE
2	Olive-tan, fine SAND with some silt and little fine gravel, moist, SM	
3	Gray to orange-brown, fine SAND with little silt, dry, faint mottling, SP-SM	
4	Orange-brown to gray, fine SAND with some silt and trace gravel, moist, SM	3.6 BEDROCK
5	Bedrock encountered at 3.6 ft. Bottom of exploration at 3.6 ft.	Standing water at ground surface approximately 50 ft. south of TP-6
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7		TP-6 dry 1.5 hr. after excavation
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SUMMIT GEOENGINEERING SERVICES 640 Main Street Lewiston, Maine 04240	TEST PIT LOG	Test Pit # TP-7
	Project: Geotechnical Investigation Eben Hill and Ocean East Condominiums, Portland, ME	Project # 7278 Groundwater: None observed

Contractor:	R.J. Grondin & Sons, Inc.	Ground Surface Elevation:	Approx. 93 feet (NGVD)		
Equipment:	Caterpillar 320L Excavator	Reference:	Coffin Engineering & Surveying topographic map		
Summit Staff:	Erik J. Wiberg, P.E.	Date:	10/18/01	Weather:	Clear, 40's

Depth (ft)	DESCRIPTION	
	ENGINEERING	**GEOLOGIC/GENERAL**
1	Dark brown, fine SAND with little silt and little organics, some roots, moist, SM	TOPSOIL 0.5
2	Reddish-brown to tan, fine GRAVEL with some sand and trace to little silt, GW-GM	GLACIAL TILL
	Weathered rock	1.8 WEATHERED ROCK
3	Bedrock encountered at 2.5 ft. Bottom of exploration at 2.5 ft.	2.5 BEDROCK
4		Boulders/bedrock exposed near TP-7.
5		Exposed bedrock approx. 40 ft.west of TP-7.
6		Exposed bedrock approx. 60 ft.southwest of TP-7.
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SUMMIT GEOENGINEERING SERVICES 640 Main Street Lewiston, Maine 04240	TEST PIT LOG Project: Geotechnical Investigation Eben Hill and Ocean East Condominiums, Portland, ME	Test Pit # TP-3 Project # 7278 Groundwater: None observed

Contractor:	R.J. Grondin & Sons, Inc.	Ground Surface Elevation:	95.1 feet (NGVD)		
Equipment:	Caterpillar 320L Excavator	Reference:	Coffin Engineering & Surveying point data		
Summit Staff:	Erik J. Wiberg, P.E.	Date:	10/18/01	Weather:	Clear, 40's

Depth (ft)	DESCRIPTION ENGINEERING	GEOLOGIC/GENERAL
1	Dark brown, fine SAND with organic and little silt, moist, SM	TOPSOIL 0.3 GLACIAL TILL
2	Reddish-brown, SILT with some fine sand to fine SAND with some silt, little gravel moist, ML/SM	0.8 WEATHERED ROCK
3	Weathered rock	1.0 BEDROCK
4	Bedrock encountered at 1.0 ft. Bottom of exploration at 1.0 ft.	
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SUMMIT GEOENGINEERING SERVICES 640 Main Street Lewiston, Maine 04240	TEST PIT LOG Project: Geotechnical Investigation Eben Hill and Ocean East Condominiums, Portland, ME	Test Pit # TP-9 Project # 7278 Groundwater: None observed

Contractor:	R.J. Grondin & Sons, Inc.	Ground Surface Elevation:	94.2 feet (NGVD)		
Equipment:	Caterpillar 320L Excavator	Reference:	Coffin Engineering & Surveying point data		
Summit Staff:	Erik J. Wiberg, P.E.	Date:	10/18/01	Weather:	Clear, 40's

Depth (ft)	DESCRIPTION ENGINEERING	GEOLOGIC/GENERAL	
1	Dark brown, fine SAND with little organics and little silt, moist, SM		TOPSOIL
		0.5	GLACIAL TILL
2	Olive-brown, fine SAND with little silt and little gravel, moist, SM	1.0	WEATHERED ROCK
	Weathered rock	1.5	BEDROCK
3	Bedrock encountered at 1.5 ft.		
	Bottom of exploration at 1.5 ft.		
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SUMMIT GEOENGINEERING SERVICES 640 Main Street Lewiston, Maine 04240	TEST PIT LOG Project: Geotechnical Investigation Eben Hill and Ocean East Condominiums, Portland, ME	Test Pit # TP-10 Project # 7278 Groundwater: None observed

Contractor:	R.J. Grondin & Sons, Inc.	Ground Surface Elevation:	97.2 feet (NGVD)		
Equipment:	Caterpillar 320L Excavator	Reference:	Coffin Engineering & Surveying point data		
Summit Staff:	Erik J. Wiberg, P.E.	Date:	10/17/01	Weather:	PC, 60's

Depth (ft)	DESCRIPTION	
	ENGINEERING	**GEOLOGIC/GENERAL**
1	Dark brown, fine SAND with some silt and little organics, moist, SM	TOPSOIL 0.5
2	Reddish-brown, fine SAND with some silt and little gravel, occasional cobble, moist, SM	GLACIAL TILL
3	Tan GRAVEL with some sand and trace to little silt, cobbles to 12-inch, dry, GW-GM/GM	
4	Bedrock encountered at 3.5 ft. Bottom of exploration at 3.5 ft.	3.5 BEDROCK
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6		
7		Exposed bedrock 35 ft. W of TP-10
8		Exposed bedrock 20 ft. E of TP-10
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SUMMIT GEOENGINEERING SERVICES 640 Main Street Lewiston, Maine 04240	TEST PIT LOG	Test Pit # TP-11
	Project: Geotechnical Investigation Eben Hill and Ocean East Condominiums, Portland, ME	Project # 7278 Groundwater: None observed

Contractor:	R.J. Grondin & Sons, Inc.	Ground Surface Elevation:	100.4 feet (NGVD)		
Equipment:	Caterpillar 320L Excavator	Reference:	Coffin Engineering & Surveying point data		
Summit Staff:	Erik J. Wiberg, P.E.	Date:	10/17/01	Weather:	PC, 60's

Depth (ft)	DESCRIPTION		
	ENGINEERING	GEOLOGIC/GENERAL	
1	Olive-brown, fine sand with some silt, trace clay, some roots, occasional gravel, moist, SM		FILL
2	Dark brown, fine SAND with some silt, little organics, moist, SM	1.5	TOPSOIL
3	Light brown, weakly cemented SAND, dry, SM	2.0	WEATHERED ROCK
	Weathered rock	2.3	BEDROCK
4	Bedrock encountered at 2.3 ft.		
	Bottom of exploration at 2.3 ft.		
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SUMMIT GEOENGINEERING SERVICES 640 Main Street Lewiston, Maine 04240	TEST PIT LOG Project: Geotechnical Investigation Eben Hill and Ocean East Condominiums, Portland, ME	Test Pit = TP-12 Project # 7278 Groundwater: None observed

Contractor:	R.J. Grondin & Sons, Inc.	Ground Surface Elevation:	94.1 feet (NGVD)		
Equipment:	Caterpillar 320L Excavator	Reference:	Coffin Engineering & Surveying point data		
Summit Staff:	Erik J. Wiberg, P.E.	Date:	10/17/01	Weather:	PC, 60's

Depth (ft)	DESCRIPTION ENGINEERING	GEOLOGIC/GENERAL	
1	Brown, fine SAND with some silt and little organics, roots, SM		TOPSOIL
2	Reddish-brown, fine SAND with little to some silt, occasional weathered rock.	0.5	GLACIAL TILL
3	Weathered rock	0.8	WEATHERED ROCK
4	Bedrock encountered at 1.5 ft. Bottom of exploration at 1.5 ft.	1.5	BEDROCK
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6		Exposed bedrock ridge (N-S alignment) 15 ft. east of TP-12	
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SUMMIT GEOENGINEERING SERVICES 640 Main Street Lewiston, Maine 04240	TEST PIT LOG	Test Pit # TP-13
	Project: Geotechnical Investigation Eben Hill and Ocean East Condominiums, Portland, ME	Project # 7278 Groundwater: None observed

Contractor:	R.J. Grondin & Sons, Inc.	Ground Surface Elevation:	96.7 feet (NGVD)		
Equipment:	Caterpillar 320L Excavator	Reference:	Coffin Engineering & Surveying point data		
Summit Staff:	Erik J. Wiberg, P.E.	Date:	10/17/01	Weather:	PC, 60's, Occasional rain

Depth (ft)	DESCRIPTION ENGINEERING	GEOLOGIC/GENERAL
1	Dark brown, SILT with some organics and trace fine SAND, roots, ML/OL	TOPSOIL
2	Orange-brown, fine SAND with little fine gravel, dry, SM	0.8 GLACIAL TILL
3	Light brown to orange-brown, mottled, GRAVEL with some sand and little silt, dry, GM	
4		
5	Light brown to orange-brown, mottled, fine to medium SAND with little to some gravel and little silt, dry, SM	
6		
7	Bedrock encountered at 6.0 ft. Bottom of exploration at 6.0 ft.	6.0 BEDROCK
8		
9		Exposed bedrock ridge 35 ft. ENE of TP-13 Exposed bedrock ridge 25 ft. WNW of TP-13
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SUMMIT GEOENGINEERING SERVICES 640 Main Street Lewiston, Maine 04240	TEST PIT LOG	Test Pit # TP-14
	Project: Geotechnical Investigation Eben Hill and Ocean East Condominiums, Portland, ME	Project # 7278 Groundwater: None observed

Contractor:	R.J. Grondin & Sons, Inc.	Ground Surface Elevation:	96.1 feet (NGVD)		
Equipment:	Caterpillar 320L Excavator	Reference:	Coffin Engineering & Surveying point data		
Summit Staff:	Erik J. Wiberg, P.E.	Date:	10/17/01	Weather:	PC, 60's, Occasional rain

Depth (ft)	DESCRIPTION	
	ENGINEERING	GEOLOGIC/GENERAL
1	Brown, fine SAND with some silt and trace to little organics, moist, SM	TOPSOIL
2	Reddish-brown, fine sand with some silt, SM	0.9 GLACIAL TILL
	Weathered rock, moist	1.25 WEATHERED ROCK
3	Bedrock encountered at 1.5 ft.	1.5 BEDROCK
	Bottom of exploration at 1.5 ft.	
4		Exposed bedrock ridge 30 ft. E of TP-14
5		Exposed bedrock knoll 5 ft. SE of TP-14
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SUMMIT GEOENGINEERING SERVICES 640 Main Street Lewiston, Maine 04240	TEST PIT LOG	Test Pit # TP-15
	Project: Geotechnical Investigation Eben Hill and Ocean East Condominiums, Portland, ME	Project # 7278 Groundwater: None observed

Contractor:	R.J. Grondin & Sons, Inc.	Ground Surface Elevation:	88.6 feet (NGVD)		
Equipment:	Caterpillar 320L Excavator	Reference:	Coffin Engineering & Surveying point data		
Summit Staff:	Erik J. Wiberg, P.E.	Date:	10/17/01	Weather:	PC, 60's

Depth (ft)	DESCRIPTION	
	ENGINEERING	GEOLOGIC/GENERAL
1	Brown, fine SAND with some silt and little organics, moist, SM	TOPSOIL 0.5
2	Orange-brown fine SAND with some silt and little gravel, occasional boulders, moist, SM	GLACIAL TILL
3	Light brown, GRAVEL with some sand and trace to little silt, occasional weathered rock	
4	fragments and boulders, dry, GW-GM	
5	Bedrock encountered at 4.2 ft. Bottom of exploration at 4.2 ft.	4.2 BEDROCK
6		
7		Exposed bedrock 15 ft. SE of TP-15
8		Exposed bedrock ridge 50' NW of TP-15
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SUMMIT GEOENGINEERING SERVICES 640 Main Street Lewiston, Maine 04240	TEST PIT LOG	Test Pit # TP-16
	Project: Geotechnical Investigation Eben Hill and Ocean East Condominiums, Portland, ME	Project # 7278 Groundwater: None observed

Contractor:	R.J. Grondin & Sons, Inc.	Ground Surface Elevation:	86.9 feet (NGVD)		
Equipment:	Caterpillar 320L Excavator	Reference:	Coffin Engineering & Surveying point data		
Summit Staff:	Erik J. Wiberg, P.E.	Date:	10/17/01	Weather:	PC, 60's

Depth (ft)	DESCRIPTION	
	ENGINEERING	GEOLOGIC/GENERAL
1	Brown, fine SAND with some silt and little organics, moist, SM	TOPSOIL 0.6
2	Reddish-brown fine SAND with some silt and little gravel, occasional boulders, dry to moist, SM	GLACIAL TILL 2.0 WEATHERED ROCK
3	Weathered rock	2.5 BEDROCK
4	Bedrock encountered at 2.5 ft. Bottom of exploration at 2.5 ft.	
5		Exposed bedrock ridge 15' N of TP-16
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SUMMIT GEOENGINEERING SERVICES 640 Main Street Lewiston, Maine 04240	TEST PIT LOG Project: Geotechnical Investigation Eben Hill and Ocean East Condominiums, Portland, ME	Test Pit # TP-17 Project # 7278 Groundwater: None observed

Contractor:	R.J. Grondin & Sons, Inc.	Ground Surface Elevation:	76.0 feet (NGVD)		
Equipment:	Caterpillar 320L Excavator	Reference:	Coffin Engineering & Surveying point data		
Summit Staff:	Erik J. Wiberg, P.E.	Date:	10/17/01	Weather:	PC, 60's

Depth (ft)	DESCRIPTION	
	ENGINEERING	GEOLOGIC/GENERAL
1	Brown, fine SAND with some silt and little organics, substantial roots, moist, SM	TOPSOIL
2	Orange-brown, coarse to fine SAND with little silt silt, moist, SP-SM/SM	1.0 GLACIAL TILL
3		2.5 BEDROCK
4	Bedrock encountered at 2.5 ft. Bottom of exploration at 2.5 ft.	
5		Exposed bedrock 30' SE of TP-17
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SUMMIT GEOENGINEERING SERVICES 640 Main Street Lewiston, Maine 04240	TEST PIT LOG	Test Pit # TP-18
	Project: Geotechnical Investigation Eben Hill and Ocean East Condominiums, Portland, ME	Project # 7278 Groundwater: None observed

Contractor:	R.J. Grondin & Sons, Inc.	Ground Surface Elevation:	64.9 feet (NGVD)		
Equipment:	Caterpillar 320L Excavator	Reference:	Coffin Engineering & Surveying point data		
Summit Staff:	Erik J. Wiberg, P.E.	Date:	10/17/01	Weather:	PC, 60's

Depth (ft)	DESCRIPTION	
	ENGINEERING	GEOLOGIC/GENERAL
1	Brown, fine SAND with some silt and little organics, roots, moist, SM	TOPSOIL
2	Tan, medium to fine SAND with little silt and trace gravel, moist, SP-SM	1.0 GLACIAL TILL
	Weathered rock	2.0 WEATHERED ROCK
3		2.5 BEDROCK
	Bedrock encountered at 2.5 ft.	
4	Bottom of exploration at 2.5 ft.	
5		Exposed bedrock 10' S of TP-18
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SUMMIT GEOENGINEERING SERVICES 640 Main Street Lewiston, Maine 04240	TEST PIT LOG	Test Pit # TP-19
	Project: Geotechnical Investigation Eben Hill and Ocean East Condominiums, Portland, ME	Project # 7278 Groundwater: None observed

Contractor:	R.J. Grondin & Sons, Inc.	Ground Surface Elevation:	57.7 feet (NGVD)		
Equipment:	Caterpillar 320L Excavator	Reference:	Coffin Engineering & Surveying point data		
Summit Staff:	Erik J. Wiberg, P.E.	Date:	10/17/01	Weather:	PC, 60's

Depth (ft)	DESCRIPTION	
	ENGINEERING	GEOLOGIC/GENERAL
1	Brown, GRAVEL with some silt and weathered rock rock, GM	GLACIAL TILL
		0.9
2	Bedrock encountered at 0.9 ft.	BEDROCK
	Bottom of exploration at 0.9 ft.	
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SUMMIT GEOENGINEERING SERVICES 640 Main Street Lewiston, Maine 04240	TEST PIT LOG Project: Geotechnical Investigation Eben Hill and Ocean East Condominiums, Portland, ME	Test Pit # TP-20 Project # 7278 Groundwater: 2.0 ft BGS

Contractor:	R.J. Grondin & Sons, Inc.	Ground Surface Elevation:	80.3 feet (NGVD)		
Equipment:	Caterpillar 320L Excavator	Reference:	Coffin Engineering & Surveying point data		
Summit Staff:	Erik J. Wiberg, P.E.	Date:	10/17/01	Weather:	PC, 60's

Depth (ft)	DESCRIPTION	
	ENGINEERING	GEOLOGIC/GENERAL
1	Dark brown, SILT with little fine sand and little organics, moist, ML	TOPSOIL
2	Reddish-brown, coarse SAND to fine GRAVEL with little silt, wet, SM/GM	0.7 GLACIAL TILL 1.5
3	Weathered rock, wet	WEATHERED ROCK Slow seepage at 2.0 ft.
4		3.5
5	Bedrock encountered at 3.5 ft. Bottom of exploration at 3.5 ft.	BEDROCK
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SUMMIT GEOENGINEERING SERVICES 640 Main Street Lewiston, Maine 04240	TEST PIT LOG	Test Pit # TP-21
	Project: Geotechnical Investigation Eben Hill and Ocean East Condominiums, Portland, ME	Project # 7278 Groundwater: None observed

Contractor:	R.J. Grondin & Sons, Inc.	Ground Surface Elevation:	66.1 feet (NGVD)		
Equipment:	Caterpillar 320L Excavator	Reference:	Coffin Engineering & Surveying point data		
Summit Staff:	Erik J. Wiberg, P.E.	Date:	10/17/01	Weather:	PC, 60's

Depth (ft)	DESCRIPTION	
	ENGINEERING	GEOLOGIC/GENERAL
1	Dark brown, SILT with little fine sand and little organics, moist, ML	TOPSOIL
2	Reddish-brown, coarse GRAVEL with little to some fine sand and little silt, moist, GM	1.1 GLACIAL TILL
3		2.5
4	Bedrock encountered at 2.5 ft. Bottom of exploration at 2.5 ft.	BEDROCK
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SUMMIT GEOENGINEERING SERVICES 640 Main Street Lewiston, Maine 04240	TEST PIT LOG Project: Geotechnical Investigation Eben Hill and Ocean East Condominiums, Portland, ME	Test Pit # TP-22 Project # 7278 Groundwater:

Contractor:	R.J. Grondin & Sons, Inc.	Ground Surface Elevation:			
Equipment:	Caterpillar 320L Excavator	Reference:	Coffin Engineering & Surveying point data and topo		
Summit Staff:	Erik J. Wiberg, P.E.	Date:	10/17/01	Weather:	PC, 60's

Depth (ft)	DESCRIPTION	
	ENGINEERING	GEOLOGIC/GENERAL
1	Proposed test pit location is in residential driveway. Test pit not excavated	
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SUMMIT GEOENGINEERING SERVICES 640 Main Street Lewiston, Maine 04240	TEST PIT LOG	Test Pit # TP-23
	Project: Geotechnical Investigation Eben Hill and Ocean East Condominiums, Portland, ME	Project # 7278 Groundwater: None observed

Contractor:	R.J. Grondin & Sons, Inc.	Ground Surface Elevation:	47.1 feet (NGVD)		
Equipment:	Caterpillar 320L Excavator	Reference:	Coffin Engineering & Surveying point data		
Summit Staff:	Erik J. Wiberg, P.E.	Date:	10/17/01	Weather:	PC, 60's

Depth (ft)	DESCRIPTION	
	ENGINEERING	GEOLOGIC/GENERAL
1	Brown, fine SAND with some silt and trace organics, roots, dry, SM	TOPSOIL
2	Orange-brown, fine SAND with little silt, moist, SM	0.7 GLACIAL MARINE
3	Tan, fine SAND with trace to little silt, little fine gravel, very faint mottling, dry, SP-SM	
4		
5	Bedrock encountered at 3.8 ft. Bottom of exploration at 3.8 ft.	3.8 BEDROCK
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SUMMIT GEOENGINEERING SERVICES 640 Main Street Lewiston, Maine 04240	TEST PIT LOG Project: Geotechnical Investigation Eben Hill and Ocean East Condominiums, Portland, ME	Test Pit # TP-24 Project # 7278 Groundwater: 9.2 ft BGS

Contractor:	R.J. Grondin & Sons, Inc.	Ground Surface Elevation:	40.8 feet (NGVD)		
Equipment:	Caterpillar 320L Excavator	Reference:	Coffin Engineering & Surveying point data		
Summit Staff:	Erik J. Wiberg, P.E.	Date:	10/17/01	Weather:	PC, 60's

Depth (ft)	DESCRIPTION	
	ENGINEERING	GEOLOGIC/GENERAL
1	Brown, fine SAND with some silt and little organics, roots, moist, SM	TOPSOIL
2	Orange-brown, mottled, fine SAND with some silt and with thin lenses of silt with clay, moist, SM	1.0 GLACIAL MARINE
3		
4	Olive, SILT with some clay and trace fine sand, moist, ML	
5	Orange-brown to olive, fine SAND with some silt and little gravel, strong mottling, moist, SM	
6		
7		6.0 GLACIAL TILL Boulders to 12-inches encountered below 6 feet. Excavation difficult due to dense soil conditions.
8	Orange-brown, fine SAND with some silt and occasional bouldes, moist, SM	
9		
10		Slow seepage observed at 9.25 ft. 3 hours after excavation. Hole open to 10 ft.
11	Refusal encountered at 10.2 ft. Bottom of exploration at 10.2 ft.	10.2 BEDROCK
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SUMMIT GEOENGINEERING SERVICES 640 Main Street Lewiston, Maine 04240	TEST PIT LOG Project: Geotechnical Investigation Eben Hill and Ocean East Condominiums, Portland, ME	Test Pit # TP-25 Project # 7278 Groundwater: 10.0 ft BGS

Contractor:	R.J. Grondin & Sons, Inc.	Ground Surface Elevation:	40.9 feet (NGVD)		
Equipment:	Caterpillar 320L Excavator	Reference:	Coffin Engineering & Surveying point data		
Summit Staff:	Erik J. Wiberg, P.E.	Date:	10/17/01	Weather:	PC, 60's

Depth (ft)	DESCRIPTION	
	ENGINEERING	**GEOLOGIC/GENERAL**
1	Brown, fine SAND with some silt and trace organics, roots, moist, SM	TOPSOIL
2	Olive, SILT with some clay and trace fine sand, occasional feeder roots, friable, moist, ML	0.7 GLACIAL MARINE
3		
4	Olive to tan, mottled, SILT with some clay, moist, firm, ML	Qu > 4.5 tsf at 4.0 ft. (see note)
5		
6	Olive-gray, fine SAND with some silt and tan silty sand lenses, mottled, moist, SM	Soil horizons dip at about 10-15 degrees toward the east
7		
8	Tan to light brown, fine SAND with trace to little silt and trace gravel, faint mottling, dry, SP-SM	Sidewall cave in at 7.5 ft.
9		8.2
10	Olive to brownish-gray, SAND with some silt and little clay, mottled, firm, SM	GLACIAL TILL Qu > 4.5 tsf (excavated sample) Slow seepage observed at 10 ft. 3 hours after exc.
11		
12	Refusal encountered at 11.0 ft. Bottom of exploration at 11.0 ft.	11.0 BEDROCK
13		
14		
15		Note: Unconfined compressive strengths measured by hand penetrometer on excavation sidewall.
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SUMMIT GEOENGINEERING SERVICES 640 Main Street Lewiston, Maine 04240	TEST PIT LOG Project: Geotechnical Investigation Eben Hill and Ocean East Condominiums, Portland, ME	Test Pit # TP-26 Project # 7278 Groundwater: 9.8 ft BGS

Contractor:	R.J. Grondin & Sons, Inc.	Ground Surface Elevation:	36.4 feet (NGVD)		
Equipment:	Caterpillar 320L Excavator	Reference:	Coffin Engineering & Surveying point data		
Summit Staff:	Erik J. Wiberg, P.E.	Date:	10/17/01	Weather:	PC, 60's

Depth (ft)	DESCRIPTION	
	ENGINEERING	GEOLOGIC/GENERAL
1	Brown, fine SAND with some silt and trace to little organics, roots, moist, SM	TOPSOIL
2	Olive, SILT with some clay and trace fine sand, friable, moist, ML	0.7 GLACIAL MARINE
3		
4		Qu = 4.5 tsf at 3.0 ft. (see note)
5		
6	Olive to olive-brown, SILT with some clay to CLAY with some silt, firm, moist, CL/ML	Qu = 3.5 tsf at 6.0 ft
7		
8		Qu = 2.5 tsf at 7.5 ft
9		Slow seepage observed at 9.8 ft. 2 hours after exc.
10		Slow seepage observed at 10.2 ft. 2 hours after exc.
11		Test Pit open to 13.7 ft.
12	Blue-gray, clayey SILT, very soft, wet, ML	
13		
14		
15	Refusal encountered at 14.0 ft. Bottom of exploration at 14.0 ft.	14.0 BEDROCK
16		
17		
18		Note: Unconfined compressive strengths measured by hand penetrometer on excavation sidewall.
19		
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SUMMIT GEOENGINEERING SERVICES 640 Main Street Lewiston, Maine 04240	TEST PIT LOG Project: Geotechnical Investigation Eben Hill and Ocean East Condominiums, Portland, ME	Test Pit # TP-27 Project # 7278 Groundwater: 7.0 ft BGS

Contractor:	R.J. Grondin & Sons, Inc.	Ground Surface Elevation:	Approx. 30 feet (NGVD)		
Equipment:	John Deere 595D Excavator	Reference:	Coffin Engineering & Surveying topographic map		
Summit Staff:	Erik J. Wiberg, P.E.	Date:	10/17/01	Weather:	PC, 60's

Depth (ft)	DESCRIPTION	
	ENGINEERING	**GEOLOGIC/GENERAL**
1	Brown, SILT with little fine SAND and little organics, moist, ML	TOPSOIL
2	Olive to brown, mottled, SILT with some clay, moist, ML	1.1 GLACIAL MARINE
3	Brown to gray-brown, mottled, SILT with some clay, friable, moist, ML	Qu = 4.5 tsf at 2.5 ft. (see note)
4		Qu = 4.5 tsf at 3.0 ft
5		
6	Olive to gray, SILT with some clay to CLAY with some silt, firm, moist, CL/ML	Qu = 3.75 tsf at 5.5 ft
7		Qu = 2.75 tsf at 6.5 ft
8		Moisture increases at 7.0 ft.
9		Very slow seepage observed at 10.5 ft. 6 hours after excavation. Test pit open to 11.5 ft.
10		
11	Blue-gray, clayey SILT, very soft, wet, ML	Qu < 0.25 tsf from excavated sample
12		11.5
13	Bottom of exploration at 11.0 ft.	Bedrock not encountered
14		
15		
16		
17		
18		Note: Unconfined compressive strengths measured by hand penetrometer on excavation sidewall. unless otherwise noted.
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SUMMIT GEOENGINEERING SERVICES 640 Main Street Lewiston, Maine 04240	TEST PIT LOG	Test Pit # TP-28
	Project: Geotechnical Investigation Eben Hill and Ocean East Condominiums, Portland, ME	Project # 7278 Groundwater: 6.0 ft BGS

Contractor:	R.J. Grondin & Sons, Inc.	Ground Surface Elevation:	Approx. 35 feet (NGVD)		
Equipment:	Caterpillar 320L Excavator	Reference:	Coffin Engineering & Surveying topographic map		
Summit Staff:	Erik J. Wiberg, P.E.	Date:	10/17/01	Weather:	PC, 60's

Depth (ft)	DESCRIPTION	
	ENGINEERING	GEOLOGIC/GENERAL
1	Brown, SILT with little fine SAND and little organics, moist, ML	TOPSOIL
2	Olive to gray-brown, mottled, SILT with some some clay, friable, moist, ML	1.0 GLACIAL MARINE
3		Qu = 2.5 tsf at 3.0 ft. (see note)
4		
5		Qu = 3.5 tsf at 5.0 ft
6	Olive to gray, SILT with some clay to CLAY with some silt, firm, moist, CL/ML	Moisture increases at 6.0 ft. Very slow seepage observed at 6.0 ft.
7		
8		Qu varies from 1.5 tsf to 2.25 tsf at 7.0 ft.
9		
10		
11	Blue-gray, silty CLAY, very soft, wet, ML	
12		
13	Bottom of exploration at 12.0 ft.	12.0 Bedrock not encountered
14		
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16		
17		Note: Unconfined compressive strengths measured by hand penetrometer on excavation sidewall. unless otherwise noted.
18		
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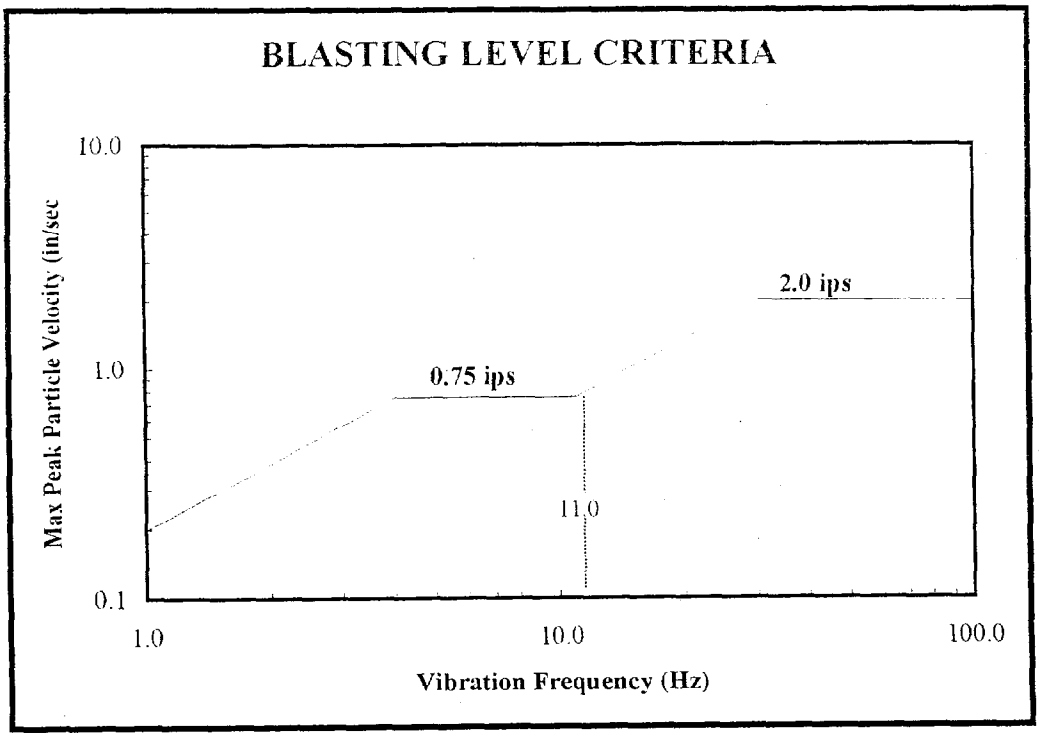

REFERENCE: OSM alternative blasting criteria (Modified from figure B-1. Bureau of Mines. RI 8507)

The Blasting Contractor shall provide a seismographic record to Realty Resources, LLC for each blast event at the nearest off-site structure. The record shall include the date and time of the blast, peak and resultant particle velocities and associated frequencies, and the airblast overpressure.

Flyrock

Blasting mats shall be used to cover the area which will be blasted, such that flyrock traveling along the ground or in the air shall not be cast more than one-half the distance to the nearest structure or beyond the property line, whichever is less.

APPENDIX C

BLASTING RECOMMENDATIONS

APPENDIX C

BLASTING RECOMMENDATIONS

Introduction

Blasting operations will be performed in general accordance with the applicable U.S. Department of the Interior Rules, the recommendations provided below, and a normal standard of care.

Blast Design

The blasting contractor shall submit a blasting plan to the Owner for approval prior to blasting operations. The blasting plan shall include a schedule, sketches of the drill patterns (hole spacing and depth), type and amount of explosives, number and sequence of delays, methods for minimizing flyrock, and any other information pertinent to demonstrating compliance with the applicable U.S. Department of the Interior Rules and the recommendations provided below.

Notification

Oral notification to the abutters within one-half mile of the blast area shall be provided prior to blasting. Warning and all clear signals of different character or pattern that are audible within one-half mile from the point of the blast shall be given. The meaning of the signals shall be conveyed to the abutters at the time they are notified.

Pre-blast Surveys

All blasting operations are the direct responsibility of the Blasting Contractor. Reports of damage to structures caused by blasting operations are the sole responsibility of the Blasting Contractor. Therefore, it is incumbent upon the Blasting Contractor to perform pre-blast surveys as they deem necessary.

Airblast Limits

Airblast overpressure shall not exceed 136 dB (0.018 psi) at the nearest structure.

Ground Vibration Limits

The maximum ground vibration at any structure shall not exceed the limits presented in the following chart:

State of Maine
Department of Public Safety
Construction Permit

Reviewed for Barrier Free

Sprinkled

Sprinkler Supervised

\# **13577**

TOWNHOMES @ OCEAN EAST

Located at: OCEAN AVE.

PORTLAND

Occupancy/Use: APARTMENTS

4/23 A004

Permission is hereby given to:

REALTY RESOURCES

247 COMMERCIAL STREET
ROCKPORT, ME 04856

to construct or alter the afore referenced building according to the plans hitherto filed with the Commisioner and now approved.

No departure from application form/plans shall be made without prior approval in writing. This permit is issued under the provision of Title 25, Chapter 317, Section 2448 and the provisions of Title 5, Section 4594 - F.

Nothing herein shall excuse the holder of this permit for failure to comply with local ordinances, zoning laws, or other pertinent legal restrictions. Each permit issued shall be displayed/available at the site of construction.

This permit will expire at midnight on the 01 th of April 2004

Dated the 01 th day of October A.D. 2003

Michael P. Cantara

Commissioner

Copy-3 Code Enforcement Officer

Comments:

Code Enforcement Officer
PORTLAND, ME

Memorandum

To: Rick Goduti

From: Mike Nugent/Manager of Inspection Services

Date: 09/24/2003

Re: Oceans East 739 Ocean Ave. (423 A004)

Partial Review Comments;

1) Plans are not stamped.
2) Page A1.2 Chimney termination height issue
3) Page A2.5 Chimney termination height issue
4) Please provide a copy of the soils investigation report w/ foundation recommendations.
5) A3.1 and F5.1 Footing dimensions, anchor bolt spacing from corners, type of vapor barrier. what is " a.i.b." in the wall section?
6) A3.2 What brand and type of floor and roof trusses specifically
7) Stone around footing & perimeter drain?
8) Roof Underlayment?
9) UL listings for all fire rated assemblies and STC ratings
10) Fire rated assemble penetration protection schedule
11) Continuity detail for the fire separation assembly/floor truss top chord breach.(wall type 7)
12) It appears that the Top floor ceiling/attic floor assembly is the fire separation assembly, please provide a detail of this assembly with UL listing and STC. Also all Ceiling Light Fixtures and other penetrations become "special" please provide this info.
13) Draft stopping in floor systems pursuant to Section 721.7.1.2, is not shown, are there concealed spaces in excess of 500 Sq. Ft?
14) Is the attic draft stopping above every unit and extending to the underside on the roof sheating for each unit?
15) What type of Fire Suppression is proposed?
16) Stair nosings must be at least ¾ of an inch , (1/2 inch shown)
17) What is the fire separation assembly in the basements between units that are unlabeled (pages F1.1,2 &3)
18) Basement ventiliation (section 1208 of the Code)
19) Footing depth on F.5.1 calls for 4" of Sand and Gravel, this appears to be in conflict with section 1806.
20) How will draft stopping occur in attics of units with rafters/trussed parallel to the fron/rear exterior wall?
21) Attic Access?
22) Snow Load w/ drift calcs
23) Seismic Design
24) Wind Design
25) Floor Loads
26) Fastener Scedule