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: 061824

PERMIT ISSUED
NOV - 3 2006
DEC - 2 9 2006
CITY OF PORTLAND

This is to certify that Ocean Gateway Garage LLC / Albane / Michael Poulin

has permission to 6 story parking garage, Foundation only

AT 127 FORE ST 020 C009001

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 when permission proceed before this building or part there is lined or otherwise closed-in 4 HOUR NOTICE REQUIRED.

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

PERMIT ISSUED
DEC 29 2006
CITY OF PORTLAND

OTHER REQUIRED APPROVALS

Fire Dept. _____

Health Dept. _____

Appeal Board _____

Other _____
Department Name

12/28/06
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 ISSUED
DEC 29
CITY OF PORTLAND

Permit No:	Issue Date:	CBL:
06-1824		020 C009001

Location of Construction:	Owner Name:	Owner Address:	Phone:
127 FORE ST	Ocean Gateway Garage LLC	2 Market St. Suite 500	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	Gilbane / Michael Poulin	900 Elm St Manchester	6056990076
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	**Zone:**
		Foundation Only/Commercial	B5b

Past Use:	Proposed Use:	Permit Fee:	Cost of Work:	CEO District:
Vacant Land	Parking Garage 6 story Foundation only		$855,835.00	1

FIRE DEPT: ☐ Approved ☐ Denied

Signature:

INSPECTION:
Use Group: Type:
FOUNDATION ONLY
12/28/06

Signature:

Proposed Project Description:
6 story parking garage, Foundation only

PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)

Action: ☐ Approved ☐ Approved w/Conditions ☐ Denied

Signature: Date:

Permit Taken By:	Date Applied For:
dmartin	12/26/2006

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 14 Zone C	☐ Conditional Use	☐ Requires Review
☐ Subdivision	☐ Interpretation	☐ Approved
☒ Site Plan #2006-0235	☐ Approved	☐ Approved w/Conditions
Maj ☐ Min ☐ MM ☐	☐ Denied	☐ Denied
OK with Conditions		
Date: 12/27/06	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

General 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: MIDDLE / FORE STREETS, PORTLAND ME		
Total Square Footage of Proposed Structure: 216,662 SF +/-	Square Footage of Lot: 48,742 SF +/-	
Tax Assessor's Chart, Block & Lot: Chart# 20 Block# C Lot# 9 127 FORE STREET LOT	Owner: OCEAN GATEWAY GARAGE LLC	Telephone: 207 775-2464
Lessee/Buyer's Name (If Applicable): N/A	Applicant name, address & telephone: OCEAN GATEWAY GARAGE LLC DREW SWENSON, MANAGER 2 MARKET ST, SUITE 500 PORTLAND ME 04101 207-775-2464	Cost Of Work: $ 855,835 Fee: $ 8,590.00 C of O Fee: $ 75.00 Due

Current Specific use: SURFACE PARKING LOT

If vacant, what was the previous use? —

Proposed Specific use: _____

Project description: SIX STORY 709-725 SPACE PARKING ~~GARAGE~~ GARAGE WITH 5,000 SF +/- RETAIL SPACE ON GROUND FLOOR

Contractor's name, address & telephone: GILBANE BUILDING CO. 207 772-3725
1121 COMMERCIAL ST, PORTLAND ME 04102

Who should we contact when the permit is ready: DREW SWENSON

Mailing address: Phone: 207 775-2464

OCEAN GATEWAY GARAGE LLC
2 MARKET STREET, SUITE 500
PORTLAND, ME 04101

Please submit all of the information outlined in the Commercial Application Checklist.
Failure to do so will result in the automatic denial of your permit.

In order to be sure the City fully understands the full scope of the project, the Planning and Development Department may request additional information prior to the issuance of a permit. For further information visit us on-line at www.portlandmaine.gov, stop by the Building Inspections office, room 315 City Hall or call 874-8703.

I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I 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.

Signature of applicant: _____ Date: 12/26/06

This is not a permit; you may not commence ANY work until the permit is issued.

DEPT. OF BUILDING INSPECTION
CITY OF PORTLAND, ME
DEC 26 2006
RECEIVED

FROM DESIGNER: Simon Design Engineering, LLC

DATE: 12-21-06

Job Name: Ocean Gateway Parking Structure

Address of Construction: _____

2003 *International Building Code*

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

Building Code and Year IBC 2003 Use Group Classification(s) S-2

Type of Construction II-B

Will the Structure have a Fire suppression system in Accordance with Section 903.3.1 of the 2003 IBC yes - not required.

Is the Structure mixed use? yes if yes, separated or non separated (see Section 302.3) seperated

Supervisory alarm system? _____ Geotechnical/Soils report required? (See Section 1802.2) yes

STRUCTURAL DESIGN CALCULATIONS

no. Submitted for all structural members *(106.1, 106.1.1)*

DESIGN LOADS ON CONSTRUCTION DOCUMENTS *(1603)*

Uniformly distributed floor live loads (1603.1.1, 1607)

Floor Area Use	Loads Shown
PARKING DECK	40psf
STAIRS	100 psf / 300# 4.5"
STORAGE	125 psf
EQUIPMENT RM	150 psf
LOBBIES	100 psf

Wind loads (1603.1.4, 1609)

ASCE 7 Design option utilized (1609.1.1, 1609.6)

100 mph *Basic wind speed (1609.3)*

1.00 Building category and wind importance factor, Iw (Table 1604.5, 1609.5)

D *Wind exposure category (1609.4)*

0 Internal pressure coefficient *(ASCE 7)*

(psf) 37.2/-40.6 Component and cladding pressures *(1609.1.1, 1609.6.2.2)*

(psf) 31.5/-37.8 Main force wind pressures *(1609.1.1, 1609.6.2.1)*

Earthquake design data (1603.1.5, 1614 - 1623)

_____ Design option utilized *(1614.1)*

I Seismic use group ("Category") *(Table 1604.5, 1616.2)*

0.371 / 0.160 Spectral response coefficients, S_{DS} & S_{D1} *(1615.1)*

C Site class *(1615.1.5)*

20% Live load reduction *(1603.1.1, 1607.9, 1607.10)*

SNOW GOV. Roof live loads *(1603.1.2, 1607.11)*

Roof snow loads (7603.7.3, 1608)

50psf Ground snow load, P_g (1608.2)

42 psf If P_g > 10 psf, flat-roof snow load, P_f *(1608.3)*

1.0 If P_g > 10 psf, snow exposure factor, C_e *(Table 1608.3.1)*

1.0 If P_g > 10 psf, snow load importance factor, I_s *(Table 1604.5)*

1.2 Roof thermal factor, C_t *(Table 1608.3.2)*

N/A Sloped roof snowload, P_s *(1608.4)*

B Seismic design category *(1616.3)*

OSMF Basic seismic-force-resisting system *(Table 1617.6.2)*

3/3 Response modification coefficient, R_I and deflection amplification factor, C_d *(Table 1617.6.2)*

ELFP Analysis procedure *(1616.6, 1617.5)*

805.9K Design base shear *(1617.4, 1617.5.1)*

Flood loads (1603.1.6, 1612)

B/O Flood hazard area (1612.3)

6.9 Elevation of structure

Other loads

3000lb / 4.5" AREA Concentrated loads (1607.4)

50psf Partition loads (1607.5)

6" Barrier Impact loads *(1607.8)*

_____ Misc. loads *(Table 1607.8, 1607.9.1, 1607.7, 1607.12, 1607.13, 1610, 1611, 2404)*

PER 500 sf EFFECTIVE WIND AREA

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:
06-1824	12/26/2006	020 C009001

Location of Construction:	Owner Name:	Owner Address:	Phone:
127 FORE ST	Ocean Gateway Garage LLC	2 Market St. Suite 500	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	Gilbane / Michael Poulin	900 Elm St Manchester	(603) 699-0076
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	
		Foundation Only/Commercial	

Proposed Use:	Proposed Project Description:
Parking Garage 6 story Foundation only	6 story parking garage, Foundation only

Dept: Zoning **Status:** Approved with Conditions **Reviewer:** Marge Schmuckal **Approval Date:** 12/27/2006

Note: **Ok to Issue:** ☑

1) This permit is for the FOUNDATION ONLY - Separate permits SHALL be required for work beyond the foundation work.

2) This permit is being approved on the basis of plans submitted. Any deviations shall require a separate approval before starting that work.

3) The B-5b Zone requires that any structure shall not be setback NO MORE THAN 10 feet from the front property line. This foundation approval is based upon compliance with the maximum front setback of 10 feet.

Dept: Building **Status:** Approved with Conditions **Reviewer:** Mike Nugent **Approval Date:** 12/29/2006

Note: **Ok to Issue:** ☑

1) Attached are my post permit, pre construction conditions Per MJN:

1) Stamped structural plans with full construction details must be submitted and approved prior to commencement of construction.
2) The statement of Special Inspections must be signed by all applicable parties prior to the commencement of construction.
3) The proposal submitted by the selected piling installer must be reviewed and approved by the project engineer. Any variations from the approved construction documents must be documented and approved.
4) This permit is for a foundation only.Due to the limited information submitted, this review was limited to height and area limitations (table 406.3.5) and relevant portions of chapters 16, 17 and 18 of the 2003 IBC. All other chapter reviews will occur when the information is made available. For the puposes of this review it is assumed that the garage will meet the "openings" requirement found in section 406.3.3.1 of the 2003 IBC.
5) A summary statement from the project engineer shall be provided that establishes compliance with Section 1808 of the 2003 IBC. It shall specify compliance with all applicable sections of the code including but not limited to: the nine items specified in Section 1808.2.2 of the IBC, with specific attention given to the testing criterea outlined on page 14 of the Haely and Aldrich report. If the testing criterea varies from that specified in ASTM D 1143 ot ASTM D4945. This variation needs to be reviewed and approved prior to implimentation.

Dept: Public Works **Status:** Open **Reviewer:** **Approval Date:**

Note: **Ok to Issue:** ☐

Dept: Zoning **Status:** Approved with Conditions **Reviewer:** Marge Schmuckal **Approval Date:** 12/22/2006

Note: **Ok to Issue:** ☑

Dept: Parks **Status:** Open **Reviewer:** **Approval Date:**

Note: **Ok to Issue:** ☐

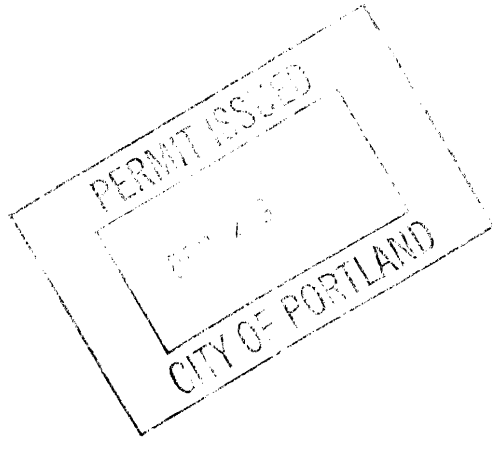
PERMIT ISSUED
DEC 29 2006
CITY OF PORTLAND

Location of Construction:	Owner Name:	Owner Address:	Phone:
127 FORE ST	Ocean Gateway Garage LLC	2 Market St. Suite 500	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	Gilbane / Michael Poulin	900 Elm St Manchester	(603) 699-0076
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	
		Foundation Only/Commercial	

Dept:	Fire	**Status:**	Open	**Reviewer:**	Greg Cass	**Approval Date:**	
Note:						**Ok to Issue:**	☐
Dept:	DRC	**Status:**	Open	**Reviewer:**		**Approval Date:**	
Note:						**Ok to Issue:**	☐
Dept:	Planning	**Status:**	Approved with Conditions	**Reviewer:**	Bill Needelman	**Approval Date:**	12/28/2006
Note:						**Ok to Issue:**	☑

Comments:

12/27/2006-mes: Still needs a final sign off from Planning PRIOR to issuing the foundation permit - Also owes $75 on the fee



From: Jeanie Bourke
To: Drew Swenson; Mike Nugent; nsmith@bernsteinshur.com; William Needelman
Date: 12/29/2006 11:13:22 AM
Subject: RE: Riverwalk Performance Guarantee/Foundation permit

Treasury has confirmed from that the wire was received....the permit can be picked up!!

Jeanie Bourke
Inspection Services Division Director

City of Portland
Planning Dept./ Inspections Division
389 Congress St. Rm 315
Portland, ME 04101
jmb@portlandmaine.gov
(207)874-8715

>>> "Drew Swenson" <dswenson@swensonandco.com> 12/29 10:21 AM >>>

Thank you Mike!

CITY OF PORTLAND, MAINE

Department of Building Inspections

20

Received from

Location of Work

Cost of Construction $

Permit Fee $

Building (IL) ___ Plumbing (I5) ___ Electrical (I2) ___ Site Plan (U2) ___

Other

CBL:

Check #: **Total Collected $**

THIS IS NOT A PERMIT

No work is to be started until PERMIT CARD is actually posted upon the premises. Acceptance of fee is no guarantee that permit will be granted. PRESERVE THIS RECEIPT. In case permit cannot be granted the amount of the fee will be refunded upon return of the receipt less $10.00 or 10% whichever is greater.

WHITE - Applicant's Copy
YELLOW - Office Copy
PINK - Permit Copy

Attached are my post permit, pre construction conditions:

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>>> William Needelman 12/28/06 3:41 PM >>>
To all:

Regarding the issuance of the foundation only building permit for the Ocean Gateway Garage:

Planning sign-off is waiting for receipt of the performance guarantee (the signed escrow agreement is in, but Finance is waiting for the wire transfer of the funds.)

After issuance of the foundation permit, the applicant is still required to fulfill outstanding conditions of approval - all of which can occur during foundation construction.

I will be out tomorrow, and as of +/-2:00 this afternoon, the $ wire had not come to finance. I have left messages on Drew's office and cell voice mails.

Again, as soon as the City has the $ in hand, the Planning is fine with the foundation-only permit.

I will be in on Jan. 2.

Thank you.

Bill
874-8722

>>> "Nathan Smith" <nsmith@bernsteinshur.com> 12/27/2006 1:55:42 PM >>>

Duane,
Riverwalk will be wiring $885,835 to the City for a Performance Guarantee on the Ocean Gateway Garage, etc. Project. Could you please send me wiring instructions. I will be working out the details of the guarantee with Elizabeth Boynton.
Thanks
Nathan

Nathan Smith

Bernstein Shur

100 Middle Street

PO Box 9729

Portland, ME 04104-5029

207 774-1200 main

207 774-1127 facsimile

nsmith@bernsteinshur.com

www.bernsteinshur.com

Portland, ME | Augusta, ME | Manchester, NH

CC: 'Alan Simon'; Alex Jaegerman ; Barbara Barhydt; 'Barry Sheff'; 'Charles Young'; 'David Senus'; Donna Martin; Douglas' 'Butler; Duane Kline; Elizabeth Boynton; 'Fred Forsley'; Gayle Guertin; Jay Reynolds; Jennifer Dorr; Joe Gray ; John Lufkin; John' 'Monaghan; Lannie Dobson; Lee Urban; Marge Schmuckal; mikem@intercontinental.net; 'Nick Iselin'; 'Patrick Carroll'; 'Richard Libardoni'; sandy@seaglasscapital.com; 'Sarah Lynch'; 'Scott Simons'; 'Stephen Fraser'; 'Steve Brackett'; 'Thomas Gorrill'; Wayne' 'Chadbourne

BUILDING PERMIT INSPECTION PROCEDURES

Please call 874-8703 or 874-8693 to schedule your inspections as agreed upon

Permits expire in 6 months, if the project is not started or ceases for 6 months.

The Owner or their designee is required to notify the inspections office for the following inspections and provide adequate notice. Notice must be called in 48-72 hours in advance in order to schedule an inspection:

By initializing at each inspection time, you are agreeing that you understand the inspection procedure and additional fees from a "Stop Work Order" and "Stop Work Order Release" will be incurred if the procedure is not followed as stated below.

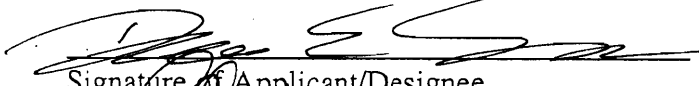
A Pre-construction Meeting will take place upon receipt of your building permit.

✓	**Footing/Building Location Inspection:**	Prior to pouring concrete
✓	**Re-Bar Schedule Inspection:**	Prior to pouring concrete
✓	**Foundation Inspection:**	Prior to placing ANY backfill
_____	~~**Framing/Rough Plumbing/Electrical:**~~	~~Prior to any insulating or drywalling~~
_____	~~**Final/Certificate of Occupancy:**~~	~~Prior to any occupancy of the structure or use. NOTE: There is a $75.00 fee per inspection at this point.~~

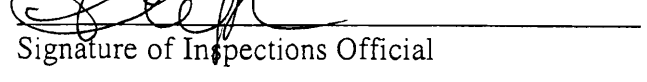
Certificate of Occupancy is not required for certain projects. Your inspector can advise you if your project requires a Certificate of Occupancy. All projects **DO** require a final inspection

_____ **If any of the inspections do not occur, the project cannot go on to the next phase, REGARDLESS OF THE NOTICE OR CIRCUMSTANCES.**

_____ **CERIFICATE OF OCCUPANICES MUST BE ISSUED AND PAID FOR, BEFORE THE SPACE MAY BE OCCUPIED**



Signature of Applicant/Designee — Date 12/29/06



Signature of Inspections Official — Date 12.29.06

CBL: 20 C 9 Building Permit #: 061824

From: Elizabeth Boynton
To: Drew Swenson; Jeanie Bourke; Mike Nugent; nsmith@bernsteinshur.com; William Needelman
Date: 12/29/2006 11:14:38 AM
Subject: RE: Riverwalk Performance Guarantee/Foundation permit

The wire transfer has arrived and Dick Lagarde has signed off on the escrow account. The permit can be issued. I will send Nate Smithy a copy of the executed performance guarantee. Happy New Year to all.

Elizabeth Boynton
Associate Corporation Counsel
City of Portland
389 Congress Street
Portland, ME 04101
207-874-8480 (tel)
207-874-8497 (fax)
liz@portlandmaine.gov

>>> "Drew Swenson" <dswenson@swensonandco.com> 12/29/2006 10:21:00 AM >>>
Thank you Mike!

I have just been informed that the wire transfer was initiated about an hour ago and it should be hitting the City account shortly.

Can someone let me know when it arrives in the bank's system, and I will then come over to pick up the foundation permit. Thank you.

On behalf of all of us on the development team, Happy New Year to everyone who has helped us and thank you for your help making this project a reality. Special thanks to everyone at City Hall who has worked so hard on this project during the holiday week. Best wishes to everyone in 2007!!!

Drew E. Swenson
Riverwalk LLC
2 Market Street, Suite 500
Portland ME 04101
Tel: 207-775-2464
Fax: 207-775-2465
Cell: 207-415-3829

-----Original Message-----
From: Mike Nugent [mailto:mjn@portlandmaine.gov]
Sent: Thursday, December 28, 2006 7:42 PM
To: nsmith@bernsteinshur.com; Jeanie Bourke; William Needelman
Cc: Alex Jaegerman ; Barbara Barhydt; Duane Kline; Donna Martin; Gayle Guertin; Jay Reynolds; Jennifer Dorr; Lannie Dobson; Lee Urban; Elizabeth Boynton; Marge Schmuckal; dswenson@swensonandco.com
Subject: Re: Riverwalk Performance Guarantee/Foundation permit

I have reviewed the Foundation Only Permit and will leave the signed permit with the Inspections Office. Upon satisfactory resolution of the performance guarantee , Lannie, Donna or Gayle should be informed to process the permit for distribution and notify the appropriate person that it may be picked up.

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Nathan Smith

Bernstein Shur

100 Middle Street

PO Box 9729

Portland, ME 04104-5029

207 774-1200 main

207 774-1127 facsimile

nsmith@bernsteinshur.com

www.bernsteinshur.com

Portland, ME | Augusta, ME | Manchester, NH

CC: 'Alan Simon'; Alex Jaegerman ; Barbara Barhydt; 'Barry Sheff'; 'Charles Young'; 'David Senus'; Donna Martin; Douglas' 'Butler; Duane Kline; 'Fred Forsley'; Gayle Guertin; Jay Reynolds; Jennifer Dorr; Joe Gray ; John Lufkin; John' 'Monaghan; Lannie Dobson; Lee Urban; Marge Schmuckal; mikem@intercontinental.net; 'Nick Iselin'; 'Patrick Carroll'; 'Richard Libardoni'; sandy@seaglasscapital.com; 'Sarah Lynch'; 'Scott Simons'; 'Stephen Fraser'; 'Steve Brackett'; 'Thomas Gorrill'; Wayne' 'Chadbourne

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From: Lee Urban
To: Jeanie Bourke; Mike Nugent; nsmith@bernsteinshur.com; William Needelman
Date: 12/29/2006 9:17:34 AM
Subject: Re: Riverwalk Performance Guarantee/Foundation permit

Thanks, everyone!!

>>> Mike Nugent 12/28/2006 7:42:12 PM >>>
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3) The proposal submitted by the selected piling installer must be reviewed and approved by the project engineer. Any variations from the approved construction documents must be documented and approved.
4) This permit is for a foundation only.Due to the limited information submitted, this review was limited to height and area limitations (table 406.3.5) and relevant portions of chapters 16, 17 and 18 of the 2003 IBC. All other chapter reviews will occur when the information is made available. For the puposes of this review it is assumed that the garage will meet the "openings" requirement found in section 406.3.3.1 of the 2003 IBC.
5) A summary statement from the project engineer shall be provided that establishes compliance with Section 1808 of the 2003 IBC. It shall specify compliance with all applicable sections of the code including but not limited to: the nine items specified in Section 1808.2.2 of the IBC, with specific attention given to the testing criterea outlined on page 14 of the Haely and Aldrich report. If the testing criterea varies from that specified in ASTM D 1143 ot ASTM D4945. This variation needs to be reviewed and approved prior to implimentation.

>>> William Needelman 12/28/06 3:41 PM >>>
To all:

Regarding the issuance of the foundation only building permit for the Ocean Gateway Garage:

Planning sign-off is waiting for receipt of the performance guarantee (the signed escrow agreement is in, but Finance is waiting for the wire transfer of the funds.)

After issuance of the foundation permit, the applicant is still required to fulfill outstanding conditions of approval - all of which can occur during foundation construction.

I will be out tomorrow, and as of +/-2:00 this afternoon, the $ wire had not come to finance. I have left messages on Drew's office and cell voice mails.

Again, as soon as the City has the $ in hand, the Planning is fine with the foundation-only permit.

I will be in on Jan. 2.

Thank you.

Bill
874-8722

>>> "Nathan Smith" <nsmith@bernsteinshur.com> 12/27/2006 1:55:42 PM >>>
Duane,
Riverwalk will be wiring $885,835 to the City for a Performance Guarantee on the Ocean Gateway Garage, etc. Project. Could you please send me wiring instructions. I will be working out the details of the guarantee with Elizabeth Boynton.
Thanks
Nathan

Nathan Smith

Bernstein Shur

100 Middle Street

PO Box 9729

Portland, ME 04104-5029

207 774-1200 main

207 774-1127 facsimile

nsmith@bernsteinshur.com

www.bernsteinshur.com

Portland, ME | Augusta, ME | Manchester, NH

CC: Alex Jaegerman ; Barbara Barhydt; Donna Martin; dswenson@swensonandco.com; Duane Kline; Elizabeth Boynton; Gayle Guertin; Jay Reynolds; Jennifer Dorr; Lannie Dobson; Marge Schmuckal

From: Marge Schmuckal
To: Ann Machado; Donna Martin; Gayle Guertin; Jeanie Bourke; Lannie Dobson; Mike Nugent
Date: 12/27/2006 9:28:27 AM
Subject: Re: Riverwalk/Longfellow garage-condos

I have this permit on my desk. - I am intending to sign off on it today for zoning. But yes, we need to wait for Bill in Planning to give the final OK.
Marge

>>> Jeanie Bourke 12/22/2006 2:10:28 PM >>>
FYI....
This project needs a permit by Dec. 31 per funding. Planning (Bill) wil lhopefully be ready to sign off by next Friday.....with performance bond.

Unfortunately they have not filed an application with us. I believe they will be coming in at the eleventh hour for a foundation only permit. Anything we can do to accomodate this approval is appreciated.

Support staff can you please send out a heads up when it arrives.....
Thanks

Jeanie Bourke
Inspection Services Division Director

City of Portland
Planning Dept./ Inspections Division
389 Congress St. Rm 315
Portland, ME 04101
jmb@portlandmaine.gov
(207)874-8715

CC: John Lufkin; Lee Urban

CITY OF PORTLAND, MAINE
DEVELOPMENT REVIEW APPLICATION
PLANNING DEPARTMENT PROCESSING FORM
Zoning Copy

2006-0235
Application I. D. Number

12/8/2006
Application Date

Amendment to Plan - Longfellow Gara
Project Name/Description

Drew Swenson, Riverwalk, LLC.
Applicant

2 Market Street, Suite 500, Portland, ME 04101
Applicant's Mailing Address

Consultant/Agent

India/Fore Street, Portland, Maine
Address of Proposed Site

Applicant Ph: (207) 775-2464 **Agent Fax:**
Applicant or Agent Daytime Telephone, Fax

020 C023001
Assessor's Reference: Chart-Block-Lot

Proposed Development (check all that apply): ☐ New Building ☐ Building Addition ☐ Change Of Use ☐ Residential ☐ Office ☐ Retail ☐ Manufacturing ☐ Warehouse/Distribution ☐ Parking Lot ☐ Apt **0** ☐ Condo **0** ☑ Other (specify) **Plan Amendment**

Proposed Building square Feet or # of Units | Acreage of Site | **B5b** Zoning

Check Review Required:

☐ Site Plan (major/minor) ☐ Zoning Conditional - PB ☐ Subdivision # of lots
☐ Amendment to Plan - Board Review ☐ Zoning Conditional - ZBA ☐ Shoreland ☑ Historic Preservation ☐ DEP Local Certification
☑ Amendment to Plan - Staff Review ☐ Zoning Variance ☐ Flood Hazard ☐ Site Location
☐ After the Fact - Major ☐ Stormwater ☐ Traffic Movement ☐ Other
☐ After the Fact - Minor ☐ PAD Review ☐ 14-403 Streets Review

Fees Paid: Site Plan **$250.00** Subdivision Engineer Review Date **12/11/2006**

Zoning Approval Status:

Reviewer Marge S. - Dmap

☐ **Approved** ☐ **Approved w/Conditions** See Attached ☐ **Denied**

Approval Date Approval Expiration Extension to ☐ Additional Sheets Attached

☐ Condition Compliance signature date

Performance Guarantee ☐ **Required*** ☐ **Not Required**

* No building permit may be issued until a performance guarantee has been submitted as indicated below

☐ Performance Guarantee Accepted — date | amount | expiration date
☐ Inspection Fee Paid — date
☐ Building Permit Issue — date
☐ Performance Guarantee Reduced — date | remaining balance | signature
☐ Temporary Certificate of Occupancy — date | ☐ Conditions (See Attached) | expiration date
☐ Final Inspection — date | signature
☐ Certificate Of Occupancy — date
☐ Performance Guarantee Released — date | signature
☐ Defect Guarantee Submitted — submitted date | amount | expiration date
☐ Defect Guarantee Released — date | signature

DEPT. OF BUILDING INSPECTION
CITY OF PORTLAND, ME
DEC 14 2006
RECEIVED

Applicant: Ocean Gateway Garage LLC Date: 4/19/06

Address: 25 India St C-B-L: 20-C-9
& Fore St - Longfellow Garage 20-C-23

CHECK-LIST AGAINST ZONING ORDINANCE

Date - New construction foundation only - #20-C-009

Zone Location - B-5b

Interior or corner lot - 25 India St

Proposed Use/Work -

Sewage Disposal - city

Lot Street Frontage -

Front Yard - - MAX front yard setback in B-5b = 10'

Rear Yard - None req

Side Yard - None req

Projections -

Width of Lot -

Height - 65' MAX - for 25 India St - showing 64' to top of beam to lowest level over 3 stories high
3 floors min - for Longfellow Garage - 64' & 68' scaled - No back up of the Average Grade

Lot Area - No min req -

Lot Coverage/ Impervious Surface - 100% allowed

Area per Family - 40 Du per Acre (43,560#) N/A

Off-street Parking -

Loading Bays - N/A

Site Plan - #2005-0271

Shoreland Zoning/ Stream Protection - N/A

Flood Plains - Panel 4 - Zone C

Statement of Special Inspections

Project:	**Ocean Gateway Parking Garage**
Location:	Portland, Maine
Owner:	Ocean Gateway Garage LLC
Owner's Address:	2 Market Street, Suite 500, Portland ME 04101
Architect of Record:	Scott Simons Architects
Structural Engineer of Record:	Simon Design Engineering, LLC

This *Statement of Special Inspections* is submitted as a condition for permit issuance in accordance with the Special Inspection requirements of the International Building Code. It includes a Schedule of Special Inspection Services applicable to this project as well as the name of the Special Inspector and the identity of other approved agencies intended to be retained for conducting these inspections.

The Special Inspector shall keep records of all inspections and shall furnish inspection reports to the Building Official, Structural Engineer of Record, and Architect of Record. Discovered discrepancies shall be brought to the immediate attention of the Contractor for correction. If such discrepancies are not corrected, the discrepancies shall be brought to the attention of the Building Official, Structural Engineer of Record, and Architect of Record. The Special Inspection program does not relieve the Contractor of his or her responsibilities.

Interim reports shall be submitted to the Building Official, Owner, Structural Engineer of Record, and Architect of Record.

A *Final Report of Special Inspections* documenting completion of all required Special Inspections and correction of any discrepancies noted in the inspections shall be submitted prior to issuance of a Certificate of Use and Occupancy.

Job site safety, and means and methods of construction are solely the responsibility of the Contractor.

Interim Report Frequency: Monthly

Prepared by:

Alan H. Simon, P.E.

Signature date

Design Professional Seal

Owner's Authorization:

Signature date

Building Official's Acceptance:

Signature date

Schedule of Special Inspection Services

The following sheets comprise the required schedule of special inspections for this project. The construction divisions which require special inspections for this project are as follows:

- X Soils and Foundations
- X Cast-In-Place Concrete
- X Precast Concrete
- X Masonry
- X Structural Steel
- Cold-Formed Steel Framing
- X Spray Fire Resistive Material
- Wood Construction
- Exterior Insulation and Finish System
- Special Cases

Inspection Agents	Firm	Address
1. Special Inspector Richard Libardoni	Intercontinental Developers Inc.	1270 Soldiers Field Rd. Boston, MA
2. Testing Laboratory .	TBD.	
3. Testing Laboratory Wayne Chadbourne	Haley & Aldrich, Inc.	75 Washington Avenue Suite 203 Portland, Maine 04101-2617
4. Testing Laboratory	TBD	

Note: The qualifications of all personnel performing Special Inspection activities are subject to the approval of the Building Official.

The inspection and testing agent shall be engaged by the Owner or the Owner's Agent, and not by the Contractor or Subcontractor whose work is to be inspected or tested. Any conflict of interest must be disclosed to the Building Official, prior to commencing work.

The credentials of al inspectors and testing technicians shall be provided if requested.

It is recommended that the person administering the Special Inspections program be a Professional Engineer experienced in the design of buildings.

Key for Minimum Qualifications of Inspection Agents (where indicted on Schedule)	
PE	Professional Engineer
EIT	Engineer in Training
ACI	American Concrete Institute Certified Concrete Field Testing Technician
AWS	American Welding Society Certified Welding Inspector
ASNT	American Society of Non-Destructive Testing – Level II or III

Qualifications of inspection agents may be indicted on the Schedule in instances where the Structural Engineer deems such requirements are appropriate.

Item	Agent No. (Qualif.)	Scope
1. Shallow Foundations	3 (EIT)	Inspect bearing surfaces for conformance to the requirements of the structural drawings, specifications, and/or geotechnical report
2. Controlled Structural Fill	3 (EIT)	Test material for conformance to specifications or geotechnical report. Perform laboratory compaction tests in accordance with the specifications to determine optimum water content and maximum dry density. Provide full-time inspection of the installation. Perform field density tests of the in-place fill.
3. Deep Foundations	3 (EIT)	Inspect documents identifying pile material and certifying grade of material for conformance to the Contract Documents, and that the identification is maintained from the point of manufacture to the point of delivery to the site. Perform full time inspection of installation. Maintain accurate records for each pile. Monitor dynamic pile load tests and modify pile capacity/installation as required. Record final location of each pile in plan.
4. Other	N/A	

Item	Agent No. (Qualif.)	Scope
1. Mix Design	4 SER	Review mix designs.
2. Material Certification	4 (ACI) SER	Review for conformance to specifications.
3. Reinforcement Installation	4	Inspect reinforcing for size, quantity, condition and placement.
4. Post-Tensioning Operations	N/A	Inspect tensioning and anchorage of tendons. Inspect grouting off bonded tendons.
5. Batching Plant	4 (ACI)	Review Plant quality control procedures and batching and mixing methods.
6. Formwork Geometry	4	Inspect form sizes.
7. Concrete Placement	4	Observe concrete placement operations. Verify conformance to specifications including cold-weather and hot-weather placement procedures. Perform slump, density and air content tests at point of discharge.
8. Evaluation of Concrete Strength	4	Test and evaluate in accordance with the specifications.
9. Curing and Protection	4	Observe procedures for conformance to the specifications.
10. Other		

Item	Agent No. (Qualif.)	Scope
1. Material Certification	4 SER	Review for conformance to specifications.
2. Mixing of Mortar and Grout	4	Inspect field-mixing procedures for conformance to the specifications.
3. Installation of Masonry	4	Inspect placement for conformance to the specifications.
4. Reinforcement Installation	4	Inspect reinforcing steel for size, quantity, condition and placement for conformance to approved submittals and Contract Documents. Inspect welding of reinforcement and review welder's certifications.
5. Grouting Operations	4	Inspect grouting procedures for conformance with the specifications. Inspect cells prior to grouting.
6. Weather Protection	4	Inspect protection for cold and hot weather for conformance with the specifications.
7. Evaluation of Masonry Strength	4	Verify strength in accordance with the specifications.
8. Anchors and Ties	4	Inspect anchorage of masonry to other construction for conformance to the Contract Documents.
9. Other		

Item	Agent No. (Qualif.)	Scope
1. Fabricator Certification/ Quality Control Procedures	2 (PE) [SER]	Review each Fabricator's quality control procedures. Inspect in-plant fabrication, or review Fabricator's approved Independent Inspection Agency's reports.
2. Material Certification	2 (PE) [SER]	Review for conformance to the specifications.
3. Open Web Steel Joists	N/A	Inspect for size, placement, bridging, bearing and connection to structure. Visually inspect all welds of a minimum of 5% of the joists, randomly selected.
4. Bolting	2 (PE)	Test and inspect bolted connections in accordance with specifications. Verify bolt size and grade.
5. Welding	2 (AWS)	Check welder qualifications. Visually inspect fillet welds and test full-penetration field welds in accordance with specifications.
6. Shear Connectors	2 (PE)	Inspect for size and placement. Test for proper weld attachment.
7. Structural Details	2 (PE)	Review for conformance to the specifications.
8. Metal Deck	2 (PE)	Verify gage, width, and type. Inspect placement, laps, welds, side lap attachment and screws or other mechanical fasteners. Check welder qualifications.
9. Other		

Item	Agent No. (Qualif.)	Scope
1. Material Specifications	4	Review for conformance to contract documents.
2. Laboratory Tested Fire Resistance Design	4	Review for conformance to contract documents.
3. Schedule of Thickness	4	Review for conformance to contract documents.
4. Surface Preparation	4	Inspect surface preparation and review for conformance to contract documents and approved submittals.
5. Application	4	Verify installation procedures. Review for conformance to contract documents and approved submittals.
6. Curing and Ambient Condition	4	Verify curing procedures and review for conformance to contract documents and approved submittals.
7. Thickness	4	Verify applied thickness and review for conformance to contract documents and approved submittals.
8. Density	4	Verify applied density and review for conformance to contract documents and approved submittals.
9. Bond Strength	4	Verify bond strength and review for conformance to contract documents and approved submittals.
10. Other		

Drew E. Swenson, CPA, JD, LLM
2 Market Street, Suite 500
Portland, Maine 04101

dswenson@swensonandco.com
tel: 207-775-2464
fax: 207-775-2465

Drew Swenson

Real Estate Development &
Financial Advisory Services

December 26, 2006

City of Portland
Planning and Development Department
389 Congress Street
Room 308
Portland ME 04101

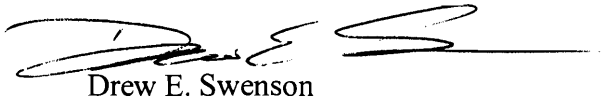
Re: Ocean Gateway Garage Excavation & Foundation Permit

Dear Sir or Madam:

Enclosed please find all the material required for the above-referenced permit application. Please also find a check in the amount of $8,580 for the permit application fee.

If you have any questions or additional informational needs, please contact me 207-415-3829.

Sincerely,



Drew E. Swenson
Principal, Ocean Gateway Garage LLC

SECTION 05300
STEEL DECK

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS:

A. Requirements for the General Conditions, DIVISION I, are hereby made a part of this Section to the same extent as if repeated herein.

B. The Fabricator/Erector shall coordinate this work with that of other trades affecting, or affected by the work included under this Section and shall cooperate with such trades, and the General Contractor to assure the steady and timely progress of the work.

C. The Fabricator/Erector agrees to accept the results of tests secured from a qualified testing laboratory engaged by the Owner.

D. When referred to, Standard Specifications of Technical Societies, manufacturers' associations, and federal agencies shall be the latest edition and include all amendments current as of the date of issue of these Specifications.

1.2 SCOPE OF WORK:

A. The work under this Section includes the furnishing of all labor, materials, tools, equipment and services required for the complete installation of all metal deck indicated on the Drawings or specified herein. Shop Drawings, fabrications, transportation and erection are here included. The work also includes provision of reinforcing at unframed roof openings, specifically reinforcing roof drain openings, flashing, cell closures, closure plates, pour stops, sheet metal work required to contain concrete, and sump pans at roof drains over all areas shown on the Drawings.

B. Related Work Specified Elsewhere: The following items of work are not included in this Section and are specified elsewhere:

1. SECTION 03300 - CAST-IN-PLACE CONCRETE
2. SECTION 05120 - STRUCTURAL STEEL
3. Supports and hangers for Electrical, Mechanical, and/or Plumbing work (except as shown on the Structural Drawings or noted herein) specified

under the respective Sections.

1.3 ABBREVIATIONS AND STANDARDS:

A. Abbreviations:

AISC: American Institute of Steel Construction, Inc.
AISI: American Iron and Steel Institute
ANSI: American National Standards Institute
ASCE: American Society of Civil Engineers
ASTM: American Society of Testing Materials
AWS: American Welding Society
SDI: Steel Deck Institute
UL: Underwriters Laboratories, Inc.

B. National Standards referenced herein are included to establish recognized quality only. Equivalent quality and testing standards will be acceptable subject to their timely submission, review and acceptance by the Engineer.

C. Standards: The Fabricator/Erector shall have in is possession and shall keep available in his field office the following Standards and Recommended Practices (latest editions and/or edition indicated below) to which reference may be made herein and to which he shall conform, except where otherwise required by this Specification.

1. International Building Code, 2003
2. American Society of Civil Engineers
   a. ASCE 7-98: American Society of Civil Engineers: Minimum Design Loads for Buildings and Other Structures, 1998.
3. American Welding Society
   a. AWS D1.3: Structural Welding Code - Sheet Steel
4. Steel Deck Institute
   a. SDI No. 28: Design Manual For Composite Decks, Roof Decks, and Form Deck.

1.4 DEFINITIONS:

A. Testing Agency: The Testing Agency will be selected by the General Contractor and paid for by the Owner. He will be responsible for the Owner's field inspection throughout the erection process and in that capacity will visually inspect the work, review the Fabricator/Erector's field test reports and perform such additional tests as deemed necessary to ensure conformance with the intent of the Contract Drawings and Specifications.

1.5 SUBMITTALS

A. Refer to DIVISION 1 for submittal provisions and procedures.

B. Certificate of Compliance: Submit to the Engineer each of the following:

1. Certification of Welders: Certified copies of the welder's certificates of qualification.
2. Physical Tests: Certified copies of report(s) of physical tests of an independent Testing Agency indicating ultimate and service load values for the deck being supplied.
3. Manufacturer's Tests: Certified copies of reports of manufacturer's tests made from heats at the mill for all metal deck supplied under this Section.
4. Manufacturer's literature indicating recommended installation instructions, section properties, load tables, etc.

C. Shop Drawings:

1. Shop Drawings shall show type of deck, gage of steel, locations, necessary fabrication to fit deck into job, closures, pour stops, sump pans, curb details, method of field connection to supporting structure including size, spacing, and pattern of welding, and method of fitting deck with other parts of construction.
2. The Fabricator/Erector shall verify the consistency of field dimensions with those dimensions given on the Architect's Drawings, and obtain by measurements at the site all necessary dimensions and levels.
3. Prior to submission of the Shop Drawings to the Engineer, they shall be prechecked by the Fabricator/Erector for conformity of detail with the Contract Documents and as coordinated with other work under his charge. The signature of a representative of the Fabricator/Erector indicating that the Drawings have been prechecked will be required. The Fabricator/Erector shall be wholly responsible for the conformity of dimensions and details of the Shop Drawings with the Contract Documents. Shop Drawings shall indicate where shoring of metal decking is required. The maximum allowable deflection under wet concrete is 3/8 inch.
4. Shop Drawings (four sets) shall be submitted in the form of black line prints for use by the Engineer

as work sheets for review of the Drawings.

5. After receipt of the Shop Drawings by the Engineer, they will be reviewed and necessary corrections will be marked on three copies, which will be returned. Corrections shall then be made on the Drawing(s), which shall be resubmitted. This procedure will continue until the Drawings are released for construction. The Fabricator/Erector shall then deliver to the Engineer the quantity and type of prints specified in DIVISION 1 for his record and the use of his personnel.
6. At least one copy of each released Shop Drawing shall be kept available in the Fabricator/Erector's field office and Drawings not bearing evidence of release for construction by the Engineer shall not be kept on the job.

1.6 GUARANTEE/WARRANTY:

A. Attention is directed to DIVISION 1 regarding Guarantees and Warranties under this Section.

B. Manufacturers shall provide their standard guarantees for work under this Section; however, such guarantees shall be in addition to and not in lieu of all other liabilities, which the manufacturer and/or Fabricator/Erector may have by law or other provisions of the Contract Documents.

PART 2 - PRODUCTS

2.1 MATERIALS:

A. Deck shall be formed of steel conforming to ASTM A446, Grade A (minimum yield strength 33,000 psi) with a zinc coating conforming to ASTM A525, coating class G90 or as indicated on the Drawings, 18-gage minimum or as indicated on the Drawings.

1. Metal floor deck shall be one of the following products or approved equivalent:
   a. Vulcraft: 2" VLI
   b. United Steel Deck, Inc.: 2" Lok-Floor
2. Metal roof deck shall be one of the following products or approved equivalent:
   a. Vulcraft: 3" Type N or 1½" Type B
   b. United Steel Deck, Inc.: 3" Type NS or 1½" Type B

B. Accessories: Closures, hanger tabs for suspended

acoustical ceilings, and other accessories shall be provided as necessary for complete installation. Hanger tabs shall each support 100 pounds minimum load and provide for fastening of hanger wire for suspended ceiling. Tabs shall be a maximum of 1'-0" on center in each direction.

C. Cell closure flexible strips and fillers shall be of material in compliance with applicable Building Code governing class of construction. Sump pans and frames for drains blocking infills at curb of mechanical units.

D. Provide metal closure strips at edges of all slabs and openings that will serve as pour stops for concrete. Closures shall be of same quality as metal deck unless otherwise indicated as "plate" and be sufficient to span or cantilever from steel beams (16-gage minimum).

PART 3 - EXECUTION

3.1 INSPECTION:

A. Examine all work prepared by others to receive work of this Section and report any defects affecting installation to the Fabricator/Erector for correction. Commencement of work will be construed as complete acceptance of preparatory work by others.

3.2 FABRICATION:

A. Fabricate deck units in accordance with the AISI "Specifications for the Design of Cold Formed Steel Structural Members" and approved Shop Drawings. Locate openings for penetrations where indicated and provide supports framing and edge reinforcement for all openings.

B. Floor Deck: Form units in lengths to span three or more support spacings with flush ends and interlocking side laps. All decking shall be detailed and fabricated to be unshored during concrete placement unless otherwise noted on the Contract Drawings. Depth, rib spacing, and gage as specified or shown on the Contract Drawings.

C. Roof Deck: Form units in lengths to span three or more supports spacings with flush ends and nested side laps. Depth, rib spacing, and gage as specified or called out on the Contract Drawings.

D. Closures: Form to provide tight fit at open ends of

cells or flutes and at sides of deck.

3.3 PRODUCT DELIVERY, STORAGE AND, HANDLING:

A. Steel deck delivery should be scheduled to arrive at the job site as required for erection.

B. Storage: Store off the ground with one end elevated to provide for drainage. Protect against condensation with a ventilated waterproof covering.

C. Care should be taken not to bend or mar decking.

3.4 INSTALLATION:

A. Install in accordance with manufacturer's recommendations, except as modified or extended herein. Welding shall be in accordance with AWS D1.3.

B. Placing Deck Units: Place deck units on supporting steel framework and adjust to final position with ends bearing minimum 2-1/2 inches on supporting members.

1. Place deck units end to end before they are permanently fastened.
2. Align cells over entire length of run.
3. Do not stretch or compress side lap interlocks.
4. Place units flat and square, and secure to adjacent framing without warp or deflection.
5. Units less than full width used to complete deck coverage shall not be less than 6 inches wide.
6. Where possible, steel deck shall span three or more supports.

C. Fastening Deck Units

1. Secure units to supporting members with 3/4-inch minimum diameter fusion welds. Maximum spacing 12" on center at each beam or girder support except as otherwise noted on the Contract Drawings.
2. Tack weld end closures at 4'-0" on center maximum.
3. Tack weld side closures at 3'-0" on center maximum.
4. Side Laps:
   a. Composite Deck: Button punch side laps between adjacent decks at intervals not to exceed 2'-0".
   b. Non-composite Deck: Fasten side laps between adjacent deck units with #12 TEK Screws at 6" on center maximum such that tight fit is created between the two units.
5. All welding shall be done by competent experienced

welding personnel.

D. Cut and fit deck units around projection through roof. Make cuts neat, square, and trim. Grind smooth all rough edges.

3.5 PROTECTION:

A. Do not use deck for storage or working platforms until permanently secured in position.

B. Assure that construction loads do not exceed carrying capacity.

C. During erection, distribute all construction live loads by appropriate means to prevent damage to the previously installed components.

3.6 CLEANING AND TOUCH-UP:

A. Remove oil, grease, dirt, or debris from deck and leave work ready for further construction.

B. Wirebrush clean all welds and scars and touch-up with zinc-rich paint.

END OF SECTION

MEMORANDUM

To: FILE

From: Marge Schmuckal **Dept:** Zoning

Subject: Application ID: 2006-0235

Date: 12/22/2006

On 12/22/06 I met with the Steve Fraiser, architect, and Drew Swenson. The proposed amendment to the parking garage is meeting the current zoning ordinance for setbacks, coverage and height. It is noted that the front of the building has been altered from the original submittal. In no area of the new front, shall the building be setback more than 10' from the front property line.

Marge Schmuckal
Zoning Administrator

Section 02220 – Demolition

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK:

A. Demolition includes modification, removal, relocation, and/or disposal of items as shown on Drawings or as specified. This includes, but is not limited to, the following:

1. Removal and replacement of utilities as required to accommodate new construction.

2. Removal and replacement of hot bituminous and cement concrete pavement as required to accommodate new construction.

3. Removal of granite curbing within project area as specified on the Drawings.

4. Coring of holes of diameter required and at locations required to accommodate utilities and piping as necessary for new construction.

5. Removal of buildings including foundations and below-grade foundation walls.

6. All other demolition work required to allow complete installation of the Project.

1.02 SUBMITTALS:

A. Submit proposed methods and disposal plans for demolition to OWNER and ENGINEER for review prior to start of work as specified.

B. Submit schedule indicating proposed sequence of demolition to OWNER and ENGINEER and for review prior to start of work. Include coordination for shutoff, capping and continuation of utility services as required, together with details for dust and noise control protection.

1.03 JOB CONDITIONS:

A. Permits: CONTRACTOR shall obtain all required permits for demolition.

B. Condition of Structures: The OWNER assumes no responsibility for actual condition of structures to be demolished.

1. Conditions existing at time of inspection for bidding purposes will be maintained by OWNER in so far as practicable. However, variations within structure may occur by OWNER's removal and salvage operations prior to start of demolition work.

C. Partial Removal: Items must be removed from structure as work progresses. Salvaged items must be transported from site as they are removed.

D. Explosives: Use of explosives will not be permitted.

A. General: Perform selective demolition work in a systematic manner. Use such methods as required to complete work indicated on Drawings or as specified in accordance with demolition schedule and applicable regulations.

B. Provide services for effective air and water pollution controls (water sprinkling, temporary enclosures, and other suitable methods) to limit dust and dirt rising and scattering in air to lowest practical level. Comply with governing regulations, permits, laws, and ordinances pertaining to environmental protection.

C. Completely fill below grade areas and void resulting from demolition work. Provide fill material as shown on the Drawing or as specified.

D. Saw-cut asphalt and concrete paved surfaces before removal. Joint cut should be neat and straight.

3.03 PIPE CORING:

A. General: Core holes for all pipe protrusions through existing concrete structures to allow watertight installation of pipe and link seal or pipe sleeve as required. Double link seals shall be installed at all pipe protrusions through concrete walls containing liquid or saturated conditions on either side.

3.04 SALVAGED MATERIALS:

A. General: Where shown on the Drawings or specified as Salvage, Property of OWNER, or Deliver to OWNER, carefully remove indicated items, clean, store, and turn over to OWNER in area designated by ENGINEER or OWNER.

B. Any unanticipated items of significant historic or commercial value discovered in the demolition work shall remain the property of OWNER. CONTRACTOR will have the option to take possession of all other demolition materials or to dispose of them suitably. No materials assigned to CONTRACTOR may remain on site without written authorization from ENGINEER or OWNER.

3.05 BUILDINGS

A. CONTRACTOR shall assess and remove and dispose of all components coated with lead based paints and asbestos containing materials in accordance with all applicable local, state and federal regulations. Cost for assessing, removing, and disposing of all lead based paints and asbestos containing materials shall be the responsibility of the CONTRACTOR.

B. Lead-based paint components such as piping, supports, railings, or other fastened components that can be removed by unbolting or whole in an intact condition without burning, cutting, scraping, grinding, crushing, crumbling, sanding or other actions creating dust and potential exposure hazards shall be removed and disposed in such a manner. In the event components can not be removed without potential dust exposure, then requirements under OSHA 29 CFR 1926.62 shall be followed for training, personal monitoring, and personal protection.

C. Asbestos containing materials, if removed whole and intact (without scraping, sanding, grinding, or by mechanical means) to prevent crumbling or generating dusts, can be removed by a non-licensed contractor and disposed of as miscellaneous non-friable waste. Asbestos containing materials in a friable condition (crumbling, pulverized or reduced to dust) shall be removed by a

Section 02230 – Site Clearing

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK:

A. Work covered by this Section includes site clearing and grubbing as required to perform the Work as shown on Drawings.

B. The CONTRACTOR shall limit the area of clearing and grubbing to the minimum area possible to allow for the proper installation of the Work and to preserve all plantings, trees, shrubs, grass and natural vegetation to the maximum possible extent.

1.02 RELATED WORK: Includes, but not limited to, the following:

A. Slope Protection and Erosion Control: Section 02370.

1.03 QUALITY ASSURANCE:

A. Confine clearing and grubbing operations to within the following limits:

1. All areas where Work is required to be done, but, to the minimum extent possible to properly install the Work.

2. Within the Grading Limits as shown on the Drawings.

B. No trees, plants, shrubs, flowers or vegetables shall be removed or trimmed without the prior permission of the ENGINEER, except where otherwise specified.

C. Protection of Existing Trees and Vegetation: Protect existing trees and other vegetation indicated to remain in place, against unnecessary cutting, breaking or skinning of roots, skinning and bruising of bark, smothering of trees by stockpiling construction materials or excavated materials within drip line, excess foot or vehicular traffic, or parking of vehicles within drip line. Provide temporary guards to protect trees and vegetation to be left standing.

1.04 STORAGE AND HANDLING:

A. Store trees, plants and shrubs in protected areas and give ample water to keep them in a thriving condition for subsequent replanting.

B. Obstruction of roads, driveways, sidewalks, gutters and drainage ditches, swales and channels with stored materials is not permitted.

1.05 JOB CONDITIONS:

A. The locations of trees, plantings, vegetation, sidewalks, curbs and other living and nonliving items, as shown on the Drawings, have been determined by actual surveys at the time surveys were made. Since that time, the condition of things may have changed. Remove and replace all obstacles and obstructions, as required to complete the Work, whether shown on the Drawings or not, at no extra cost to OWNER.

B. Explosives are not permitted for clearing and grubbing operations.

C. Use all means necessary to protect existing objects not indicated to be removed. In the event of damage, make all necessary repairs and replacements and restore to its original condition, as acceptable to ENGINEER.

overly compacting the root mass.

d. Prepare trees to be transplanted by pruning branches back and by pruning roots and watering seven (7) days prior to digging.

3.03 PERFORMANCE:

A. Clearing and Grubbing:

1. Clearing consists of cutting and disposing of all trees, down timber, stubs, brush, bushes, snags, rubbish, debris, and other objectionable matter and materials and the removal and storage of fences, signs, walks, guard rails, curbs and other items to be restored.

2. Grubbing consists of the removal and disposal of all stumps, roots, duff, foundations and other objectionable matter and materials to a minimum of 12 inches below original ground surface.

3. All operations shall be done in a manner so that present growth will blend with the limits of construction and a natural appearance will be attained.

4. Employ whatever measures are necessary to avoid erosion.

B. Topsoil:

1. Topsoil is defined as friable loam surface soil found in a depth of not less than 4 inches from the original ground surface. Satisfactory topsoil is reasonably free of subsoil, clay lumps, stones, and other objects over 2-inches in diameter, and without weeds, roots, and other objectionable material.

2. Strip topsoil within limits as designated on Drawings or required to whatever depths encountered in a manner to prevent mixing with underlying subsoil or objectionable material.

3. Where trees are indicated to be left standing, stop topsoil stripping a sufficient distance to prevent damage to main root system.

4. Stockpile topsoil in storage piles in areas shown or where directed. Construct storage piles to freely drain surface water. Cover storage piles as necessary to prevent windblown dust and erosion.

5. Surplus loam and topsoil not required for completion of the Work shall remain the property of the OWNER. Stockpile this material on-site and maintain and protect until Work is complete.

C. Trees and Plantings:

1. In grassed, planted and open areas do not remove or trim trees or plantings without the prior permission of ENGINEER. Remove and preserve small trees, plantings, flowers and similar vegetation for reuse.

2. If it is impractical to fell trees as a whole, remove them in sections according to standard practices of professional tree removal. Fall trees to the center of the area being cleared to minimize damage to trees that are to be left standing.

3. Immediately after felling a tree, remove branches, cut trunk and limbs and remove all materials from the site and dispose of in a lawful manner.

4. Property OWNER shall have the right to cut and remove any wood in advance of the CONTRACTOR'S operations. All other timber and wood which is removed shall become the property of CONTRACTOR.

Section 02240 – Dewatering

PART 1 - GENERAL

1.01 Description of Work

A. Provide, install, and maintain all necessary material and equipment used to keep excavation free of standing or flowing water and to transport water to a suitable discharge point.

B. Provide measures to dispose of water in accordance with all local, state and federal regulations. Notify the City of Portland Environmental Engineering Department prior to conduction dewatering operations.

C. Related Work elsewhere includes:

Earthwork: Section 02300
Slope Protection and Erosion Control: Section 02370
Water System Distribution: Section 02510
Sewers and Drains: Section 02600
Stormwater Treatment Systems: Section 02631

1.02 Submittals

A. At least 2 weeks prior to the start of construction in any areas of anticipated dewatering, submit to the Engineer and City of Portland Environmental Engineering Department, a written plan for removal, storage, treatment, and disposal of groundwater from excavations. Do not proceed with construction in any of these areas until the plan has been reviewed and approved by the Engineer and City of Portland Environmental Engineering Department.

PART 2 – PRODUCTS (not applicable)

PART 3 - EXECUTION

3.01 General:

A. Only trained personnel are authorized to conduct dewatering, storage, and discharge operations.

3.02 Dewatering Excavations:

A. Perform all work in the dry. Prevent surface water or groundwater from flowing into excavations and from flooding project site and surrounding area. Do not allow water to accumulate in excavations.

B. Provide and maintain pumps, well points, sumps, hoses, filters, and all other dewatering system components necessary to convey water away from excavations.

C. Minimize the suspended solids content in the water by lining the excavation collection area with crushed stone and placing the pump intake in a perforated bucket.

D. Convey water removed from excavations to a frac tank. Do not use trench excavations as temporary drainage ditches. Do not allow silt laden water to discharge to gutters or storm drainage system. Do not discharge water directly to the storm or sanitary sewer.

E. Any damages to existing facilities or new work resulting from the failure of the Contractor to maintain the work areas in a dry condition shall be repaired by the Contractor, as directed by the Engineer, at no additional expense to the Owner. Pumping shall be continuous where specified or directed or as necessary to protect the work and to maintain satisfactory progress.

Section 02250 – Shoring and Bracing

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK:

A. Work included:

Shoring and bracing necessary to protect existing buildings, utilities, all existing improvements, and excavation against movement due to caving, to meet OSHA safety requirements of shoring and bracing, and to provide cofferdams.

Maintenance of shoring and bracing.

Removal and disposal of shoring and bracing, as required.

B. Shoring and bracing systems include, but are not limited to, permanent and temporary measures.

C. Steel sheet piling: Provide steel sheet piling, to be removed following completion of Work, where shown on the Drawings, where directed by the ENGINEER, or where otherwise required by CONTRACTOR to complete the work. Payment will be incidental to installation of piping and manholes. Piling shall remain in place when directed by the ENGINEER. Payment for piling to remain in place will be made by Change Order.

Steel sheet piling may be left in place at the CONTRACTOR'S option if approved by the ENGINEER. No additional payment will be made for this piling.

No payment will be made for steel sheet piling used for the CONTRACTOR'S convenience.

D. Movable box: Provide where a shoring system is required but sheet piling is not called for. Cost of movable box system is incidental to other work items.

E. Related Work Specified Elsewhere Includes:

Earthwork: Section 02300

1.02 QUALITY ASSURANCE:

A. Design: Assign design of shoring and bracing to a Professional Engineer registered in the state of Maine.

B. Regulations: Comply with local codes and OSHA requirements.

1.03 SUBMITTALS:

A. Certificate of Design: Submit certification of design for shoring and bracing system signed by a Professional Engineer registered in the state of Maine.

1.04 JOB CONDITIONS:

A. Before starting work, check and verify governing dimensions and elevations. Survey condition of adjoining properties with ENGINEER. Take photographs, recording any prior settlement or cracking of structures, pavements, and other improvements. Prepare a list of such damages,

C. Cut off sheet piling to be left in place at least two feet below finish grade. Indicate location of any sheet piling cut off and left in place on as-built drawings, as required by OWNER.

End of Section

Section 02300 - Earthwork

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK:

A. Work included: All excavating, filling, backfilling, and removal of materials. Earthwork for utilities is included in this section.

B. Related Work Specified Elsewhere:

Existing Subsurface Conditions: Section 02010

Shoring and Bracing: Section 02250

Slope Protection and Temporary Erosion Control: Section 02370

Dewatering: Section 02240

1.02 PROTECTION:

A. Paved Surfaces: Do not operate equipment that will cause damage on paved surfaces. Any damage to existing roads or other paved surfaces caused by construction equipment shall be repaired at no additional cost to OWNER.

B. Maintain Excavations with approved barricades, lights, and signs to protect life and property until excavation is filled and graded to a condition acceptable to the ENGINEER.

C. Protect structures, utilities, monitoring wells, property monuments, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earthwork operations. The CONTRACTOR shall be responsible for actual cost of repair or replacement of any items damaged as a result of construction activities, including any professional services required for inspection of repairs and replacement.

1.03 QUALITY ASSURANCE:

A. Testing and Inspection: OWNER shall be responsible for all testing, unless otherwise noted. The cost for retesting due to failed tests shall be the responsibility of the CONTRACTOR.

The CONTRACTOR shall be responsible for coordinating with ENGINEER to allow for testing to be performed at the frequencies specified. A minimum of 48 hours notice for in-place testing shall be given to allow proper scheduling by ENGINEER.

B. Materials Testing Firm: Company specializing in in-situ testing of compacted fills with a minimum of five years documented experience. Company to be acceptable by ENGINEER and OWNER. Materials testing firm to be independent of CONTRACTOR.

1.04 JOB CONDITIONS:

A. Site Information: The CONTRACTOR may make his own borings, hand probes, explorations, and observations to determine soil, water levels, and other subsurface conditions at no additional cost to OWNER. Coordinate with OWNER prior to start of additional investigative work.

B. Existing Utilities: Locate existing underground utilities in areas of excavation work. If utilities are indicated to remain in place, provide adequate means of support and protection during

B. Gravel/Aggregate Base: Hard, durable gravel contained only particles passing the 2-inch sieve. Equal to MDOT 703.06a, Type A material. Sieve analysis by weight:

Sieve Size	% Passing by Weight
2"	100
1/2"	45 - 70
1/4"	30 - 55
No. 40	0 - 20
No. 200	0 – 5

C. Aggregate Subbase: Sand or gravel of hard, durable particles; equal to MDOT 703.06b Type D material. Aggregate subbase shall not contain particles that will not pass the 6-inch sieve. The part that passes the 3-inch sieve shall meet the following gradation requirements:

Sieve Size	% Passing by Weight
1/4"	25 - 70
No. 40	0 - 30
No. 200	0 - 7

D. Subbase Fill: Sand or gravel of hard, durable particles; equal to MDOT 703.06 Type F material. Subbase fill shall not contain particles that will not pass the 6-inch sieve. The part that passes the 3-inch sieve shall meet the following gradation requirements:

Sieve Size	% Passing by Weight
1/4"	60 - 100
No. 40	0 - 50
No. 200	0 - 7

E. 3/4" Crushed Stone: Durable, clean angular rock fragments obtained by breaking and crushing rock material.

Sieve Size	% Passing by Weight
1"	100
3/4"	90 - 100
3/8"	20 - 55
No. 4	0 - 10
No. 200	0 - 1.5

F. Sand: Sand shall be well-graded coarse sand without excessive fines and free from loam, clay, and organic matter. Beach sand shall not be used. The grading requirements are as follows:

Sieve Size	% Passing by Weight
3/8"	100
No. 4	95 - 100
No. 16	50 - 85
No. 50	10 - 30
No. 100	2 - 10

stand without undermining pavement. Remove all topsoil, organic matter and fill materials containing debris within limits of paved areas.

F. Excavation for Structures: Conform to elevations and dimensions shown within a tolerance of plus or minus 0.10 foot, and extending a sufficient distance from footings and foundations to permit placing and removal of concrete formwork, installation of services, other construction, and for inspection.

In excavating for footings and foundations, take care not to disturb bottom of excavation. Excavate by hand to final grade just before concrete formwork and reinforcement is installed. Trim bottoms to required lines and grades to leave solid base to receive other Work. When excavating in clay material, use a smooth-edged bucket to avoid disturbance of the bottom of the excavation. Use shoring and bracing where sides of excavation will not support itself.

G. Excavation for Utility Trenches: Excavate to widths shown on the Drawings and depths indicated or required to establish indicated slope and invert elevations.

Produce an evenly graded, flat trench bottom at the subgrade elevation required for installation of pipe and bedding material. Place backfill material directly into trench or excavation. Do not stockpile material to be used as backfill along edges of trenches. Load excavated material directly into trucks, unless otherwise permitted by the ENGINEER.

H. Unauthorized Excavation: Removal of materials beyond indicated subgrade elevations or dimensions without specific direction of ENGINEER. Unauthorized excavation, as well as remedial work directed by ENGINEER, including refilling, shall be at CONTRACTOR's expense.

I. Refilling Unauthorized Excavation: For trenches, use 3/4-inch crushed stone. Elsewhere, backfill and compact unauthorized excavations as specified for authorized excavations of same classification, unless otherwise directed by ENGINEER.

J. Excavation of Unsuitable Materials: When excavation has reached required subgrade elevations, notify ENGINEER who will make an inspection of conditions. If unsuitable bearing materials are encountered at required subgrade elevations, carry excavations deeper as directed by ENGINEER and replace excavated material as specified. Removal of unsuitable material and its replacement as directed by ENGINEER will be paid for as Excavation Below Normal Grade unless material has been made unsuitable by CONTRACTOR's operations. In this instance, removal and replacement will be performed at CONTRACTOR's expense.

K. Material Storage: Stockpile and maintain suitable surplus excavated materials for re-use as backfill within the Project limits, as directed by ENGINEER. Place, grade and shape stockpiles for proper drainage. Locate and retain soil materials away from edge of excavations.

3.02 BLASTING

A. General: Obtain approval of OWNER and ENGINEER before blasting. All blasting for utilities shall be paid as Utility Trench Blasting. All blasting related to footings, foundations and other site elements NOT related to utilities shall be paid as Open Blasting.

B. Pre-blast Survey shall be the responsibility of the CONTRACTOR. Provide pre-blast survey prior to any blasting or blasting related operations. A written report of the preblast survey will be provided to the OWNER by the CONTRACTOR and will be available for review by the City of Portland. A copy of the blasting plan will be submitted to the City of Portland and OWNER for review and approval prior to the initiation of the site preparation work.

All owners of buildings, dwellings or residences located within 500-feet of the blasting location shall be notified, in writing, by the CONTRACTOR a minimum of 30 days prior to the scheduled

11. Seismographic and airblast records, which shall include: type of instrument, sensitivity, and calibration signal or certification of annual calibration; exact location of instrument and the date, time, and distance from the blast; and the vibration and/or airblast level recorded.

E. All blasting shall be performed in accordance with all pertinent provisions of the "Manual of Accident Prevention in Construction", issued by the Associated General Contractors of America, Inc., of the "Construction Safety Rules and Regulations", as adopted by the State Board of Construction Safety, Augusta, Maine, and the Maine Department of Transportation "Standard Specifications" Section 105.2.6, Use of Explosives. Blasting through the overburden will not be allowed.

F. Drilling Equipment will be equipped with suitable dust control apparatus that must be kept in repair and used during all drilling operations.

G. Open Blasting shall pertain to all blasting required for the placement of foundations, footings, and other project elements not specifically identified in paragraph H, Utility Trench Blasting. Vertical pay limits for all Open Blasting shall be one (1) foot below the base of structural elements to be placed. Horizontal pay limits for all Open Blasting shall be two (2) feet beyond each outside edge of structural elements to be placed. Blasting for placement of underdrain piping and associated appurtenances depicted along building footings will be considered Open Blasting.

H. Utility Trench Blasting shall pertain to all blasting required for the placement of any pipe, utility structure, or associated appurtenances. Utilities associated with the site shall include water distribution and service, sanitary sewer collection and service, storm sewer collection, underground electrical service, telecommunications, data, and geothermal related elements, as indicated on the drawings. All blasting required for the placement of utilities outside the horizontal and vertical pay limits defined by Open Blasting described in paragraph G, shall be paid as Utility Trench Blasting. Pay limits for piping and utility structures shall be as depicted on the contract drawings.

3.03 STABILITY OF EXCAVATIONS:

A. General: Slope sides of excavations to comply with OSHA Regulations and Local Codes. Shore and brace where sloping is not possible due to space restrictions or stability of material excavated. Maintain sides and slopes of excavations in safe condition until completion of backfilling.

B. Refer to Section 02250 for shoring and bracing requirements.

3.04 DEWATERING:

A. Refer to Section 02240 for dewatering requirements

3.05 BACKFILL AND FILL:

A. General: Place suitable soil material in layers to required elevations as shown on the Drawings. Fill, backfill, and compact to produce minimum subsequent settlement of the material and provide adequate support for the surface treatment or structure to be placed on the material. Place material in approximately horizontal layers of beginning at lowest area to be filled. Do not impair drainage.

B. Ground Surface Preparation: Remove vegetation, debris, unsuitable soil materials, obstructions, and deleterious materials from ground surface prior to placement of fills. Remove material to the full extent of root penetration. Scarify surfaces so that fill material will bond with existing surface.

that is too wet to compact to required density. Compact each horizontal layer of fill and slope as Work progresses.

B. Degree of Compaction: Compact to the following minimum densities:

FILL AND BACKFILL LOCATION	DENSITY
Under structure foundations and slab on grade	95% of max.
Top 3 feet under pavement	95%
Below top 3 feet under pavement	92%
Structural fills	95%
Pipe Bedding	95%
Adjacent to structure foundation walls, retaining walls, and tank walls	92% - 95%
Trenches through Gravel areas	95%
Trenches through other non-paved areas	90%
Embankments/Landscaped Areas	90%

Maximum density: ASTM D1557.
Field density tests: ASTM D1556 (sand cone) or ASTM D2167 (rubber balloon), or ASTM D2922 (nuclear methods).

C. Testing: Determine actual in-place densities using field tests as directed by the ENGINEER. Tests will be made by an independent laboratory. Costs for initial tests will be paid by OWNER. Perform additional work to obtain proper compaction if in-place densities do not meet specified densities. Costs of re-testing shall be borne by CONTRACTOR.

D. Minimum Number of Tests: For areas to be paved and building subgrade, a minimum of one (1) test per 2,000 square feet (sf) per lift of material, but in no case less than three (3) tests. For trenches, a minimum of one (1) test per 100 lineal feet (lf) per lift of material. Other areas shall be tested at a minimum frequency of one (1) field test per 10,000 sf per lift of material, unless otherwise directed by ENGINEER.

3.07 GRADING:

A. Grading: Uniformly grade areas within limits of grading under this section, including adjacent transition areas. Smooth finish surface within specified tolerances and compact with uniform levels or slopes between points where elevations are shown, or between such points and existing grades.

B. Grading Outside Structure Lines: Grade areas adjacent to structure to drain away from structures and to prevent ponding.

C. Finish surfaces free from irregular surface changes and as follows:

Lawn or Unpaved Areas: Finish areas to receive topsoil to within not more than 0.10' above or below required subgrade elevations.

Pavements: Shape surface of areas under pavement to line, grade and cross-section, with finish surface not more than 1/2 inch above or below required subgrade elevation.

Section 02370 – Slope Protection and Erosion Control

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK:

A. Provide and maintain devices to control erosion, siltation, sedimentation and dust that occur during construction operations. Undertake every reasonable precaution and do whatever is necessary to avoid erosion of soil and to prevent silting of wetland areas, drainage ditches, streams, and lakes.

B. Provide measures to control dust caused whether on or off the Project site.

C. Deficiencies in erosion control measures indicated by failures or erosion shall be immediately corrected by providing additional measures or different techniques to correct the situation and prevent subsequent erosion.

D. Exposure of soils on embankments, excavations, and graded areas shall be kept as short as possible. Initiate seeding and other erosion control practices as soon as reasonably possible.

E. Provide erosion control measures in any ditch, swale or channel before water is allowed to flow in the waterway.

F. Mechanized Equipment will not be permitted in water courses unless specifically required in the Contract Documents.

G. Remove and dispose of all devices upon soil stabilization.

1.02 QUALITY ASSURANCE:

A. Conform to all requirements of applicable federal, state and local permits, and Contract Documents, and conform to the recommendations of the Standards (see Part D below) whether the measures are specifically noted herein, or not.

B. Conform to all requirements of the MeDEP Construction General Permit/Stormwater Permit-by-Rule.

C. Meet with the ENGINEER to discuss erosion control requirements prior to the start of construction.

D. Standards: "Maine Erosion and Sedimentation Control BMPs" prepared by the Maine Department of Environmental Protection, dated March 2003, or most recent version.

1.03 SUBMITTALS:

A. Erosion Control Program: Prepare and submit to ENGINEER for approval prior to construction startup.

PART 2 - PRODUCTS

2.01 MATERIALS:

3. Erosion Control Blanket Anchors: Wooden pegs or metal staples as recommended by the manufacturer for the installation of the erosion control blanket. The fasteners shall not be longer than 9 inches.

H. Mulches:

1. Long fibered hay or straw in dry condition and which are relatively free of weeds and foreign matter detrimental to plant life.

2. Mulch binder: An asphalt emulsion mulch binder of type acceptable to the ENGINEER.

3. Mulch netting: Plastic or nylon mesh netting with approximate openings of 1/4- to 1-inch; or other netting approved by the ENGINEER.

I. Temporary Seed: Seed variety and applied rate are selected based upon the date of application, and as determined by the following table. Equivalent seed mixture based on its suitability for use in controlling erosion of the various soil types and slopes may be used as approved by the ENGINEER.

Dates	Seed	Applied Rate
4-1 to 7-1 8-15 to 9-15	Annual Ryegrass	0.9 lb/1000 ft^2
5-15 to 8-15	Sudan grass	0.9 lb/1000 ft^2
9-15 to 10-15	Winter Rye	3.0 lb/1000 ft^2

J. Sod:

1. Grown from certified seed of adapted varieties to produce high quality sod free of any serious thatch, weeds, insects, diseases and other pest problems.

2. At least one year old and not older than three years. Cut with a 1/2- to 1-inch layer of soil.

K. Drains:

1. Flexible drains consisting of collapsible neoprene pipe, minimum 8-inch diameter.

2. Corrugated metal pipe and inlet of a gauge consistent with the loading conditions, minimum 12-inch diameter.

L. Polyethylene Liner: U.V. Resistant, minimum thickness 6 mils.

M. Woven Filter Fabric: Provide Mirafi 600X woven textile or equal.

N. Non-Woven Fabric: Equal to Propex 4545 by Amoco Fabrics Co., or approved equal.

O. Siltation Fence: MIRAFI Environfence, Amoco 1380 Silt Stop, or approved equal.

P. Hay Bale Barrier: Rectangular shaped bales of hay or straw weighting at least 40 pounds per bale; free from noxious weed seeds and rough or woody materials.

Q. Catch Basin Inlet Sediment Barrier: As per contract drawings or approved equal.

5. Hay mulch should cover the ground enough to shade it, but the mulch should not be so thick that a person standing cannot see ground through the mulch.

6. Remove matted mulch or bunches.

E. Temporary Erosion Control Matting:

1. Surface Preparation:

   a. Conform to grades and cross sections for slopes and ditches shown on the Drawings.
   b. Finish to a smooth and even condition with all debris, roots, stones, and lumps raked out and removed.
   c. Loosen soil surface to permit bedding of the matting.
   d. Unless otherwise directed, apply seed prior to placement.

2. Installation:

   a. Place strips lengthwise in the direction of the flow of water.
   b. Where strips are laid parallel or meet as in a tee, overlap at least 4 inches.
   c. Overlap ends at least 6 inches in a shingle fashion.
   d. The up-slope end of each strip of the matting shall be turned down and buried to a depth of not less than 6 inches with the soil firmly tamped against it.
   e. The ENGINEER may require that any other edge exposed to more than normal flow of water be buried in a similar manner.
   f. Build check slots at right angles to the direction of the flow of water. Space so that one check slot or one end occurs within each 50 feet of slope length. Construct by placing a tight fold of the matting at least 6 inches vertically into the ground, and tamp the same as up-slope ends.
   g. Bury edges of matting around the edges of catch basins and other structures.
   h. When ordered, additional seed shall be spread over matting, particularly at those locations disturbed by building the slots. Matting shall then be pressed onto the ground with a light lawn roller or by other satisfactory means.
   i. Drive staples vertically into the ground flush with the surface.
   j. On slopes flatter than 4:1, space staples not more than 3 feet and one row, alternately spaced, down the center.
   k. On grades 4:1 or steeper, place staples in the same three rows, but spaced 2 feet apart.
   l. On all overlapping or butting edges, double the number of staples, with the spacing halved; all ends of the matting and all required check slots shall likewise have staples spaced every foot.

F. Temporary Seeding:

1. Seed with appropriate seeds and application rates from the table in paragraph 2.01I of this Section. Seed shall be sown at the rate indicated, on the pure live seed basis.

2. Mulch areas where temporary seeding has been applied. Do not mulch seeded areas where matting will be immediately installed.

3. If temporary seeding does not achieve adequate growth by December 1, an additional layer of mulch shall be applied at that time.

A. Inspect erosion control practices immediately after each rainfall and at least daily during prolonged rainfall or snowmelt for damage. Provide maintenance and make appropriate repairs or replacement at no additional cost to the OWNER, until Project acceptance or as required to comply with maintenance requirements if longer.

B. Remove silt from silt fence when it has reached one foot above grade or prior to expected heavy runoff or siltation.

C. Repair matting if any staples become loosened or raised, or if any matting becomes loose, torn, or undermined, make satisfactory repairs immediately.

D. Following temporary and/or final seeding, the CONTRACTOR shall inspect the work area semimonthly until the seedlings have vegetated 85% - 90% of the area. Reseeding shall be carried our by the CONTRACTOR with follow-up inspections in the event of any failures until vegetation is adequately established.

End of Section