From: Marge Schmuckal
To: Lee Urban
Date: Tue, Mar 9, 2004 9:04 AM
Subject: Re: Flood Plain/Ocean Gateway

Lee,
The FEMA process to amend their floodmaps is very long and cumbersome and they request the City to kick in dollars for the engineering costs. In 1996 we started a process with FEMA to remap the area off Washington Avenue by Mona Road which is subject to flooding by the Fallbrook. It took two years and we were the talk of FEMA (not all kindly) of how quickly the process took for us. We went to the head of the class because of Cheryl and her contacts with Senator Snow. Cheryl will confirm this.

FEMA doesn't just take our word for what we think may be correct. An outside contractor (engineer) is hired to meet FEMA requirements before FEMA accepts any specific mapping changes. They would also work with our Public Works engineers (i.e. Jon Giles previously)

I hope this helps you. You may pass this information on with any tweaking.

Marge

>>> Lee Urban 03/09 5:49 AM >>>
Good morning, Marge, . . .

I would like to send the following to Joe this morning. Please feel free to comment on it before I send it off. My question to you is do you know how long the amendment process by FEMA would take. And what happens if the City says, without any amendment, that it's in the A2 zone and we're wrong [it gets wiped out by a storm, for example]? Would there be a problem with insurance? I'd like to end my email to Joe with a "next steps" proposal - for example: We contact FEMA and start the process, we get a letter from FEMA, whatever.

Thanks.

Good morning, Joe . . .

I have received Barry Sheff's March 3 memo to you seeking your support that the City maintain that Pier 2 is in the A2 zone. Barry's argument does offer support for his claim that Pier 2 is in the A2 zone.

The challenge is before us, however, because the flood plain map does not show Pier 2 to be in A2. The map simply has a white area where Pier 2 is now located. To be able to opine with certainty that the new building will be located in the A2 zone, the City should require that the map be amended by FEMA. But I note that the new building is not on the existing Pier 2. It is to be along the side of Pier 2, closer to the area of open water. If FEMA gives an OK on both Pier 2 and the proposed building, then we are all set. Otherwise, we are left with a pier and a building that clearly is not shown as being in any flood plain zone.

CC: Alex Jaegerman; Lori Paulette; Needelman Bill

From: Marge Schmuckal
To: William Needelman
Date: Thu, Jan 15, 2004 4:32 PM
Subject: Re: Fwd: Oceangateway Parking Evaluation

Bill,
Can I get a copy of the site plan with the new and old so I can determine what would be required under the parking? I too believe that it will be under what they will be showing, but they need to see it in writing.
Marge

>>> William Needelman 01/14 2:20 PM >>>
To all:

Attached is the Ocean Gateway parking plan in email format. Hard copies are to follow. You can use the site plan previously circulated as the primary graphic. If you need a map, please let me know, and I'll make sure you get one.

For the upcoming Jan 27 Planning Board meeting, I will need the following review comments.

John and Tom, please provide your opinions of the location, quantity and function of the proposed parking as it relates to the Ocean Gateway Site Plan.

Marge, please provide a zoning interpretation as to satisfying WPDZ requirements (we all assume that zoning is a non-issue given the small amount of new sq. ft., but the Board should have it in writing.)

Penny, as stated in an earlier email, we'll need a memo describing the Board's role and limits when dealing with the parking issue, separating regulatory requirements from policy issues - particulary regarding displaced parking.

Given the aggressive time frame, if anyone has serious concerns, please try to flag them as soon as possible, so that we can get a response from the consulting team in time for the memo on Jan 23.

Sorry about the rush. Thank you all.

Bill
874-8722

WOODARD & CURRAN
Engineering • Science • Operations

FILE

CORPORATE OFFICES: Maine, Massachusetts, New Hampshire, Connecticut, Florida
Operational offices throughout the U.S

November 11, 2003

Mr. Frank Bransley
City of Portland
Department of Public Works
55 Portland Street
Portland, Maine 04104

Re: Ocean Gateway Phase I Project – Portland Harbor
Addendum to Letter dated October 14, 2003

Dear Mr. Bransley:

As you may recall, we are preparing a Site Location of Development (SLOD) permit application and Major Site Plan review documents for the Ocean Gateway Phase I project for the Maine Department of Environmental Protection (MDEP) and the City of Portland (City). The site consists of several lots owned by the City and is shown on the enclosed USGS Topographic Map. A preliminary copy of the Proposed Site Plan has also been enclosed for your use.

To estimate the wastewater discharge generated by the proposed project, an average of 300 gallons per day (GPD) per 1,000 sq. ft. of building area was used. Anticipated average daily wastewater discharge for each proposed building and for the project site will be as follows:

Building	Approximate Building Area	Average Daily Wastewater Discharge (GPD)
Receiving Station	5,500 sq. ft.	1,650
Ferry Terminal Building	15,000 sq. ft. (total floor area of two-story building)	4,500
Vehicle Inspection Station	500 sq. ft.	150
	Total Demand	**6,300**

We are proposing to discharge wastewater generated at the site through a new service connecting to the existing 12-inch collector sewer on site. The existing 12-inch main discharges into a 51-inch brick sewer upstream of CSO Outfall Structure #003. The flow would then pass through the India Street Pump Station and on to the Wastewater Treatment Plant.

It should be noted that during rainfall events, a portion of the site drains into an existing perforated manhole cover near the corner of India Street and Commercial Street. As a result of the proposed

project, stormwater running into the combined sewer will be decreased slightly in this area. The following table indicates anticipated stormwater runoff rates in cubic feet per second (cfs) for both the pre-development and post-development conditions as determined through HydroCAD modeling.

	Peak Runoff 2 Yrs (cfs)	Peak Runoff 10 Yrs (cfs)	Peak Runoff 25 Yrs (cfs)
Pre-development	2.67	4.22	4.94
Post-development	2.40	3.88	4.57
Change in Runoff	**-0.27**	**-0.34**	**-0.37**

The SLOD Permit and Major Site Plan review processes require the submission of information that demonstrates there is sufficient collection and treatment capacity to serve the proposed development. Our office is requesting an "Ability to Serve" letter from the City Public Works Department stating the collection system in the vicinity of Commercial and India Streets has the capacity to handle the additional wastewater discharge generated by this development. Major Site Plan review documents were submitted to the City on November 7, 2003. We anticipate submitting the SLOD permit application to the MDEP by the end of November.

Please contact us if you have any questions or if you need additional information. Thank you very much for your assistance.

Sincerely,

WOODARD & CURRAN INC.

Ken Volock
Engineer

KRV/kaw
203438.01

Enclosure(s)

cc: Paul Pottle, Maine Department of Transportation (without enclosures)
Jeff Monroe, City of Portland Department of Ports and Transportation (without enclosures)

WOODARD & CURRAN
Engineering • Science • Operations

FILE

CORPORATE OFFICES: Maine, Massachusetts, New Hampshire, Connecticut, Florida
Operational offices throughout the U.S

November 11, 2003

Mike Greene
Portland Water District
225 Douglass Street
P.O. Box 3553
Portland, Maine 04104-3553

Re: Ocean Gateway Phase I Project – Portland Harbor
Addendum to Letter dated October 14, 2003

Dear Mr. Greene:

As you may recall, we are preparing a Site Location of Development (SLOD) permit application and Major Site Plan review documents for the Ocean Gateway Phase I project for the Maine Department of Environmental Protection (MDEP) and the City of Portland (City). The site consists of several lots owned by the City and is shown on the enclosed USGS Topographic Map.

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following table indicates anticipated stormwater runoff rates in cubic feet per second (cfs) for both the pre-development and post-development conditions as determined through HydroCAD modeling.

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Change in Runoff	**-0.27**	**-0.34**	**-0.37**

The SLOD Permit and Major Site Plan review processes require the submission of information that demonstrates there is sufficient collection and treatment capacity to serve the proposed development. Our office would like to request an "Ability to Serve" letter from the Portland Water District stating the City Wastewater Treatment Plant and the India Street Pump Station each have the capacity to treat the additional wastewater discharge generated by this development. Major Site Plan review documents were submitted to the City on November 7, 2003. We anticipate submitting the SLOD permit application to the MDEP by the end of November.

Please contact us if you have any questions or if you need additional information. Thank you very much for your assistance.

Sincerely,

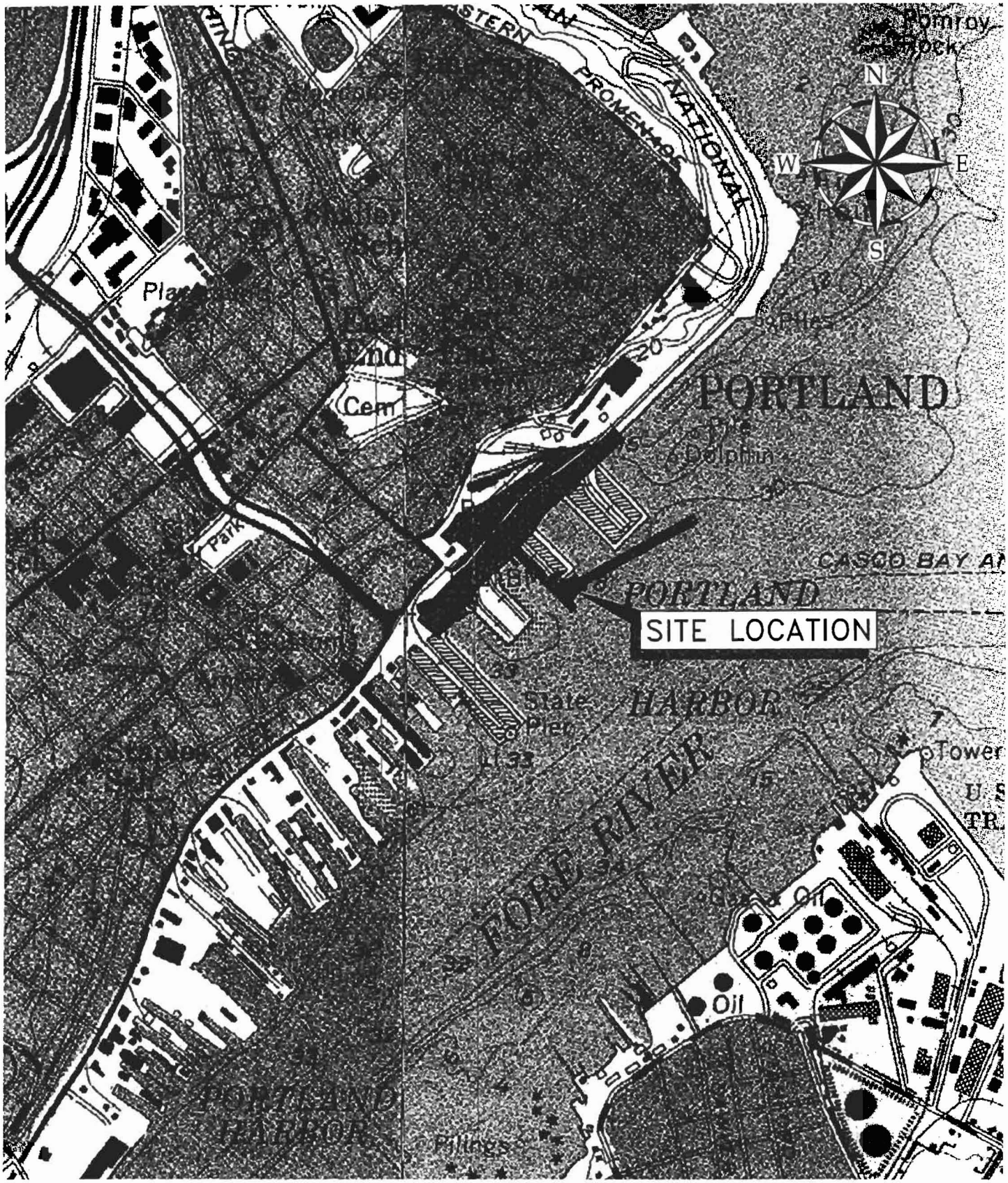
WOODARD & CURRAN INC.

Ken Volock
Engineer

KRV/kaw
203438.01

Enclosure

cc: Paul Pottle, Maine Department of Transportation (without enclosure)
Jeff Monroe, City of Portland Department of Ports and Transportation (without enclosure)



NOTE:

SOURCE: UNITED STATES GEOLOGICAL SURVEY, 1:24,000 QUADRANGLE, 7.5 MINUTE SERIES – PORTLAND EAST AND WEST

1000± 0 1000± 2000±

scale feet

WOODARD & CURRAN Engineering · Science · Operations PORTLAND, MAINE 800-426-4262	USGS TOPOGRAPHIC MAP	CITY OF PORTLAND AND MAINE DEPARTMENT OF TRANSPORTATION	JOB NO: 203438.02 DATE: SEPT 2003 SCALE: 1" = 1000'±
	DESIGNED BY: JBC/DAS CHECKED BY: BSS DRAWN BY: JBC/DAS FILE: 20343802-U001.1-SLOD	OCEAN GATEWAY	Figure 1.1

Applicant: Reed & Reed INC - Dustin Littlefield Date: 8/18/05 {19-A-14 & 15; 444-A-1,2,3,5; 445-A-1,2; 446-A-1,2}

Address: called 46 Commercial St C-B-L: 444-A-005-1

CHECK-LIST AGAINST ZONING ORDINANCE

Date - redevelopment of lot permit # 05-1085

Zone Location - WPDZ

Interior or corner lot -

Proposed Use/Work - to Construct Ocean Gateway Cruise Ship Terminal The dolphins & berthing for The large ship will be in A Later phase

Sewage Disposal - City

Lot Street Frontage - N/A

Front Yard - N/A
Rear Yard - N/A
Side Yard - N/A
} except shall be a min of 5' from edge of pier line

Projections -

Width of Lot - N/A

Height - 45' max - 40' scaled on Pitch roof for terminal Bldg
21.5' for vehicle insp. station
31' for receiving Bldg station

Lot Area - N/A

Lot Coverage/ Impervious Surface - 100% allowed

Area per Family - N/A

Off-street Parking - determined by Planning Bd - ok

Loading Bays - N/A

Site Plan - major #2003-0235

Shoreland Zoning/ Stream Protection - Exempt under the ordinance

Flood Plains - panel 14 of 17 V2 - el 13 - see changes to the Floodplain ordinance
A2 el 10 → requires 1st floor elevation of 12

Note: Already have cert. of Elevation for the terminal Bldg

1.4.1 Pier 2 Expansion and Terminal Facility Design

Conceptual design has focused on utilizing the present site layout and limiting the necessary site changes to create the Ocean Gateway multimodal facility. This will reduce impacts and maximize project funding. The facility will incorporate much of the existing site infrastructure including the pier, utilities, paved surfaces, and gravel parking areas.

Overwater efforts will include work associated with developing two vessel berths. Berth 1 includes the expansion of Pier 2 by approximately 12,500 sq. ft. with pile-supported dock, referred to on the drawings as Pier A; an approximately 7,670 sq.-ft. (15,000 gross sq.-ft.), two-story Terminal Building on the expanded pier with a covered passenger walkway linking the Terminal Building to the shore; roll-on/roll-off vehicle bridge (RORO); and the relocation of an existing passenger gangway system from the International Marine Terminal (IMT) to Pier 2. Berth 2 includes two pile-supported mooring dolphins; three pile-supported breasting dolphins (with fendering); and, dependent upon funding, five-foot wide catwalks for linemen in combination with as much as 800 sq. ft. of pile-supported pier between the dolphins (referred to as Pier B and Pier C), a 5,580 sq.-ft. floating dock, and a 9-ft. wide passenger gangway system. Overwater construction will also include the demolition and removal of the existing wood pile fendering system on Pier 2, wood piles in the location of the proposed RORO, the utility corridor on the east side of Pier 2, and the grabber rail on Mooring Platform No. 2 (once used for the BIW dry dock).

Land-side improvements will include: constructing an approximately 6,000 sq.-ft. Receiving Station with a covered breezeway; retrofitting the 870 sq.-ft. Guard House to accommodate a Vehicle Inspection Station (VIS) with 1,650 sq. ft. of covered, drive-through inspection lanes; stabilizing or reconstructing the seawall by the RORO; creating vehicular staging and queuing lanes; establishing drop-off zones and temporary parking areas; relocating utilities; constructing adjacent roadway networks; re-grading existing gravel parking areas; installing drainage systems and stormwater quality enhancement units; landscaping; and installing lighting and signage.

The aforementioned Receiving Station will be built entirely on land and will be situated at the head of Pier 2 in the location of an existing rest room facility (to be demolished) and paved driveway area. The VIS will be located at the westerly end of the site within the current Guard House. Both the Terminal Building and the Receiving Station are being designed for year-round use. The City anticipates using these spaces for private and municipal gatherings or functions when not in use by the SP or the facility's other tenants.

The SP international ferry transports foot passengers and vehicles between Yarmouth, Nova Scotia, and Portland, Maine. Foot passengers will board the vessel via the Receiving Station and the Terminal Building while vehicles will board over the RORO. Prior to boarding, vehicles will be staged in a secured, outbound queuing area, sized to accommodate roughly 200 passenger car equivalents in six lanes. Vehicles coming off the vessel will be required to pass through the VIS. Prior to being cleared through the VIS, vehicles will wait in a secured, inbound queuing area that will accommodate roughly 170 passenger car equivalents in six lanes. These queuing areas will be located between the MSP and Pier 2, south of Commercial Street.

Reed & Reed, Inc.
PO Box 370
Woolwich, ME 04579
Ph : (207)443-9747

Letter of Transmittal

To: City of Portland / Building Inspections
389 Congress St
Portland, ME 04101
315 City Hall

Transmittal #: 1
Date: 7/29/2005
Job: 421 Ocean Gateway Terminal

Subject: Commercial Building Permit Application - Ocean Gateway Project - Phase 1

WE ARE SENDING YOU ☑ Attached ☐ Under separate cover via None the following items:

☐ Shop drawings ☐ Prints ☐ Plans ☐ Samples
☐ Copy of letter ☐ Change order ☐ Specifications ☐ Other

Document Type	Copies	Date	No.	Description
Other	2	8/2/05		Commercial Building Permit Application - Ocean Gateway Project - Phase 1 ✓
Other	2 1	8/2/05		Project Plans - Full Size ✓
Other	1	8/2/05		Project Plans - 11" x 17" N/A - PDF Provided
Other	1	8/2/05		Project Specifications Forthcoming from MDOT
Other	1	8/2/05		PDF File - Plans & Specifications ✓
Other	0			

THESE ARE TRANSMITTED as checked below:

☑ For approval ☐ Approved as submitted ☐ Resubmit ___ copies for approval
☐ For your use ☐ Approved as noted ☐ Submit ___ copies for distribution
☐ As requested ☐ Returned for corrections ☐ Return ___ corrected prints
☐ For review and comment ☐ Other
☐ FOR BIDS DUE ☐ PRINTS RETURNED AFTER LOAN TO US

Remarks:

Copy To: Dustin Littlefield (Reed & Reed, Inc.)

From: Dustin Littlefield (Reed & Reed, Inc.) **Signature:** _____

If enclosures are not as noted, kindly notify us at once.

From: Jeffrey Monroe
To: Joe Gray ; Larry Mead ; Lee Urban; Marge Schmuc...
Date: Thu, Mar 11, 2004 2:24 PM
Subject: Re: Ocean Gateway/A2

A simple consideration, the 3 feet of higher building will introduce significant logistics problems and design changes for a facility that at the original planned height is the same as every other waterfront building on the sight. This introduces issues for labor managing ships, persons accessing the building, ADA issues, interior building heights and numerous others. The short terms affect is the cost of construction, the long term affect is significant operational challenges-the new pier will not connect to the old pier. Under the guise of a "pier extension" that is new structure added to an existing pier, it should not have to be raised. For example, under the existing logic-we would have had to raise the new end of the Maine State Pier 3 feet to comply. What we have is a pier extension, with a new building being added. Logic dictates a contigous structure. In that vain, so should the interpertation.

>>> Lee Urban 3/10/2004 5:33:09 AM >>>
As much as anyone, I want this problem to go away quickly. At the risk of seeming to be looking for bogeymen or seeing problems where none exist, however, but in the interest of laying out a possible issue regarding the City opining that we're in the A2 zone, I need to note that in a March 5 letter from the DEP to City Councilors regarding the proposed Custom House Wharf conditional rezoning, Mike Morse takes an active interest in what goes on along the waterfront and the various laws, both federal and State, that affect it. Will we need the DEP's consent to the City opining one way or the other regarding flood plain zoning and/or might the DEP argue against us at some point?

Believe me, I want to see this be resolved as soon as possible; but there's a map out there that is incomplete and it may not be just as easy as making an interpretation of what the map should say.

I stand ready to be guided/educated/whatever. Thanks.

3/24/04 met with Lee & Bill N
to go over Flood plain issues

From: Marge Schmuckal
To: William Needleman
Date: Wed, Apr 21, 2004 12:00 PM
Subject: Floodplain

Bill,
I have had recent conversations with Lou Sidell and Bonnie Boulter in the State Planning Office of the Floodplain Management Program. Both have told me that the City may amend our floodplain ordinance, section 14-450.8(16), concerning new construction located seaward of the reach of mean high tide within Zones A1-A30, AE, A, V1-V30, and VE. They also related that the Federal Government has stricter guidelines as to use in all the velocity zones of such areas. The City would still need to comply with the Federal guidelines for new construction on piers located on the seaward side of the reach of mean high tide. It is my understanding that our proposed changes reflect meeting those Federal guidelines.

Marge Schmuckal
Zoning Administrator

CC: PENNY LITTELL

From: Marge Schmuckal
To: William Needleman
Date: Fri, Feb 6, 2004 4:14 PM
Subject: Ocean Gateway Project

Bill,

This memo is in regards to parking requirements. It is my understanding that there is 30,000 square foot of office area and 90,000 square foot of industrial use on this site. Section 14-320.3 of the WPDZ zone requires off-street parking to be at 50% of the number of required parking spaces for each specified use. Using the square footage given, 83 parking spaces would be required. It is my understanding that a significant increase in that required number is being proposed. Parking is not a zoning problem in this proposal.

Marge Schmuckal
Zoning Administrator

From: Lee Urban
To: Marge Schmuckal; Penny Littell
Date: Thu, Mar 25, 2004 1:29 PM
Subject: Floodplain

Hello, Marge and Penny, . . .

What follows is what I sent a few seconds to Larry, Jeff and Joe.

Yesterday in our continuing efforts to try to see if this problem can go away quickly, I spent some time re-visiting the issue of flood plain zoning. Here's where I am, all of which I reported to Larry Mead at the end of the day [literally] after speaking with Marge Schmuckal, Bill Needelman, Penny Littel and Joe Gray.

1. The question of what zone the terminal will be in is a matter of science, not logic. To answer that question, one must investigate the sea bed, winds, waves, tides and so on. There is water in the area that is zoned A2 [between existing piers] and there is water zoned V2 [facing the open sea].

2. The Zoning Administrator has the authority to determine that a structure on one of those piers is in the A2 zone because the pier on which the structure sits or will sit is on that pier. The Zoning Administrator does not have the authority to determine that a structure on a pier that is not in any zone is or will sit within an A2 zone or a V2 zone because it doesn't sit in any zone and for the reason stated in #1 above.

3. That being the case, the Zoning Board of Appeals has no authority to hear any appeal of such a determination, even if the Zoning Administrator where to make one, for the reasons stated in #1 and #2.

4. But the Planning Board needs to know in what zone the facility will be located.

5. So, we proceed as best we can before the Planning Board as if the facility is going to be in the "worst" zone . . .

6. while we pull out all stops [political] to get FEMA to come up here from Boston to get the data it needs [and there may be much that's available already because the V2 zone goes all the way around the Easter Promenade] and to give us a zone in two months.

Throughout any review process, there may be well-intended members of the public who will try to find ways to claim that the review process if otherwise than as described above is flawed. So we need to do it the best way we know how so as not to be delayed further by litigation or more reviews. I think the review process described in #1 through #6 is the best way to proceed.

Carlton Day Reed, Jr., Chairman
Jackson A. Parker, President

REED & REED, INC.

WOOLWICH, MAINE 04579
Telephone 207-443-9747
FAX 207-443-2792

LETTER OF TRANSMITTAL

To: CITY OF PORTLAND
INSPECTION SERVICES
~~P.O.~~ 315, 389 Congress St.
Portland, ME 04101
874-8703

Gentlemen:

Date: 9-18-06 Job. No.: 421
Attention: MARGE SCHMUCKAL
Re: OCEAN GATEWAY

We are sending you ☑ Attached ☐ Under Separate Cover via _____

_____ , the following items:

☐ Shop Drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications
☐ Subcontracts ☐ Change Order ☐ Copy of Letter ☐ _____

Copies	Date	No.	Description
1	9-18-06		Elevation Certificate / Verification

DEPT. OF BUILDING INSPECTION
CITY OF PORTLAND, ME
SEP 19 2006
RECEIVED

These are transmitted as checked below:

☐ For approval ☐ Approved as submitted ☐ Resubmit _____ copies for approval
☐ For your use ☐ Approved as noted ☐ Submit _____ copies for distribution
☐ As requested ☐ Returned for corrections ☐ Returned _____ corrected prints
☐ For review and comment ☐ _____
☐ For signature _____
☐ For bids due _____ 20____ ☐ Prints returned after loan to us.

REMARKS: OK to issue part II

REED & REED, INC.

Copy to: File
Dave Senus - W&C

Signed by: DUSTIN LITTLEFIELD

FEDERAL EMERGENCY MANAGEMENT AGENCY
NATIONAL FLOOD INSURANCE PROGRAM

ELEVATION CERTIFICATE

O.M.B. No. 3067-0077
Expires December 31, 2005

Important: Read the instructions on pages 1 - 7.

SECTION A - PROPERTY OWNER INFORMATION

For Insurance Company Use:

BUILDING OWNER'S NAME
City of Portland

Policy Number

BUILDING STREET ADDRESS (Including Apt., Unit, Suite, and/or Bldg. No.) OR P.O. ROUTE AND BOX NO.
Terminal Building - Ocean Gateway

Company NAIC Number

CITY	STATE	ZIP CODE
Portland	ME	04101

PROPERTY DESCRIPTION (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.)
Parcel ID - 445 A002

BUILDING USE (e.g., Residential, Non-residential, Addition, Accessory, etc. Use a Comments area, if necessary.)
Non-residential. Ferry Terminal building, City of Portland.

LATITUDE/LONGITUDE (OPTIONAL) (##° - ##' - ##.##" or ##.######°)

HORIZONTAL DATUM: ☐ NAD 1927 ☒ NAD 1983

SOURCE: ☐ GPS (Type):____ ☐ USGS Quad Map ☒ Other: Survey

SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

B1. NFIP COMMUNITY NAME & COMMUNITY NUMBER	B2. COUNTY NAME	B3. STATE
City of Portland	Cumberland County	Maine

B4. MAP AND PANEL NUMBER	B5. SUFFIX	B6. FIRM INDEX DATE	B7. FIRM PANEL EFFECTIVE/REVISED DATE	B8. FLOOD ZONE(S)	B9. BASE FLOOD ELEVATION(S) (Zone AO, use depth of flooding)
2300510014	B	7/17/1976	7/17/1976	A	-

B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in B9.
☐ FIS Profile ☐ FIRM ☐ Community Determined ☒ Other (Describe): City Approved Water Level Analysis

B11. Indicate the elevation datum used for the BFE in B9: ☐ NGVD 1929 ☐ NAVD 1988 ☒ Other (Describe): 0.0 MLLW

B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? ☐ Yes ☒ No Designation Date____

SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)

C1. Building elevations are based on: ☒ Construction Drawings* ☐ Building Under Construction* ☐ Finished Construction

*A new Elevation Certificate will be required when construction of the building is complete.

C2. Building Diagram Number 5 (Select the building diagram most similar to the building for which this certificate is being completed - see pages 6 and 7. If no diagram accurately represents the building, provide a sketch or photograph.)

C3. Elevations – Zones A1-A30, AE, AH, A (with BFE), VE, V1-V30, V (with BFE), AR, AR/A, AR/AE, AR/A1-A30, AR/AH, AR/AO

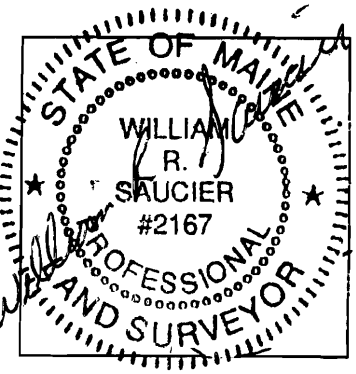
Complete Items C3.-a-i below according to the building diagram specified in Item C2. State the datum used. If the datum is different from the datum used for the BFE in Section B, convert the datum to that used for the BFE. Show field measurements and datum conversion calculation. Use the space provided or the Comments area of Section D or Section G, as appropriate, to document the datum conversion.

Datum 0.00 MLLW Conversion/Comments 0.00 MLLW = -4.57 NGVD 1929

Elevation reference mark used BM #3 1971 Does the elevation reference mark used appear on the FIRM? ☐ Yes ☒ No

☐ a) Top of bottom floor (including basement or enclosure)	16.87 ft.(m)	Elevation Ref A
☐ b) Top of next higher floor	32.87 ft.(m)	
☐ c) Bottom of lowest horizontal structural member (V zones only)	N/A ft.(m)	
☐ d) Attached garage (top of slab)	N/A ft.(m)	Verified by Bill Saucier 9/8/06
☐ e) Lowest elevation of machinery and/or equipment servicing the building (Describe in a Comments area)	16.87 ft.(m)	
☐ f) Lowest adjacent (finished) grade (LAG)	16.34 ft.(m)	+16.00'
☐ g) Highest adjacent (finished) grade (HAG)	16.34 ft.(m)	
☐ h) No. of permanent openings (flood vents) within 1 ft. above adjacent grade 0		
☐ i) Total area of all permanent openings (flood vents) in C3.h 0.00 sq. in. (sq. cm)		

License Number, Embossed Seal, Signature, and Date



SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION

This certification is to be signed and sealed by a land surveyor, engineer, or architect authorized by law to certify elevation information.
I certify that the information in Sections A, B, and C on this certificate represents my best efforts to interpret the data available.
I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001.

CERTIFIER'S NAME	LICENSE NUMBER
William R SAUCIER	PLS 2167
TITLE	**COMPANY NAME**
Field Engineer	REED & REED INC
ADDRESS	**CITY** / **STATE** / **ZIP CODE**
25 River Road	Woolwich / ME / 04579
SIGNATURE	**DATE** / **TELEPHONE**
William R Saucier	9/18/06 / 207-443-9747

XTANT: In these spaces, copy the corresponding information from Section A.			For Insurance Company Use:
DING STREET ADDRESS (Including Apt., Unit, Suite, and/or Bldg. No.) OR P.O. ROUTE AND BOX NO. rminal Building - Ocean Gateway			Policy Number
CITY Portland	STATE ME	ZIP CODE 04101	Company NAIC Number

SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION (CONTINUED)

Copy both sides of this Elevation Certificate for (1) community official, (2) insurance agent/company, and (3) building owner.

COMMENTS

City Approved Water Level Analysis conducted in May 2004 determined a finish floor elevation of 16.87 (0.00 MLLW)

Top of floor, first floor: +16.87' MLLW

Top of mech. mezzanine floor = 46.37'. Elevator machine room +16.87' MLLW ☒ Check here if attachments

SECTION E - BUILDING ELEVATION INFORMATION (SURVEY NOT REQUIRED) FOR ZONE AO AND ZONE A (WITHOUT BFE)

For Zone AO and Zone A (without BFE), complete Items E1 through E4. If the Elevation Certificate is intended for use as supporting information for a LOMA or LOMR-F, Section C must be completed.

E1. Building Diagram Number 5 (Select the building diagram most similar to the building for which this certificate is being completed – see pages 6 and 7. If no diagram accurately represents the building, provide a sketch or photograph.)

E2. The top of the bottom floor (including basement or enclosure) of the building is 0 ft.(m) 6 in.(cm) ☒ above or ☐ below (check one) the highest adjacent grade. (Use natural grade, if available).

E3. For Building Diagrams 6-8 with openings (see page 7), the next higher floor or elevated floor (elevation b) of the building is __ ft.(m) __ in.(cm) above the highest adjacent grade. Complete items C3.h and C3.i on front of form.

E4. The top of the platform of machinery and/or equipment servicing the building is 0 ft.(m) 6 in.(cm) ☒ above or ☐ below (check one) the highest adjacent grade. (Use natural grade, if available).

E5. For Zone AO only: If no flood depth number is available, is the top of the bottom floor elevated in accordance with the community's floodplain management ordinance?
☐ Yes ☐ No ☐ Unknown. The local official must certify this information in Section G.

SECTION F - PROPERTY OWNER (OR OWNER'S REPRESENTATIVE) CERTIFICATION

The property owner or owner's authorized representative who completes Sections A, B, C (Items C3.h and C3.i only), and E for Zone A (without a FEMA-issued or community-issued BFE) or Zone AO must sign here. *The statements in Sections A, B, C, and E are correct to the best of my knowledge.*

PROPERTY OWNER'S OR OWNER'S AUTHORIZED REPRESENTATIVE'S NAME
A International

ADDRESS	CITY	STATE	ZIP CODE
4111 Le Jeune Road	Miami	FL	33146
SIGNATURE	DATE	TELEPHONE	
	10/19/04	305 4612053	

COMMENTS Bottom floor elevation for Terminal Building determined by City Approved Water Level Analysis.

☐ Check here if attachments

SECTION G - COMMUNITY INFORMATION (OPTIONAL)

The local official who is authorized by law or ordinance to administer the community's floodplain management ordinance can complete Sections A, B, C (or E), and G of this Elevation Certificate. Complete the applicable item(s) and sign below.

G1. ☐ The information in Section C was taken from other documentation that has been signed and embossed by a licensed surveyor, engineer, or architect who is authorized by state or local law to certify elevation information. (Indicate the source and date of the elevation data in the Comments area below.)

G2. ☐ A community official completed Section E for a building located in Zone A (without a FEMA-issued or community-issued BFE) or Zone AO.

G3. ☐ The following information (Items G4-G9) is provided for community floodplain management purposes.

G4. PERMIT NUMBER	G5. DATE PERMIT ISSUED	G6. DATE CERTIFICATE OF COMPLIANCE/OCCUPANCY ISSUED

G7. This permit has been issued for: ☒ New Construction ☐ Substantial Improvement

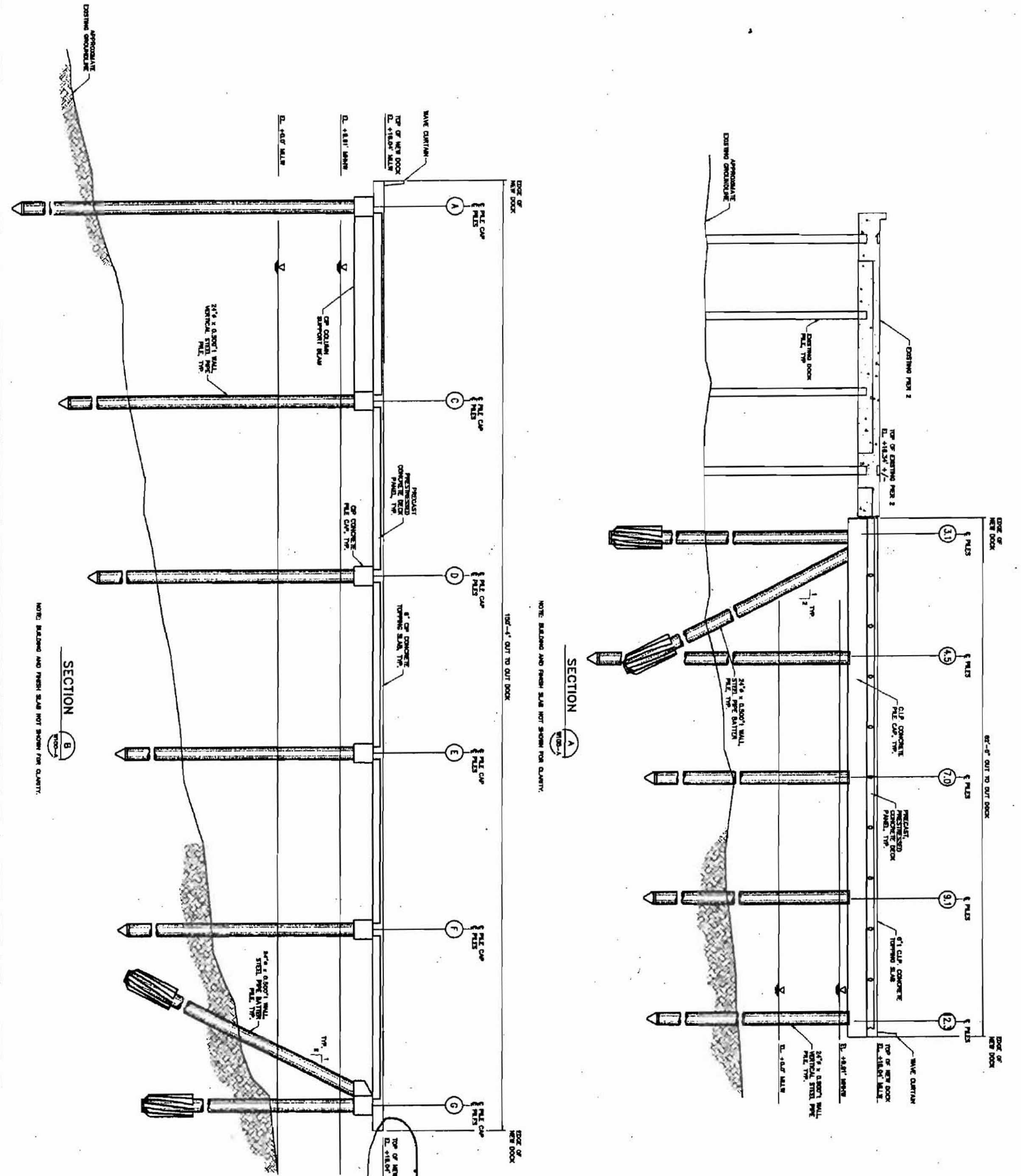
G8. Elevation of as-built lowest floor (including basement) of the building is: ___.__ ft.(m) Datum: ____

G9. BFE or (in Zone AO) depth of flooding at the building site is: ___.__ ft.(m) Datum: ____

LOCAL OFFICIAL'S NAME	TITLE
COMMUNITY NAME	TELEPHONE
SIGNATURE	DATE

MENTS

☐ Check here if attachments



Top of New Dock EL +16.04' MLLW

* This will get 6" insulation and 4" Arch. topping slab. Finish floor elev. to be 16.87'

DSD Incorporated CONSULTING ENGINEERS

PROJ. MANAGER PAUL POTTLE	BY	DATE
DESIGN-DETAILED RJ	DH	08/01/04
CHECKED-REVIEWED OT	DP	08/01/04
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

PROJECT NUMBER 009215.00

PIN
009215.00

CITY OF PORTLAND
OCEAN GATEWAY PHASE 1

PIER A
SECTIONS

W200-A

FLOOD HAZARD DEVELOPMENT PERMIT
PART II

Portland, Maine

(For completion of New Construction and Substantial Improvements)

The following information has been submitted and found compliant with the Development Standards of the Floodplain Management Ordinance:

☒ FEMA Elevation Certificate Form 81-31

☐ Review of the structural design, specifications, plans and construction methods by a Professional Engineer or Architect certifying that they meet or exceed the technical criteria contained in the FEMA/Coastal Construction Manual and are in accordance with accepted standard of practice for meeting the criteria of Article VI.K.2.

A Part II Flood Hazard Development Permit is hereby issued as provided under Article V § F of the Floodplain Management Ordinance of Portland, Maine, for development as defined in said ordinance.

Tax Map: 445 Lot #: A-002

The permittee understands and agrees that:

- The permit is issued on the representations made herein and on the elevation certificate;
- The permit may be revoked because of any breach of representation;
- Once a permit is revoked all work shall cease until the permit is reissued or a new permit is issued;
- The permit will not grant any right or privilege to erect any structure or use any premises described for any purposes or in any manner prohibited by the ordinances, codes, or regulations of the municipality;
- The permittee hereby gives consent to the Code Enforcement Officer to enter and inspect activity covered under the provisions of the Floodplain Management Ordinance;
- The permit form will be posted in a conspicuous place on the premises in plain view and;
- The permit will expire if no work is commenced within 180 days of issuance.

I hereby certify that all the statements in, and the attachments to this permit are a true description of the existing property and the proposed development project.

Owner Dustin Roma Reed & Reed Inc Date 10/6/06
signature

or

Authorized Agent Assistant Project Manager Date
signature

Issued by Marge Schmuckal Date 10/6/06

Permit # _____

SBM Associates, Inc.
ARCHITECT RESIDENTIAL COMMERCIAL INDUSTRIAL

Fax # 874-8716 Date: 12/22/05

Number of pages including cover: 2 Project #:

Fax to: MIKE NUGENT From: PETE SAWYER

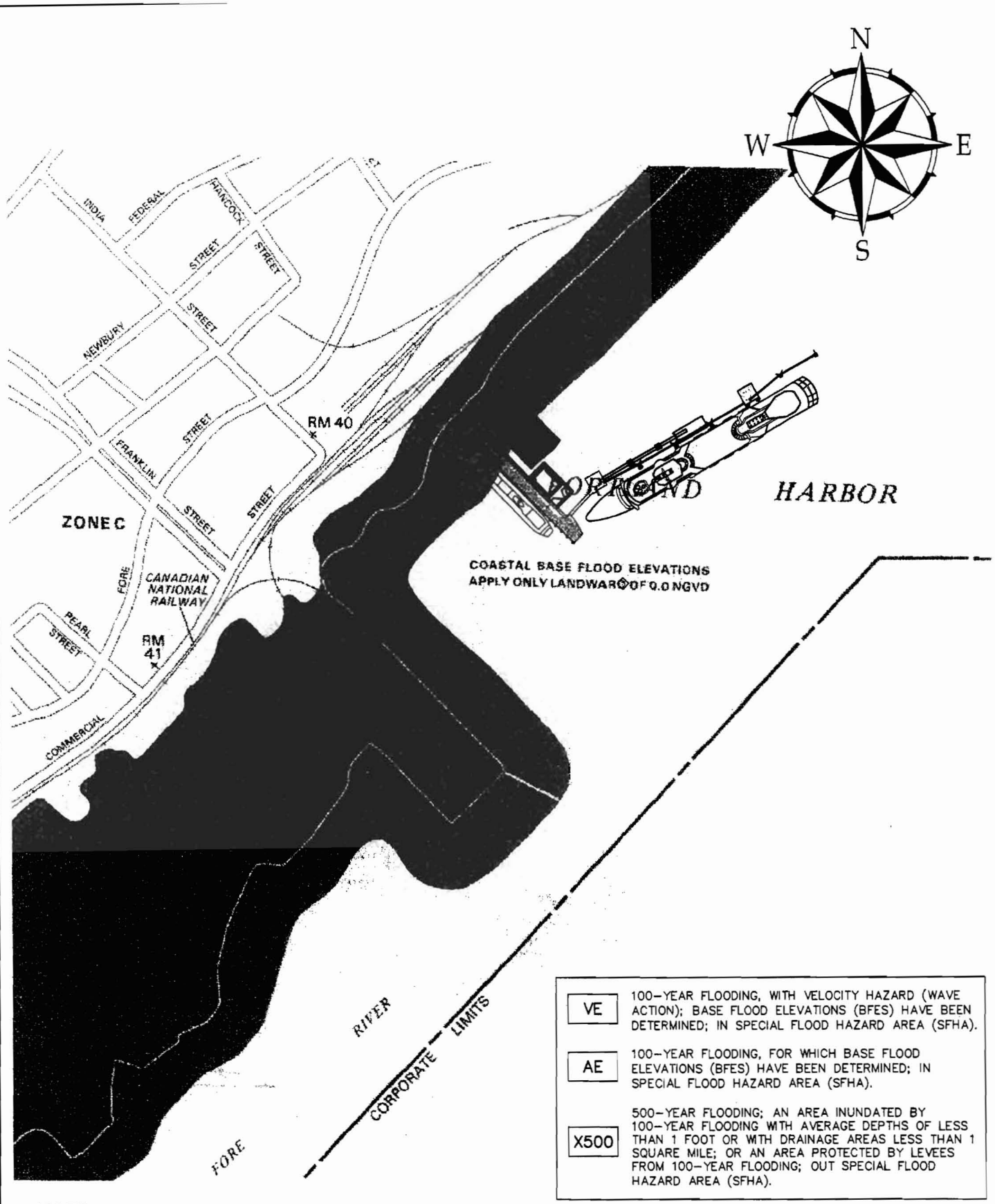
Re: 585 RIVERSIDE BLDG "C"

Message:

FOR YOUR FILES

THANKS
PETE

14 Deer Run Drive Gorham, Maine 04038 (207) 839-2420 Fax (207) 839-5883 E-Mail SBM1111@maine.rr.com



NOTE:

SOURCE: FIRM FLOOD INSURANCE RATE MAP – FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), ~~MAINE OFFICE OF GEOGRAPHIC~~ COMMUNITY ~~INFORMATION SYSTEMS (MEGIS, COMP.)~~ PANELS ____ & ____.

500 0 500 1000

scale feet

WOODARD & CURRAN Engineering · Science · Operations PORTLAND, MAINE 800-426-4262	FLOOD MAP	CITY OF PORTLAND AND MAINE DEPARTMENT OF TRANSPORTATION	JOB NO: 203438.02 DATE: FEBRUARY 2004 SCALE: 1" = 500'±
	DESIGNED BY: JBC/DAS CHECKED BY: BSS DRAWN BY: JBC/DAS FLOOD MAP.dwg	OCEAN GATEWAY	Flood Map

Parking Evaluation
Ocean Gateway Facility
Portland, Maine

Prepared for:

Woodard & Curran
41 Hutchins Drive
Portland, ME 04102

January 2004

Prepared by:

Gorrill-Palmer Consulting Engineers, Inc.

Traffic and Civil Engineering Services

PO Box 1237
15 Shaker Road
Gray, ME 04039

(207) 657-6910
Fax : (207) 657-6912
E-mail: mailbox@gorrillpalmer.com

I. Existing and Proposed Conditions

The site currently consists of the Casco Bay Island Transit District (CBITD) terminal and support operations, as well as operations related to the Amethyst (CIANBRO) project including parking (concentrated on the Portland Ocean Terminal site). The Amethyst Project is supported on-site by a 90,500 sq. ft. transit shed (warehouse), and 35,000 sq. ft. of office space on the second floor of the transit shed. The northern portion of the site is largely undeveloped, consisting of asphalt and gravel, which provides parking for island residents who commute via CBITD, local business tenants, and tenants of the 144 Fore Street office building.

The Ocean Gateway Phase 1 Project proposes the Portland Ocean Terminal site and associated abutting land would be fully developed to accommodate cruise ships, Scotia Prince Cruises (relocated from the International Marine Terminal), and other marine services. In addition, future improvements to circulation and loading areas are being planned for the CBITD facility. The Ocean Gateway Phase 1 Project consists of the following:

- Expanding Pier 2 to accommodate deep-water vessels (cruise ships)
- Creating parking areas consisting of a total of 476 parking spaces to support the Ocean Gateway site tenants.
- Creating a Receiving Station (for passenger ticketing and screening) at the head of Pier 2
- Retrofitting the Portland Ocean Terminal (POT) existing guardhouse to accommodate a Vehicle Inspection Station, and creating a covered multi-lane vehicle inspection area
- Establishing areas for queuing vehicles coming to and from the M/S Scotia Prince.
- Creating of a Terminal Building (on Pier 2) and a passenger ramp linking the Terminal Building to the Receiving Station.
- Extending Commercial Street approximately 1,000 feet to the northeast.
- Creating a new portion of Hancock Street from Fore Street to the extended Commercial Street.
- Maintaining the existing marine industrial uses and office space at the site.

II. Existing Parking Supply

Gorrill-Palmer Consulting Engineers, Inc. and Woodard & Curran met with the City staff on November 26, 2003, to review the existing parking supply on the Ocean Gateway site. Table 1 presents the various categories of parking supply for each of these existing uses. The location of each of these uses is illustrated in Figure A.

Table 1- Existing Parking Supply	
POT Daily Lot	89
Front Lot	83
Rear Lot	70
Marine Ops Lot	90
Fore Street Lot East	160
Fore Street Lot West	80
Total	**572**

III. Future Ocean Gateway Parking Demand

Gorrill-Palmer Consulting Engineers, Inc. and Woodard & Curran reviewed the future parking demands associated with the various users of the Ocean Gateway project with the City staff. An important component of the project is to provide parking for the tenants and users to meet their operational requirements. Following is a description of the tenants and users of the project for which parking will be required. Table 2 presents the various categories of parking demand for each of these uses, and the location of each of is illustrated in Figure A.

- Scotia Prince Cruises – Scotia Prince Cruises will be relocating from the International Marine Terminal (IMT) to Pier Two, Berth One at the Ocean Gateway facility. Peak operations from a traffic perspective occur during the evening hours, as the M/S Scotia Prince vessel arrives in port at 7:00 PM and departs at 8:00 PM. However, as the City will continue to encourage passengers to arrive throughout the day to visit local businesses, we are planning for passengers to arrive throughout the day. As it relates to parking demand, Scotia Prince Cruises passengers can purchase tickets for the vessel with several options; among them is to travel with a vehicle or without. It is those passengers that travel without their vehicle that create the parking demand. With a passenger capacity of 1000, crew capacity of 200, and a vehicle capacity of 200, a percentage of the passengers are walk-on and require overnight and longer-term parking. The parking demand will be required 24 hours per day, between May and November.
- Cruise Ship - Cruise ships currently are accommodated at Pier One. The proposed project will provide a new berth (Berth Two) at the Ocean Gateway facility on Pier Two. The berth will be a port-of-call berth and is not proposed for home–porting a cruise ship, and therefore parking needs are for operational staff. These spaces are required from 7:00 AM to 10 PM from June thru November
- Customs and Border Protection (CBP) – While staff offices will remain at the IMT, CBP personnel are required at the site during the operation of the Scotia Prince, requiring spaces from 5:00 PM to 9:00 PM during the months of May thru November.
- Portland Ocean Terminal and City Staff - To accommodate 35,000 sq. ft. of office currently on the second floor of the transit shed, and based upon meetings with the zoning administrator and City staff, parking demand was determined that

would meet the needs of the office space and the intent of the City Ordinance. These spaces are required from 7:00 AM to 5:30 PM year round.

- Portland Ocean Terminal Industrial Users - Marine industrial operations similar to the Cianbro operations currently on site, and planned for the future. These people require parking from 7 to 5:30 year round and are supervisory personnel. Consistent with current operations, the majority of workers will continue to be shuttled.
- Tugs - To support the marine operations in the port, a demand for both operational and service crew parking is necessitated. This parking is required year round 24 hours per day.
- Casco Bay Island Transit District (CBITD) Employees – While not a direct tenant or user of the proposed project, as a result of the anticipated relocation of employee parking stemming from planned improvements project, a parking demand will be created and requires year round 24-hrs per day spaces.

Table 2- Future Ocean gateway Parking Demand	
Scotia Prince	279
Cruise Ships	15
Customs	15
Portland Ocean Terminal and City Staff	65*
Portland Ocean Terminal Industrial Users	25
Tugs	15
Casco Bay Island Transit District Employees	25
Total	**439**

*This exceeds the requirements of the ordinance. Per Division 20 Off-Street Parking, Section 14-332(10), for offices (professional and public buildings), One (1) parking space is required for each four hundred (400) square feet of floor area. Further, per Division 18.5 Waterfront Port Development Zone, Section 14-320.3(8), off-street parking is required at fifty percent (50%) of the required parking spaces in Division 20. Therefore, 44 spaces are required for the 35,000 sq. ft. of office space located on the second floor of the transit shed.

IV. Future Ocean Gateway Parking Supply

Table 3 presents the parking supply which will be available upon completion of the Ocean Gateway project.

Table 3- FUTURE Ocean gateway Parking Supply	
Hancock Street Lot (west)	100
Commercial Street Lot	279
Waterfront Lot	97
Total	**476**

As shown in Table 3, the proposed parking supply will exceed the estimated Ocean Gateway Parking demand of 439 spaces.

V. Parking Demand Management for Ocean Gateway

To provide the maximum efficiency of the use of the Ocean Gateway parking supply, we have reviewed the parking demand with the specific parking demands of Scotia Prince Cruises. As a result of differing parking demand times, we have determined that 113 spaces can be shared in the same parking and queue areas to be utilized by Scotia Prince Cruises as shown in Table 4 below. This shared parking further reduces the anticipated demand to 354 spaces. To that end, the Scotia Prince Cruises parking demand is based upon its operational season, currently between May and November. During the months of December through April, this parking demand by Scotia Prince Cruises will decrease significantly and the parking demand will be limited to off-season employee parking, during normal business hours.

Table 4 summarizes the parking management plan proposed for the Ocean Gateway project. The table summarizes the spaces required and those provided on site in the surface parking lots as part of the Ocean Gateway project.

Table 4- Ocean gateway Parking Management Plan

Use	Spaces Required	On Site	Shared
Scotia Prince	279	279	
Cruise Ships	15		15
Customs	15		15
Portland Ocean Terminal and City Staff	65	37	28
Portland Ocean Terminal Industrial Users	25		25
Tugs	15		15
Casco Bay Island Transit District Employees	25	10	15
Total	**439**	**326**	**113**

*shared parking utilizes on site spaces where parking demand times permit and is anticipated to occur prior to 5:00pm.

VI. Additional Constituency Parking Demand

In addition to the demands associated with the Ocean Gateway project, there is additional parking demand that is currently being satisfied within the project area, and on the Ocean Gateway site. As a result of the Ocean Gateway project, some of that parking will be displaced and needs to be accommodated elsewhere. Each of the constituencies utilizing the current parking supply are described as follows:

- Islanders- Residents of the City's island communities require mainland parking on both a seasonal and year-round basis. These spaces are required to be available 24 hours per day, year round. Based on discussions with City staff and public input, the anticipated demand for spaces has been based upon the most current supply at the Portland Ocean Terminal facility and abutting parking lots.
- Auto Europe- Auto Europe is located in the Gault building and provides reservations for car rentals across the world. Employees require parking from 7:00 AM to 5:30 PM Monday thru Friday.
- Fore Street Offices- The 144 Fore Street building currently accommodates SMRT, Xpress Copy and other service based tenants.

Table 5 summarizes the estimated parking needs of these additional constituents.

Table 5- ADDITIONAL CONSTITUENTS PARKING DEMAND

Use	Spaces Required
Island Residents	240
Auto Europe	130
Fore Street Offices	50
Total	**420**

VII. Conclusion

As demonstrated by comparing Table 2 and Table 3 of this Assessment, the proposed parking supply (476) will exceed the Ocean Gateway project parking demand (439), resulting in 37 surplus or additional spaces. With further mitigation through shared parking as described in Section V of this Assessment and summarized in Table 4, a total of 326 spaces of the 476 will be utilized by the Ocean Gateway project tenants and users. As a result, 150 spaces of the 476 (supply) provided as part of the Ocean Gateway project will be made available to the additional constituents described in Section VI.

While we recognize the total demand of the additional constituents could be 420 spaces, we anticipate the demand not accommodated by the Ocean Gateway project parking surplus will be satisfied within the public and private sector. Within these sectors, a number of facilities exist, possibly including the surface parking at the Portland Fish Pier, the International Marine Terminal parking lot (to be vacated by Scotia Prince Cruises), private garages within the City, and possibly the planned eastern waterfront parking garage currently being advertised by the City of Portland.

The parking management plan proposed addresses the parking demand associated with the Ocean Gateway Project and is consistent with the design criteria established for the Ocean Gateway project and provided to the City Council.

From: Marge Schmuckal
To: William Needleman
Date: Mon, Aug 8, 2005 9:33 AM
Subject: Ocean Gateway

Bill,
I have a building permit application for this project. Can I get a stamped approved site plan from you?
Are we able to issue a building permit?
Thanks,
Marge

8/11/05
ok per Bill
w/ [illegible]
The [illegible]
stamped 8/19/05

TO: Woodard & Curran, Inc.
David Senus, P.E.

C: BEA International
Shirley Xue, P.E.

FROM: Haley & Aldrich, Inc.
James Weaver, P.E.

SUBJECT: Foundation Recommendat
Relocated Receiving Stati
Ocean Gateway Project

OFFICES

Boston
Massachusetts

Cleveland
Ohio

Dayton
Ohio

Detroit
Michigan

Hartford
Connecticut

Kansas City
Kansas

Los Angeles
California

Manchester
New Hampshire

Parsippany
New Jersey

Providence
Rhode Island

Rochester
New York

San Diego
California

Santa Barbara
California

Tucson
Arizona

Washington
District of Columbia

This memorandum presents the results of uations of foundation requirements for the portion of the proposed Receiving Station y be relocated into the limits of the former BIW Shorezone Containment Area (SCA) ribed in the Value-Analysis Alternative Proposal No. 20.1 (VAAP-20.1). This wa undertaken at your request and in accordance with our proposal dated 7 Nov2005.

The VAAP-20.1 proposes to move the Rec Station to avoid the existing Portland Water District 33 inch diameter force main locate e vicinity of building line No. 1. The original building location was sited entirely e north of the granite block seawall; we provided foundation design and constructic ommendations in a 17 November 2003 memorandum to Woodard & Curran. The osed relocation results in building foundations along Building Line No. 9 being positione he south of the seawall. It appears that foundations along building line 9 from A t will be located over water, and foundations along 9 line from C to H will be located wi the limits of the SCA.

The SCA was originally designed as a drec spoil disposal area and was closed by BIW under the Maine Department of Environmel Protection (MaineDEP) Voluntary Response Action Program (VRAP). A condition of t MaineDEP VRAP certification of completion dated 25 July 2000 indicates that "Excavati of soils beneath the geosynthetic grid are prohibited without written permission of th Deaprtment".

Our primary effort to date has been to asse foundation requirements for the foundations that will be relocated into the SCA area. In our opinion, foundations located to the north of the seawall can be designed in accordance with the recommendations contained in our 17

WOODARD & CURRAN
Engineering • Science • Operations

41 Hutchins Drive • Portland, ME 04102
(207) 774-2112 • 1-800-426-4262
Fax: (207) 774-6635

CORPORATE OFFICES: Maine, Massachusetts,
New Hampshire, Connecticut, New York, New York, Florida
Operational offices throughout the U.S.

TRANSMITTAL

TO: Mike Nugent, Manager
Inspection Services Program
City Hall – Room 315
Portland, ME 04103

DATE: August 4, 2005
PROJECT NAME: Ocean Gateway
PROJECT NUMBER: 203438

RE: Technical Specifications (Book 2) – Ocean Gateway Project

WE ARE SENDING:

- ☐ Quotation
- ☐ Brochure
- ☐ Change Order
- ☐ Drawings
- ☐ Schedule
- ☐ Manuals
- ☐ Bid Package
- ☐ Installation Package
- ☒ Other (specify): Spec Book 2
- ☐ Floppy Disk / CD
- ☐ Sample

Qty	Doc. No.	Rev. No.	Dated	Description
1			2005	**Book 2 of the Ocean Gateway Specifications**

For Your:

- ☒ USE
- ☐ APPROVAL
- ☐ REVIEW/COMMENTS
- ☐ INFORMATION
- ☐ OTHER

Sent By:

- ☐ REGULAR MAIL
- ☐ FEDERAL EXPRESS
- ☐ UPS
- ☐ COURIER
- ☒ OTHER

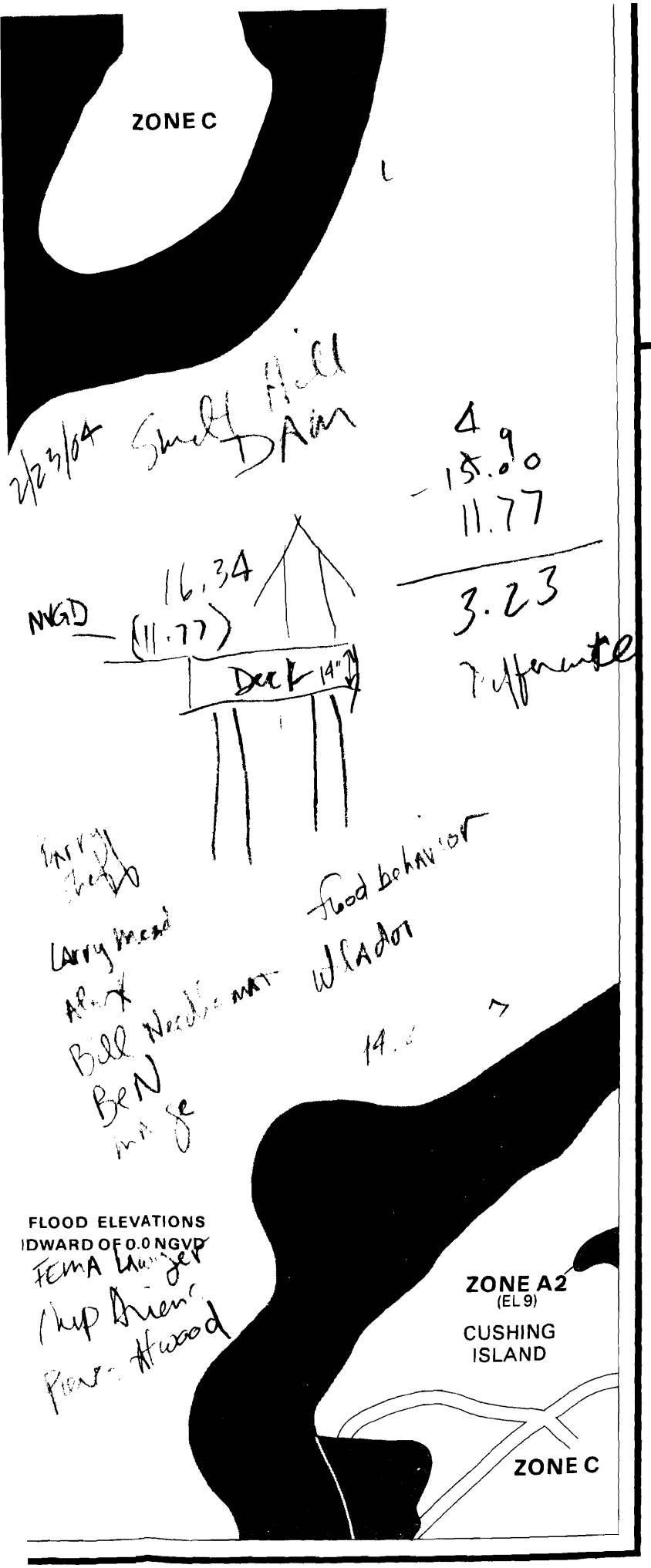
Mike:

I understand that Reed & Reed provided you with a full size copy of the plans along with Book 1 of the specifications. This copy of Book 2 completes the set. Please let Dustin Littlefield at Reed & Reed know if you need any other information.

Thanks,
Dave Senus

CC: Dustin Littlefield, Reed & Reed

BY: DAS



structures in the zones where elevations or depths have been established.

To determine if flood insurance is available in this community, contact your insurance agent, or call the National Flood Insurance Program, at (800) 638-6620.

APPROXIMATE SCALE

400 0 400 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM

FLOOD INSURANCE RATE MAP

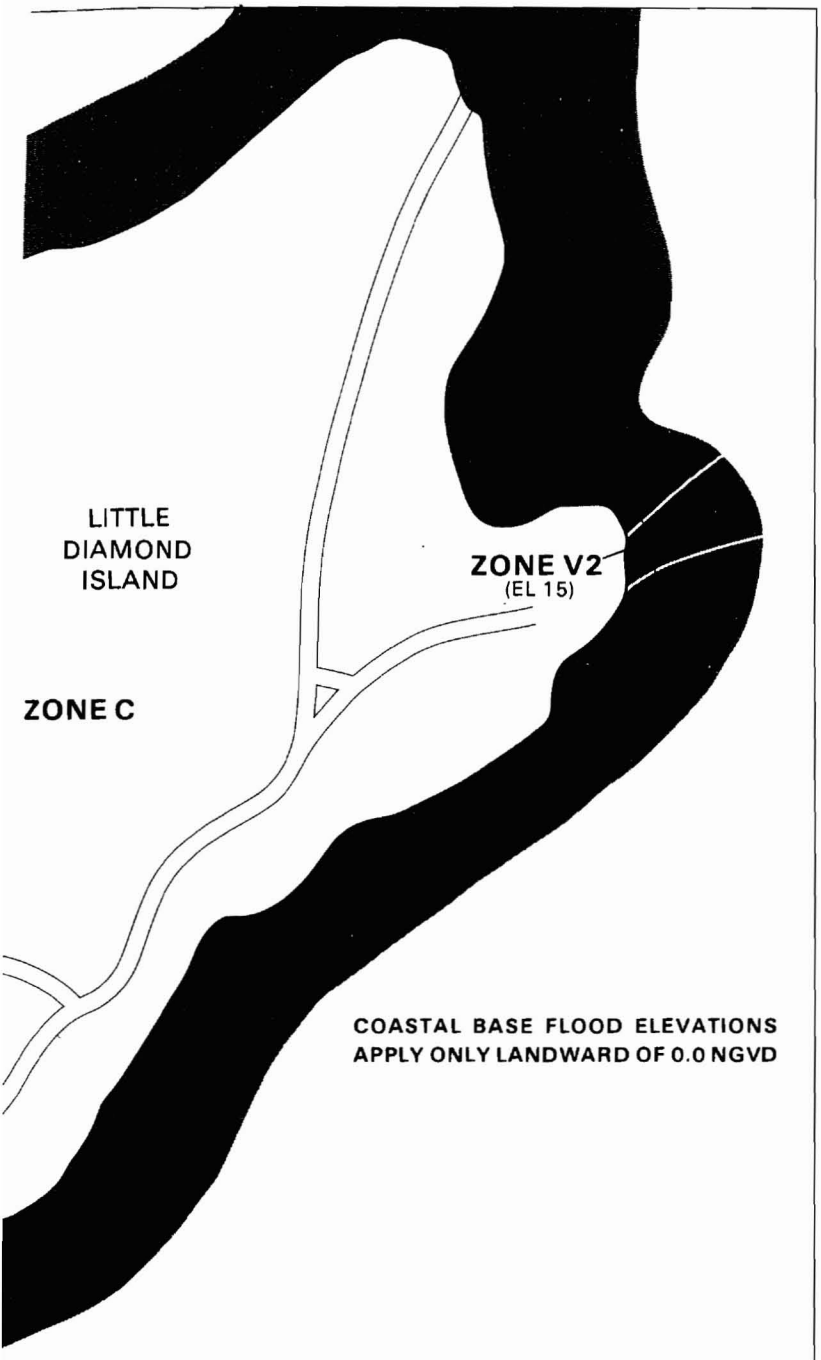
CITY OF
PORTLAND, MAINE
CUMBERLAND COUNTY

PANEL 14 OF 17
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
230051 0014 B

EFFECTIVE DATE:
JULY 17, 1986

Federal Emergency Management Agency

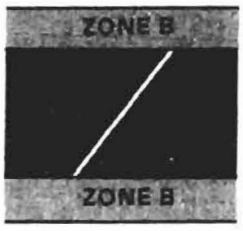


KEY TO MAP

500-Year Flood Boundary

100-Year Flood Boundary

Zone Designations*



100-Year Flood Boundary

500-Year Flood Boundary

Base Flood Elevation Line
With Elevation In Feet** 513

Base Flood Elevation in Feet
Where Uniform Within Zone** (EL 987)

Elevation Reference Mark RM7×

Zone D Boundary

River Mile •M1.5

**Referenced to the National Geodetic Vertical Datum of 1929

*EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
A0	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

NOTES TO USER

Certain areas not in the special flood hazard areas (zones A and V) may be protected by flood control structures.

This map is for flood insurance and flood plain management purposes only; it does not necessarily show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas. The coastal flooding elevations shown may differ significantly from those developed by the National Weather Service for hurricane evacuation planning.

For adjoining map panels, see separately printed Index To Map Panels.

Coastal base flood elevations shown on this map include the effects of wave action.

Coastal base flood elevations apply only landward of 0.0 NGVD.

Portland Water District

225 Douglass St. • P.O. Box 3553 • Portland, ME 04104-3553

(207) 774-5961
FAX (207) 761-8307
www.pwd.org

FILE

November 13, 2003

Ken Volock
Woodard & Curran
41 Hutchins Drive
Portland, Maine 04102

Re: Ocean Gateway Phase I – Portland Harbor

Dear Mr. Volock,

In response to your letter dated November 11, 2003, please accept this letter as confirmation that adequate capacity at the Portland Water District's India Street Pump Station and East End Wastewater Treatment Facility exists to accommodate the estimated 6,300 GPD of sewage that will be generated as a result of the above referenced project.

Average daily design flow at the facility is 19.8 million gallons per day (mgd). Current average daily flow is 16.38 mgd.

If you have any further questions, please contact me 774-5961 ext. 3075.

Regards,

Portland Water District
Michael Greene
Plant/Systems Manager, Wastewater

C: S. Rose, Maine DEP
Eric Labelle, City of Portland

STATE PLANNING OFFICE
FLOODPLAIN MANAGEMENT PROGRAM

W. LOUIS SIDELL, JR. 287-8063
e-mail: lou.sidell@state.me.us
SUE BAKER 287-8051
e-mail: sue.baker@state.me.us
BONNIE BOULTER 287-8052
e-mail: bonnie.boulter@state.me.us

184 STATE STREET
38 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0038

TOLL FREE (800) 662-4545
FAX (207) 287-5756
OR (207) 287-6489

3/29/04

mike Getz

have for V Zone

but ok for A Zone

3/30/04 Ocean Gate - Lowest floor Velocity Zone

State Exec. order

Lou Sidell

From: Marge Schmuckal
To: ALEX JAEGERMAN; Lee Urban; PENNY LITTELL; Sara...
Date: Wed, Mar 31, 2004 2:40 PM
Subject: Floodplain - Oceangate

This is not really good news.

Yesterday, I spoke with Lou Sidell who is the manager of the Floodplain Management Program under the State Planning Office. He confirmed that FEMA (in Boston, our area office) is the only body who can revise the FEMA maps. Mike Getz is the contact person at that Boston office. Lou Sidell (and Bonnie Boulter who I also spoke to in the State Office) has confirmed that they have gotten several calls on this project within the last couple weeks, including most recently Eric Labelle.

Section 14-450.8(p)1 of the ordinance states that all new construction located within all "A" zones and "V" zones shall be located landward of the reach of mean high tide. We are in the process of removing that requirement based on previous conversation I have had with the State Floodplain Management folks. It has been clarified that we can only remove that section for any "A" zones. However, because of how the Federal regulations are written, we can **not** remove the section referring to construction over water in "V" zones. This is vital if the request to FEMA does not result in a change of the entire project boundary (pier and welcoming station) to an "A" zone.

Lou Sidell is also concerned because of the State funding involved. That also brings his office directly into the mix.

Marge

a. At least two (2) feet higher than the depth specified in feet on the community's Flood Insurance Rate Map; or

b. At least three (3) feet if no depth number is specified.

4. Zone A shall have the containment wall elevated to at least two (2) feet above the base flood elevation utilizing information obtained pursuant to section 14-450.6(b)4.a.ii.; section 14-450.7(a)4; or section 14-450.7(c)1.

(o) *Wharves, piers and docks:* New construction or substantial improvement of wharves, piers, and docks are permitted in Zones A, A1-30, AE, AO, AH, V1-30, and VE, in and over water and seaward of the mean high tide if the following requirements are met:

1. Wharves, piers, and docks shall comply with all applicable local, state and federal regulations; and

2. Commercial wharves, piers, and docks involving fill shall adhere to the design and construction standards contained in the U.S. Army Corps of Engineers' *Shore Protection Manual.*

(p) *Coastal flood plains:*

1. All new construction located within Zones A1-30, AE, A, V1-30 and VE shall be located landward of the reach of mean high tide except as provided in section 14-450.8(p)7.

2. New construction or substantial improvement of any structure located within Zones V1-30 or VE shall:

a. Be elevated on posts or columns such that:

i. The bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) is elevated to two (2) feet above the base

11/26/03?

Ocean Gate Parking

Barry Sheff
David Cohan
Bill N.
John Peverad
Marge
Tom Errico
Tom Gorrill
(Larry Late)

on proposed Site - 476 spaces

No handle on what is the Demand?

if the proposed on site doesn't management or off-site

Displacement of existing - requirement
↓ month to month or 30 day -

① Islanders
② Auto-Europe
③ industrial uses of ME. State Pier
Pier I bldg ~~Ocean~~ WHAlen WAY

Current condition inventory

100,000 ÷ 1000 ÷ 50% = 50 sp
~~25~~,000 ÷ 400 =

New facility

Cur. using 12 noon - 18 at night used

Can have shared spaces

Potential New Garage - 600 - 800 spaces
with or without ~~space~~ / retail

Scotia Prince passengers employees → May 1st - Dec. 1st - ± 300

Cruise ships - ~~tra~~ ascents → usually leaf peeping season

displacement of CBITD - 25

Customs Immigration -

City & Tugs
~~Pier I - Industrial~~
~~WHA Los espectos~~ -
Pier I office / City

~~Pier I - Indust~~

CONFIDENTIAL

CITY OF PORTLAND, MAINE

MEMORANDUM

To: Joseph Gray, City Manager via: Jeffrey Monroe, Director

From: David Cohan, Waterfront Asset & Development Manager
John Peverada, Parking Manager

Date: August 22, 2003

Subject: Waterfront East End Garage Parking Demand Analysis

EXECUTIVE SUMMARY:

❶Overall Bulk Demand Analysis:
900 – 1,500 parking spaces needed.

❷Timed Demand Analysis:
625 – 825 parking spaces needed "Day 1" (Dec. '04).
915 – 1,115 spaces needed within six to eight months (by July '05).
1,070 – 1,585 spaces needed to accommodate Scotia Prince operations and anticipated near-term additional contiguous development.

BACKGROUND:

The City is contemplating subsidizing the development of a new parking garage on the east end of the waterfront through the use of TIF credit enhancements and a master lease for a large number of spaces.

Two parking demand analyses have been done to estimate both the overall bulk potential for parking demand related to this garage as well as the immediate and phased time demand that will help in understanding the City's potential master lease obligations and the most appropriate size and capacity for the new garage.

Overall, a bulk demand analysis would appear to show that between 900 – 1,500 spaces will probably be needed given the existing known parking needs, re-use of the former BIW Shipyard facility as an industrial working waterfront use site, and anticipated new development related to both the Ocean Gateway project, relocation of the Scotia Prince, nearby private development, and loss of existing surface parking facilities.

A more detailed demand analysis that takes into account certain development assumptions and timing appears to demonstrate an immediate demand in December 2004 (the assumed opening date) for 325 parking spaces. This is in addition to at least 300 spaces that will be needed by Olympia Equity related to its hotel and new office building use.

In addition, a new office building will most likely be developed just in front of this new garage on a building pad site that will front along a newly extended Commercial Street and this new office building and its associated retail space could create demand for at least an additional 115 parking spaces in this new garage.

This demand may quickly grow to 530 parking spaces within six months and may reach greater than 600 spaces during the height of the first full summer season.

Additionally, once the Scotia Prince is relocated to the Ocean Gateway project beginning in the late spring of 2006, parking demand may increase to at least 770 parking spaces (plus the Olympia Equity parking needs).

MASTER LEASE CONSIDERATIONS:

The City is being asked to be financially responsible for approximately 385 parking spaces under a master lease agreement. Upon the completion of the new garage in December 2004, we feel comfortable that we will be able to fill a minimum of 325 spaces, as follows:

Estimated Parking Demand	Dec-04
Islander Monthly Parking	150
Scotia Prince Parking	0
Auto-Europe/Adjacent Biz	95
POT Tenants	75
City/CBITD	5
"Master-Lease" Subtotals	325

In addition, the immediate demand should grow to cover all of the City's master leased spaces within the first five months.

The parking demand anticipated is based on some of the following assumptions:

1.) 227 people are currently wait-listed at the Casco Bay Garage;
2.) Over 150 islanders are currently renting spaces now in the Portland Ocean Terminal surface parking lots;
3.) The Portland Ocean Terminal spaces currently rented by Cianbro will be re-leased; and
4.) The City's Assessor's office confirms that there are currently 675 year-round island homes and 322 islanders currently parking in the Casco Bay Garage. This would appear to leave approximately 350 potential parkers at an average of one car per year-round household.

SOURCES OF PARKING DEMAND:

- Islander Monthly Parking
- Daily/Transient Customers
- POT Tenants (i.e., Cianbro, tugboats, & others)
- Nearby Business Contracts (i.e., Auto-Europe)
- City of Portland (Dept. of Transportation & City needs)
- CBITD (employees)
- New Olympia Equity Office Building Tenants
- Hotel Use
- Scotia Prince (Customers, employees, and Customs Dept.)
- Contiguous Anticipated Office and Retail Development

DETAILED DEMAND ANALYSES:

Please see attachments for detailed projections.

ParkingDemandMmo082103a

Exist'g (relate to photo) POT Daily lot: 64 Daily Spaces (no specific constituency)
+ 25 – Tug Boat Parking
89

East End Waterfront Parking Garage
Bulk Parking Demand & Potential Use Estimate

Potential Parkers	Spaces
Probable Demand	
Islander Monthly Parking	250
International Ferry Parking	300
Auto-Europe	125
POT Tenants (Tugs & City)	100
Hotel	50
Existing Businesses	50
City/CBITD Use	25
Subtotal	900
Additional Growth Demand	
New Old Port Offices	300
Grand Trunk Pad Offices	100
Additional POT Tenants	50
Additional Island Demand	100
New On-Site Offices	40
New On-Site Retail	10
Subtotal	600
Grand Total	**1,500**

~~Islander~~ Fore St lot – 135 spaces capacity count / newly created +/25 in tip – leased to Hilton not a zoning issue
25
160

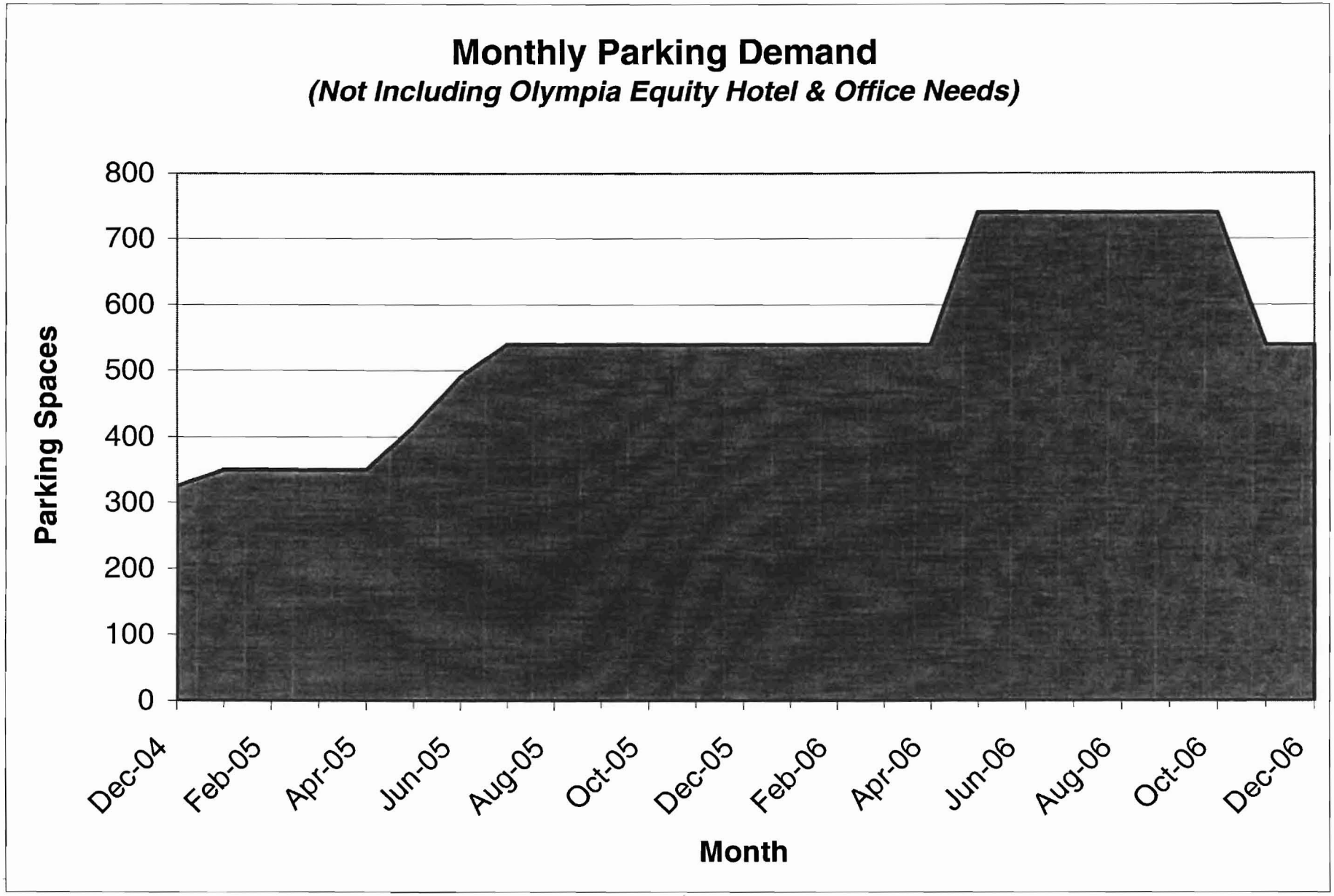
Front Lot – 83 ~~spaces~~ mostly Island monthly lots
Some (25 Auto Europe) ?? up to 50

Rear lot – 70 spaces – All Islanders

Cianbro lot 90 (maybe stretched 100) spaces

Auto Europe lot – 80 spaces

80 New spaces from SMRT
Where They Are Parking on City Land

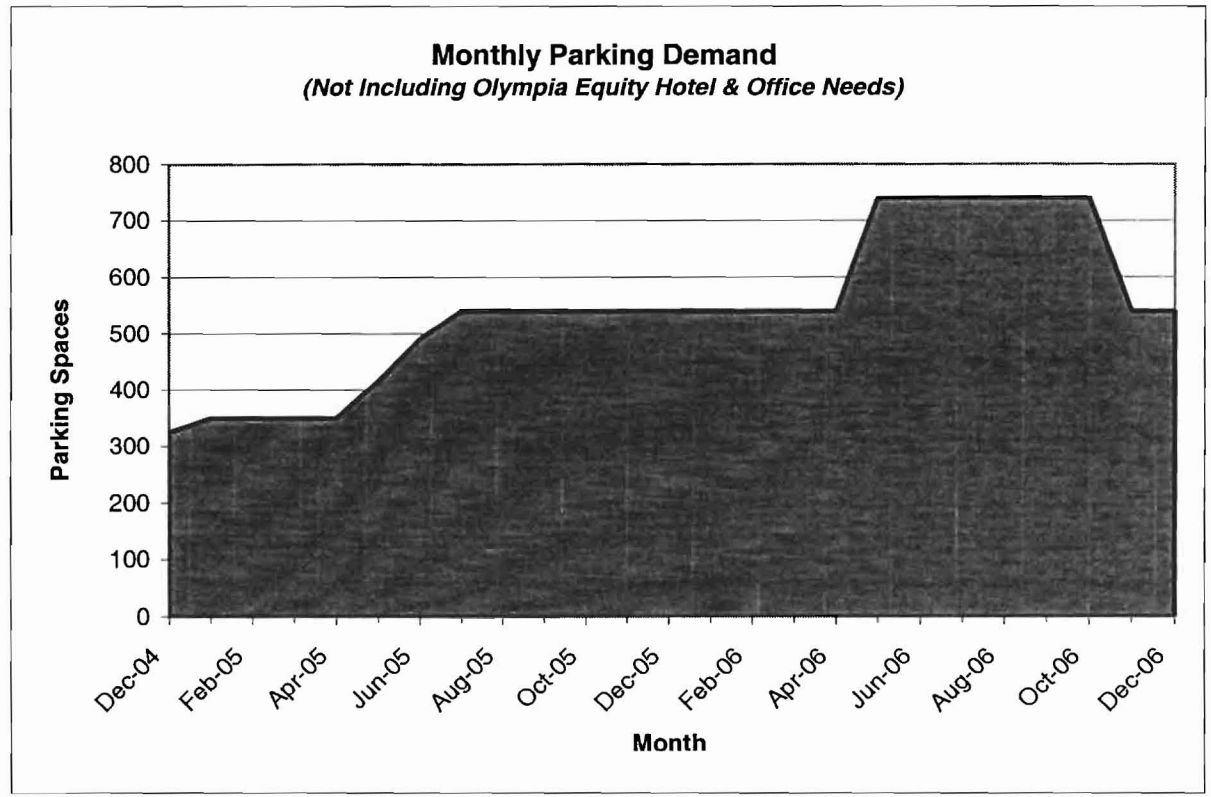

Monthly Parking Demand
(Not Including Olympia Equity Hotel & Office Needs)
Parking Spaces
800
700
600
500
400
300
200
100
0
Dec-04
Feb-05
Apr-05
Jun-05
Aug-05
Oct-05
Dec-05
Feb-06
Apr-06
Jun-06
Aug-06
Oct-06
Dec-06
Month

Timed Parking Demand Worksheet											
FY	'05	'05	'05	'05	'05	'05	'05	'06	'06	'06	'06
Month	1	2	3	4	5	6	7	8	9	10	11
	Opening										
Parking Demand	Dec-04	Jan-05	Feb-05	Mar-05	Apr-05	May-05	Jun-05	Jul-05	Aug-05	Sep-05	Oct-05
Islander Monthly Parking	150	175	175	175	175	200	225	250	250	250	250
Scotia Prince Parking	0	0	0	0	0	0	0	0	0	0	0
Auto-Europe/Adjacent Biz	95	95	95	95	95	100	100	125	125	125	125
POT Tenants	75	75	75	75	75	100	150	150	150	150	150
City/CBITD	5	5	5	5	5	15	15	15	15	15	15
"Master-Lease" Subtotals	**325**	**350**	**350**	**350**	**350**	**415**	**490**	**540**	**540**	**540**	**540**
Daily/Transient	20	20	20	20	20	40	40	75	75	75	50
Totals	345	370	370	370	370	455	530	615	615	615	590

Additional Contingent Demand	
Additional POT Tenants	100
Additional Island Demand	100
Total	200

Olympia Development Demand	
Hotel	50
New Fore St. Office Bldg.	250
Total	300

Near-Term Development Demand	
Scotia Prince Parking	300
New Comm'l St. Office Bldg.	100
New Comm'l/Hancock Retail	15
Islander Fore St. Lot Redevel.	100
Contiguous Development	100
Total	615



'06	'06	'06	'06	'06	'06	'06	'06	'07	'07	'07	'07	'07	'07
12	13	14	15	16	17	18	19	20	21	22	23	24	25
					OcnGate 1	*Sct Prince*							
Nov-05	Dec-05	Jan-06	Feb-06	Mar-06	Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06
250	250	250	250	250	250	250	250	250	250	250	250	250	250
0	0	0	0	0	0	200	200	200	200	200	200	0	0
125	125	125	125	125	125	125	125	125	125	125	125	125	125
150	150	150	150	150	150	150	150	150	150	150	150	150	150
15	15	15	15	15	15	15	15	15	15	15	15	15	15
540	**540**	**540**	**540**	**540**	**540**	**740**	**740**	**740**	**740**	**740**	**740**	**540**	**540**
40	30	30	30	30	30	30	30	30	30	30	30	30	30
580	570	570	570	570	570	770	770	770	770	770	770	570	570

City of Portland, Maine

EASTERN WATERFRONT CITY PARKING FACILITIES

PORTLAND MAINE

Strengthening a Remarkable City, Building a Community for Life • *www.portlandmaine.gov*

Lee Urban- Director of Planning and Development
Marge Schmuckal, Zoning Administrator

August 19, 2005

Dustin Littlefield
Reed & Reed
275 River Rd
Woolwich, ME 04579

RE: City of Portland Ocean Gateway Terminal & Receiving Station – 444-A-005
Application #05-1055 – Floodplain forms and certificate of elevation

Dear Mr. Littlefield,

I am in receipt of your application for the Ocean Gateway project. I have attached Floodplain forms that must be filled out and returned prior to construction. Please note that the lowest horizontal member must be elevated two feet above the base flood elevation (bfe). This office requires a P.E. certification that the construction will be in accordance with the Coastal Construction Manual. The enclosed elevation certificate shall be completed as required and returned appropriately.

If you have any questions regarding this matter, please do not hesitate to contact me at (207) 874-8695.

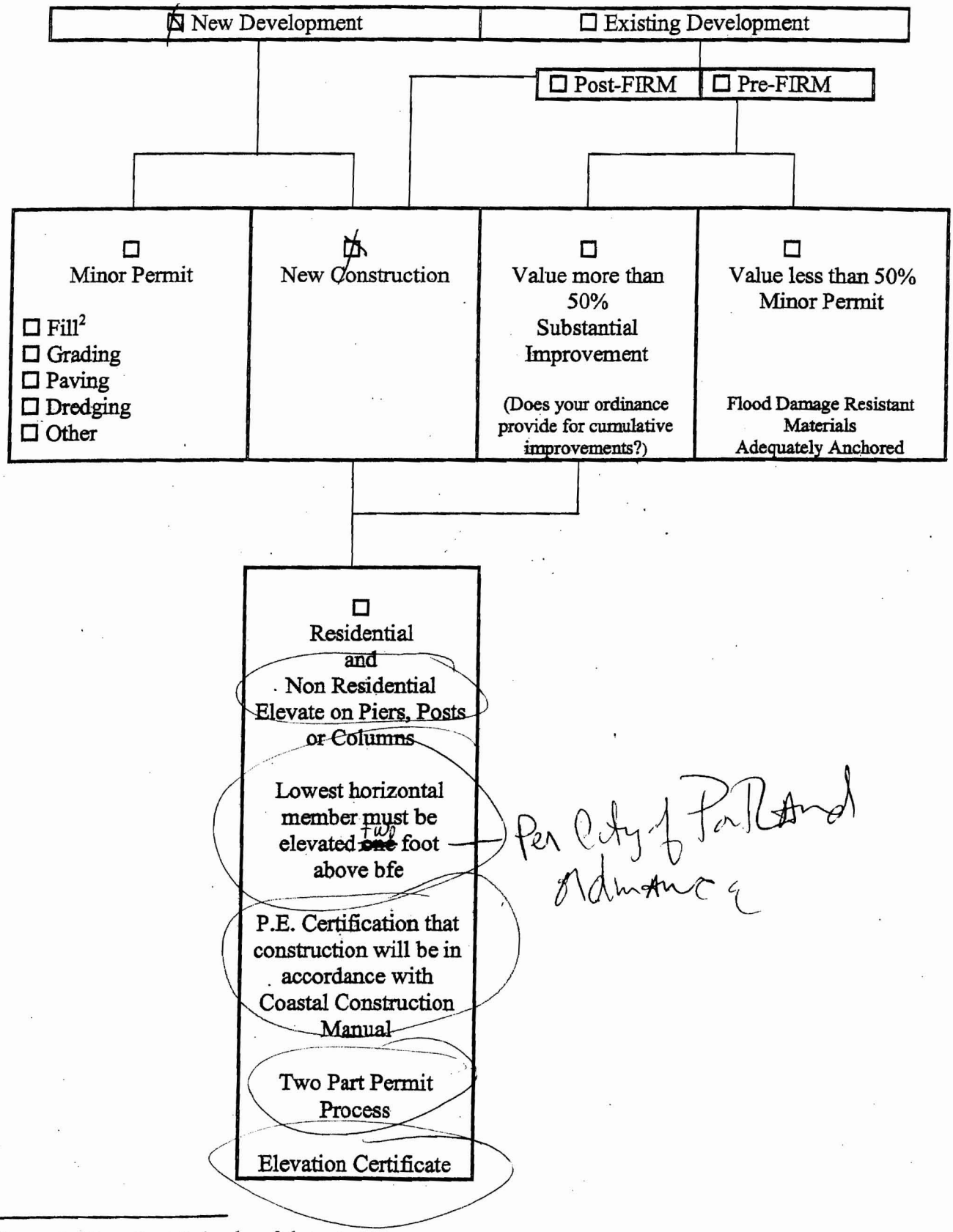
Very truly yours,

Marge Schmuckal

Marge Schmuckal
Zoning Adminstrator
City Hall, room 315
389 Congress Street
Portland, ME 04101

enclosures

V1-30 and VE Zones



[2] Not for construction of a walled and roofed structure.

CITY OF PORTLAND, MAINE
PLANNING BOARD

June 8, 2004

Capt. Jeffrey Monroe, Director
City of Portland Department of Ports and Transportation
Portland Ocean Terminal
40 Commercial Street
Portland, Maine 04101

RE: Ocean Gateway Approval

CBL: 444 A005001

Dear Capt. Monroe,

On May 25, 2004, the Portland Planning Board voted unanimously to approve the following motions regarding the Ocean Gateway Marine Passenger Terminal:

Subdivision

1. That the plan is in conformance with the subdivision standards of the land use code, subject to the following conditions of approval:

    a) That a final subdivision recording plat with all appropriate easements and rights of way be provided for review and approval of the City Planning Authority, Public Works and Legal staff and for signature by the Planning Board prior to issuance of a building permit.

    b) That the applicant receives written permission from the owners of One India Street for the construction of public infrastructure on the 12 foot strip of land running southerly along the One India Street building.

    c) That the State of Maine Department of Transportation provides an executed deed for the change of railroad right of way, as shown on the approved subdivision plans.

Flood Plain

2. That the plan is in conformance with the Flood Plain Management standards of the land use code, subject to the following conditions of approval:

    a) That the terminal building be designed with a finished floor elevation of not less than 12.3 feet NGVD.

b) That an elevation certificate (FEMA form 81-31) be provided by a registered professional engineer or architect to the Zoning Administrator prior to issuance of a Building Permit.

c) That proof of approval of all other applicable Local, State and Federal permits be provided prior to issuance of a Building Permit

Shoreland

3. That the plan is in conformance with the Shoreland Management standards of the land use code.

Waiver of Site Lighting Standards

4. That the proposed lighting plan (**will not**) produce unacceptable levels of glare and/or light trespass and therefore the Site Lighting Standards for this application (**are**) waived, subject to the following condition of approval:

a) That all flood type fixtures used in the Ocean Gateway vehicle queuing area be turned off except during active operations, or as required by regulatory authorities or for security.

Site Plan

5. That the plan is in conformance with the Site Plan standards of the land use code, subject to the following conditions of approval:

a) That any proposed additional scheduled ferry or cruise ship operations to the Ocean Gateway facility (such as international or coastal ferry service, or permanent home port cruise operations) that results in significant vehicular circulation changes, additional on-site parking demands over 25 spaces, or major facility infrastructure expansion, over that proposed with this application, shall come to the Planning Board for review and approval consistent with City ordinances. Said services, as appropriate, shall be reviewed as amendments to the site plan and shall need to demonstrate adequate parking and traffic management to satisfy all applicable site plan standards.

b) That final construction drawings for the Ocean Gateway site plan be provided for the review and approval of the Planning Authority staff prior to issuance of a building permit.

c) In the event that a parking garage, with spaces available for use by the Ocean Gateway facility, is not constructed prior to commencement of ferry operations, then a park and ride shuttle service will be implemented as needed to ensure the functional viability of industrial uses at the Maine State Pier.

d) That any dumpster locations proposed for the site be shown on the final site plan with fully screened dumpster enclosure details added to the Site Details for Planning staff review and approval.

e) That a signage plan be submitted for review and approval of the Planning Staff.

f) That any revisions to the containment area landscape treatment incorporating a percent for art project shall be submitted to the Planning Authority for review and approval.

g) At such time as a parking garage, located in the Franklin Arterial/Fore Street/Commercial Street/Portland Yacht Services block is constructed, then the 97-space easterly parking lot shall be removed and re-vegetated in accordance with a plan to be approved by the Planning Board. If no such garage structure is constructed within five years of the issuance of a building permit (for Ocean Gateway), then the applicant shall prepare and submit a plan for the review and approval of the Planning Board for the replacement of the 97 parking spaces, and for the elimination of such existing 97-space easterly lot and for re-vegetation of such area.

The approval is based on the submitted plan and the findings related to the applicable review standards as contained in Planning Board #19-04, which is attached.

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

1. Mylar copies of the construction drawing for the subdivision must be submitted to the Public Works Department prior to the release of the plat. Where submission drawings are available in electronic form, the applicant shall submit any available electronic CADD.DXF files with the final plans."

2. A performance guarantee covering the site improvements as well as an inspection fee payment of 2.0% of the guarantee amount must be submitted to and approved by the Planning Division and Public works prior to the recording of the subdivision plat. The subdivision approval is valid for three (3) years.

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.

6. 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.)

7. The Development Review Coordinator must be notified five (5) working days prior to date required for final site inspection. The Development Review Coordinator can be reached at the Planning Department at 874-8632. 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 regarding the Board's actions, please contact Bill Needelman, Senior Planner at 874-8722.

Sincerely,

Orlando Delogu, Chair
Portland Planning Board

cc: Lee D. Urban, Planning and Development Department Director
Alexander Jaegerman, Planning Division Director
Sarah Hopkins, Development Review Services Manager
Bill Needelman, Senior Planner
Jay Reynolds, Development Review Coordinator
Marge Schmuckal, Zoning Administrator
Inspections
Michael Bobinsky, Public Works Director
Traffic Division
Eric Labelle, City Engineer
Jeff Tarling, City Arborist
Penny Littell, Associate Corporation Counsel
Lt. Gaylen McDougall, Fire Prevention
Rick Blackburn, City Assessor
Approval Letter File
Paul Pottle, PE, Project Manager, MDOT
Barry Sheff, PE, Project Manager Woodard and Curran Engineers

P | N | D
Incorporated

CONSULTING
ENGINEERS

PND No. 00439.30

October 20, 2005

Mr. Barry Sheff
Woodard & Curran
41 Hutchins Drive
Portland, ME 04102

RE: Request for Waiver of Static Load Test

Dear Barry:

As you know, the original contract drawings call for a Static Pile Load Test for the bearing piles on Pier A. This is in compliance with the 1999 BOCA Code. It is now desired, by the project, to substitute a Dynamic Pile Load Test for the static test. This test method is acceptable to PND and we support a request for waiver from the Building Department for the following reasons:

1) During the development of the 1999 BOCA Code, dynamic testing techniques for determining pile capacities were just gaining reliability and acceptability in the industry. Since that time they are generally considered equivalent and in fact are given that status in the 2003 IBC Code, Section 1808.2.8.3 Load test, "...control test piers or piles shall be tested in accordance with ASTM D1143 or ASTM D4945." This is reference to the static and dynamic testing in the ASTM standards.

2) With the results of the dynamic testing and the information recorded during the dynamic test procedure, the remaining production driven piles that drive with similar characteristics actually become a verifying load test comparable to the original dynamic test. Thereby providing many pile tests instead of one pile test if the static criteria were used.

If you have any additional questions, please contact me at any time.

Sincerely,
PND Incorporated | Seattle Office

David Pierce

David Pierce, P.E., S.E.
Senior Vice President

3/24/04

WOODARD & CURRAN
Engineering • Science • Operations

CORPORATE OFFICES: Maine, Massachusetts, New Hampshire, Connecticut, Florida
Operational offices throughout the U.S.

MEMORANDUM

TO: Joe Gray, City of Portland City Manager

FROM: Barry Sheff, P.E.

DATE: March 3, 2004

RE: Shoreland Regulations and Flood Plain Management Regulations
Ocean Gateway Base Flood Elevation Design Basis

There is an omission of the existing Pier 2 from the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM); we propose that the flood elevation for the Pier 2 improvements be established as A2 zone.

We have reviewed the FIRM Community-Panel Number 230051 0013B and 0014B prepared by FEMA to determine the 100-year flood elevation for establishing building elevations and complying with the City of Portland's Code of Ordinances. The flood zones and their corresponding elevations are indicated on the FIRM. Determining the applicable flood elevation for the project however, is complicated by the fact that the existing Pier 2 is not reflected on the FIRM. The omission of the existing pier is likely due to the timing of the 1979 aerial mapping relative to the timing of the pier's 1982 construction.

At the project site, the property landside of the existing bulkhead is within the A2 flood zone, with a 100-year base flood elevation of 10 feet NGVD (14.57-feet MLLW). Also on the project site and along the Fore River, a special flood hazard zone extends roughly 250-feet from the A2 zone into the river; a V2 zone with a flood elevation of 13-feet NGVD (17.57-feet MLLW). The special flood hazard zone includes a velocity hazard associated with waves of 3-foot amplitude or greater. A copy of the FIRM is attached as Figure 1. The existing Pier 2 was constructed in 1982 at an elevation of 11.77-feet NGVD (16.34-feet MLLW); and prior to that, the Maine State Pier was constructed in 1922 at the same elevation.

As the existing Pier 2 is not depicted on the FIRM, W&C superimposed the pier onto the FIRM (see Figure 2) and found the southern half of the existing pier located seaward of the mapped flood hazard zones, not within any mapped zone. Without a mapped zone, for W&C to assess and determine the project site flood elevation, we look to FEMA's methodology, the findings of the Flood Insurance Study, and the mapping on the surrounding area. The A2 flood zone on the site and abutting areas overlay onto all of the existing piers in Portland (on the Fore River); including the Maine State Pier, the abutting Galt Wharf and those wharves and piers extending up the Fore River to Union Wharf and ultimately to the International Marine Terminal, refer to Figure 1. The FIRM indicates flood zone boundaries (and elevations) are in part delineated by pier structures. It appears that all piers which existed along the Portland waterfront at the time of the FIRM development were placed into the A2 zone. Locations seaward of the existing piers were mapped as V2 and V3 zones, see Figure 2.

FEMA's means of establishing base flood elevations in coastal areas (V zones) are controlled by the highest of the wave crest elevation (wave height) or the wave runup elevation. In coastal areas where the ground is "gently sloping", the wave crest elevation is generally the defining parameter; resulting from water depth, astronomical tide, wind setup, pressure setup, and wave setup. Alternatively, on steeply sloped shorelines (with revetments or vertical walls), the flood elevation from wave runup is generally

higher than the wave crest elevation, and the wave runup elevation controls. In the area of the site and extending upriver along the Fore River, vertical walls are commonplace and we anticipate the wave runup elevation was the controlling factor in determining the extent and elevation of the V zones.

In reviewing the applicability of the A2 zone base flood elevation, we also referenced the historic elevation data from the NOAA tide gauge on the Maine State Pier, established March 4, 1910. This tide station is on the project site and is reflected on Figures 1 and 2. The factors of storm surge waves, breaking waves, and the unimpeded reaches between obstructions which affect the tide gage level would be similar at the adjacent Pier 2. The record level elevation of 9.6-feet NGVD (14.17-feet MLLW) was recorded at on February 7, 1978, during the so-called Blizzard of '78. This record level corresponds well with the 10-feet NGVD of the A2 zone.

We understand that in the absence of a mapped flood hazard zone at the proposed Terminal Building, the Zoning Administrator has interpreted the FIRM to include the existing Pier 2 structure within the V2 zone, base flood elevation 13-feet NGVD (17.57-feet MLLW). It is our opinion that the mapping techniques, methodology, and historical data do not support this interpretation.

It is our opinion that based upon the information reviewed, the A2 zone with a base flood elevation of 10-feet NGVD (14.57-feet MLLW) is the appropriate 100-year flood elevation for the project site. The A2 zone is applicable to existing piers and the pier expansion at the Ocean Gateway site via transition of the same mapping technique exhibited in direct proximity to the site, and elsewhere along the waterfront. Although Pier 2 was not present at the time the FIRM was produced, it would likely have been mapped in the A2 zone, in the same fashion as the other pier structures. It is also our opinion that the V2 zone is applicable seaward of the A2 zone. The design of the pier expansion and the associated buildings within the A2 and V2 zones will be completed in accordance with local building codes, the 3rd Edition of FEMA's Coastal Construction Manual, and applicable FEMA technical bulletins.

As previously stated, the existing Pier 2 is constructed 1.77 feet above the A2 zone flood elevation. Establishing the base flood elevation for the existing pier, pier expansion, and building at the A2 zone 10-feet NGVD (or 14.57 MLLW) enables the design team to proceed with the pier expansion at the existing elevation, in compliance with City Code. It is worth noting that by interpreting the site to be within the V2 zone and establishing a base flood elevation from that (as interpreted by the Zoning Administrator), would require the pier expansion and Terminal Building to be 3.23-feet higher than the existing pier; this would adversely affect the flexibility, function, pedestrian and vehicle circulation, and visual character that we designed into the project.

We request that you support our interpretation of the Pier 2 Improvements being within the A2 zone, and that you work with City staff to advance our recommendations so that we may continue our design work on this important project for the City of Portland. Thank you for your consideration.

BSS/PJP/bss
203438.01

Scale cc VS Logic

Attachments

cc: Jeff Monroe, Dept. of Ports and Transportation
Larry Mead, Asst. City Manager
Paul Pottle, Maine Department of Transportation

Executive Department

Larry S. Mead
Assistant City Manager

CITY OF PORTLAND

December 30, 2003

Barry Sheff
Project Manager
Woodard and Curran
41 Hutchins Drive
Portland, ME 04102

Dear Barry:

I am writing with respect to the City's intentions relative to the proposed extension of Hancock Street as part of the Ocean Gateway project. The proposed extension will create a street connecting Commercial Street (a new extended portion) with Fore Street. This proposal is consistent with the Eastern Waterfront Master Plan that guides City policy in this area.

The City currently owns all of the land on which Hancock Street extension will be developed with the exception of one small area at the northerly terminus of the proposed street. The City will possess Right and Interest in all of the property needed for the extension of Hancock Street prior to the commencement of construction. The City has begun negotiations with the current owner to acquire the one small privately owned section. Should negotiations falter the City will take the property by eminent domain.

Please contact me if you require any further information.

Sincerely,

Larry S. Mead
Assistant City Manager

Cc: Joseph E. Gray, City Manager
Lee Urban, Director of Planning and Development
Jeffrey Monroe, Director of Waterfront and Transportation

Haley & Aldrich, Inc.
75 Washington Avenue
Suite 205
Portland, ME 04101-2617

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HALEY& ALDRICH

MEMORANDUM

FILE COPY

23 January 2006
File No. 26354-012

TO: Woodard & Curran, Inc.
David Senus, P.E.

FROM: Haley & Aldrich, Inc.
Wayne Chadbourne, P.E., James Weaver, P.E.

SUBJECT: Supplemental Geotechnical Recommendations
Relocated Receiving Station
Ocean Gateway Project

This memorandum presents supplemental geotechnical recommendations for the proposed Receiving Station. This work was undertaken at your request, in accordance with our proposal dated 7 November 2005.

Use of 24 in. dia. Piles

Based on conversations with you, it is our understanding that Reed & Reed has a surplus of 24 in. pipe piles on site and is proposing to use them to support the portion of the Receiving Station in the former BIW Shorezone Containment Area (SCA). To adequately support the structural design loads provided by BEA International (35 kips axial compression and 10 kips uplift), 24 in. dia. piles should be driven open ended to a minimum depth of 60 ft below existing ground surface. Use of a drive shoe is not required or recommended. We anticipate pile settlement on the order of ¼ in. or less.

Use of 16 in. dia. Piles

If the 24 in dia. pipe is not used for foundation support we still believe that a 16 in dia. pile would also be adequate for the column footings located in the SCA. In accordance with our memorandum dated 8 December 2005, 16 in. dia. pile used to support the Receiving Station should be driven open ended to a minimum depth of 70 ft below existing ground surface. Again, use of a drive shoe is not required or recommended. We anticipate pile settlement on the order of ¼ in. or less.

Exterior Slab on Grade

The design includes construction of a 4-in. thick, earth-supported concrete slab for the Receiving Station. The majority of the slab will be within the limits of the enclosed (heated) portion of the building, but a portion of the slab will be located beneath an open-air canopy

structure on the east and southeast sides of the building. Some of the proposed slab will be located within the limits of the SCA. The existing fill soils in this area are considered to be moderately frost-susceptible.

As previously recommended, the floor slabs should be designed as earth-supported slabs-on-grade bearing on a minimum of 12 in. of compacted structural fill. Structural fill should meet the requirements of MDOT Section 703.06, b Aggregates for Subbase, Type D. Structural fill should be placed in maximum 8-in. thick lifts with each lift compacted to a minimum of 95 percent of maximum dry unit weight as determined by ASTM D1557.

The exposed fill subgrade beneath the slab area should be inspected for the presence of wood, topsoil, organics or any other unsuitable material. If present, the unsuitable material should be removed and replaced with crushed stone/structural fill. Based on discussions with you, it is our understanding that a geotextile separation "marker" is present at depth within the SCA. Excavation below the existing geotextile marker should not be undertaken unless conditions of the VRAP are met.

Please note that the portion of the cast-in-place concrete slabs located in the unheated area beneath the canopy structure will be susceptible to localized differential movement from frost action. It is possible that some cracking and distress of the cast-in-place concrete will occur. Measures to mitigate possible frost action effects would include: 1) full-depth or partial-depth removal of underlying fill soils (4 to 4.5 feet for full-depth removal) and replacement with clean granular fill (not likely practicable), or 2) use of pavers that can accommodate movement without cracking. Placement of a stabilization/reinforcement geotextile fabric over soil subgrade soils and beneath the structural fill may help to mitigate some of the differential movement.

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November 2003 memorandum. There will be foundations that will span across the top of the existing seawall (foundations at building lines 9-D), and there will be foundations located in the water between Pier 2 and the western edge of the SCA area (foundations along building line 9 from line A to C).

According to Shirley Xue, P.E. of BEA International, columns at building lines 9-D through 9-H will support the roof structure. Design column loads at the foundation level are 35 kips (20 kip dead and 15 kip live) axial, 10 kip uplift and a maximum of 25 kip horizontal.

We did not conduct any specific subsurface explorations within the SCA area relative to the proposed building relocation. However, we did accumulate readily available information from explorations conducted in the general vicinity. Based on our review of the available information the following subsurface profile, with relevant engineering soil properties, has been assumed for this evaluation (reference is depth below current ground surface):

0 to 20 feet - SCA fill material - silt, fine sand, clay with organic matter, rock fragments and miscellaneous debris.
20 to 30 feet - Harbor bottom sediments - loose silt, fine sand and clay with organic matter.
30 to 60 feet - Marine silty clay with layers and lenses of silt and fine sand. Undrained shear strength = 500 pounds per square foot (psf).
60 to 90 feet - Marine silty clay with layers and lenses of silt and fine sand. Undrained shear strength = 700 psf.
90 to 110 feet - Marine fine sand. Total unit weight = 125 pcf and internal angle of friction = 32 degrees.
110 to 130 feet - Glacial Till. Total unit weight = 135 pcf and internal angle of friction = 35 degrees.
130 feet below ground suface - Bedrock.

It is our opinion that the top 30 feet of soil in the profile (SCA fill and harbor bottom sediments) should not be considered suitable for building foundation support. The underlying marine clay and sand, glacial till and bedrock are considered suitable for foundation support.

It is recommended that the building columns located within the SCA area be supported on pile foundations bearing in the naturally deposited, inorganic marine and glacial till soils. Given the relatively light design axial loads (35 kips), it is likely that the piles will be designed as friction piles. Given the limitations on excavation within the SCA area (VRAP condition) and the fact that other structures associated with the Ocean Gateway project will be supported on large-diameter steel pipe piles, we considered the possibility of using a single large-diameter pipe pile at each column location. The pile to column connection could consist of a bearing plate welded to the top of the pipe pile, or secured to the pile with reinforcing embedded in pile concrete fill. We evaluated a 16 inch diameter steel pipe pile with a 0.375 inch wall thickness, driven open ended to support the design column load.

The pile should be driven into the underlying inorganic marine, and possibly glacial till, deposits to develop a minimum ultimate geotechnical capacity of 78.8 kips which provides for a minimum geotechnical factor of safety of 2.25 on the design axial loads. Calculations assuming skin friction on the outside of the pile and no end bearing capacity (pile driven

open-ended) indicate that a pile with a total length of 70 feet (ignore top 30 feet of SCA fill and harbor bottom deposits) will be capable of safely supporting the design column loads. Anticipated pile settlement is on the order of ¼ inch.

Lateral pile load evaluations were conducted to assess the possible lateral pile head movements under the maximum design horizontal load of 25 kips. We used the LPILE Plus-Version4 computer program for the evaluations. We looked at both the free-head and the fixed-head conditions to try and bracket the range of predicted lateral pile head movements. For the fixed-head condition the predicted pile head movement was on the order of 0.5 in. and for the free-head condition the predicted movement was on the order of 2.1 in. The results of the lateral pile load assessment are presented in graphical form in the attached 6 sheets.

There are other foundation options for support of the columns located within the SCA area. A more conventional foundation would consist of a pile cap supported on a minimum of 2 or 3 piles. The bottom of the pile cap would be located at a depth of approximately 4.5 feet below ground surface, requiring excavation of SCA material and meeting the requirements of the VRAP. Piles supporting the pile cap would have a minimum ultimate geotechnical capacity (design capacity times 2.25 geotechnical factor of safety) of from about 27 kips (3-pile group) to 40 kips (2-pile group). The top 30 feet of soil should still be ignored. Treated timber piles would be suitable for this application. Assuming a nominal 12 inch diameter pile within the bearing zone, the depth of penetration into inorganic marine deposits would be on the order of 21 feet for the 27-kip capacity pile and 32 feet for the 40-kip capacity pile. Therefore, the total pile length for timber piles would be approximately 51 feet for the 27-kip capacity pile (3-pile group) and 62 feet for the 40-kip capacity pile (2-pile group).

It is noted that there could be obstructions (rock fragments, timber pile debris, etc.) within the SCA fill that could affect pile installation. The obstructions, if encountered, would likely be within the top 15 to 20 feet of the soil profile. The contractor might have to use a spud to move small obstructions or excavate and remove larger obstructions.

As noted, foundations located to the north of the seawall can be designed in accordance with the recommendations contained in our 17 November 2003 memorandum. It is possible that earth-supported foundations could experience settlement on the order of ¾ to 1 inch of settlement. The pile foundations described herein are expected to experience settlement on the order of ¼ inch, so the structure would need to be designed to accommodate differential settlements on the order of ½ to ¾ inch between the pile-supported and the earth-supported foundations.

It is also noted that there will be some foundations that will span over the existing seawall. It is noted the northern side of the seawall will likely have a stepped configuration used to create a gravity structure. New foundations located in the immediate vicinity of the land-side of the seawall could be impacted by the presence of the stepped structure. A geophysical investigation was undertaken by Hager GeoScience, Inc. (Hager) in 2004 for Woodard & Curran to assist in locating the Portland Water District force main and to provide information on the seawall in the vicinity of the RoRo structure. A report dated March 2004 prepared by Hager indicated at the RoRo location the back side of the seawall could extend 10 to 15 feet from the front face of the wall. If the wall configuration at the Receiving Station is similar,

seawall remnants could be expected to be present in foundation excavations located adjacent to the wall. A footing preparation detail similar to the one that was presented in our 17 November 2003 memorandum would likely be appropriate. As soon as the revised foundation plan for the Receiving Station is developed, we can review the conflicted foundations and provide specific comments and recommendations.

The facility design includes an earth-supported concrete slab within the building limits. Some of the slab will be inside the building and some will be outside but under the roof. The existing fill soils are considered to be moderately frost-susceptible. Recommendations for the floor slab contained in our 17 November memorandum are still considered appropriate. However, the concrete slabs located under the roof in unheated areas will be susceptible to localized differential movement from frost action. It is possible that some cracking and distress of the cast-in-place concrete will occur. Articulated paving blocks could better accommodate the differential movement related to possible frost action or ground surface settlement.

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Attachments:
L-Pile Summary Sheets (6)

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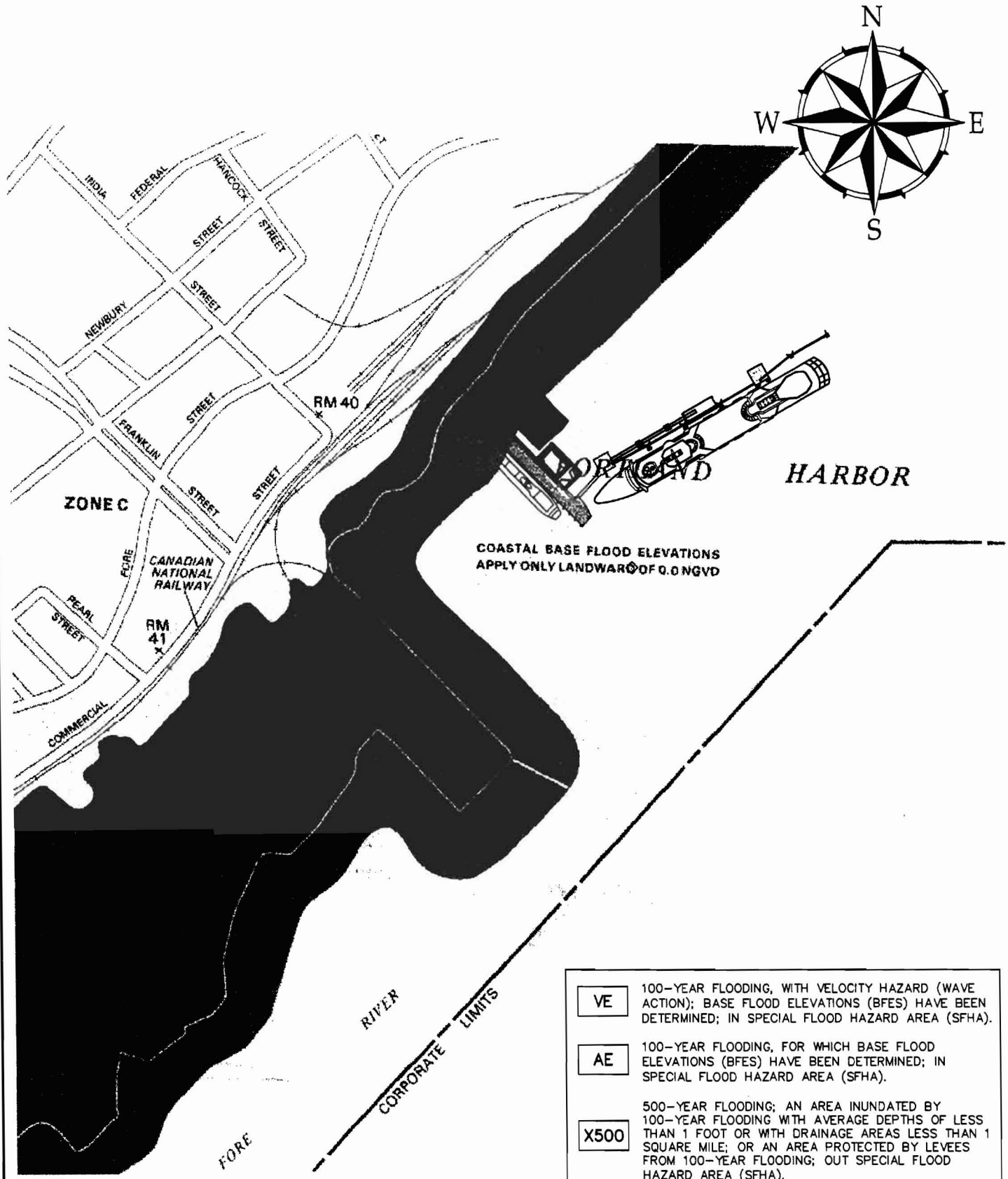


VE	100-YEAR FLOODING, WITH VELOCITY HAZARD (WAVE ACTION); BASE FLOOD ELEVATIONS (BFES) HAVE BEEN DETERMINED; IN SPECIAL FLOOD HAZARD AREA (SFHA).
AE	100-YEAR FLOODING, FOR WHICH BASE FLOOD ELEVATIONS (BFES) HAVE BEEN DETERMINED; IN SPECIAL FLOOD HAZARD AREA (SFHA).
X500	500-YEAR FLOODING; AN AREA INUNDATED BY 100-YEAR FLOODING WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; OR AN AREA PROTECTED BY LEVEES FROM 100-YEAR FLOODING; OUT SPECIAL FLOOD HAZARD AREA (SFHA).

NOTE:

SOURCE: FIRM FLOOD INSURANCE RATE MAP – FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), ~~MAINE OFFICE OF GEOGRAPHIC INFORMATION SYSTEMS (MEGIS, COMP.)~~ COMMUNITY PANELS ____ & ____.

500 0 500 1000
scale feet

WOODARD & CURRAN
Engineering · Science · Operations
PORTLAND, MAINE 800-426-4262

FLOOD MAP

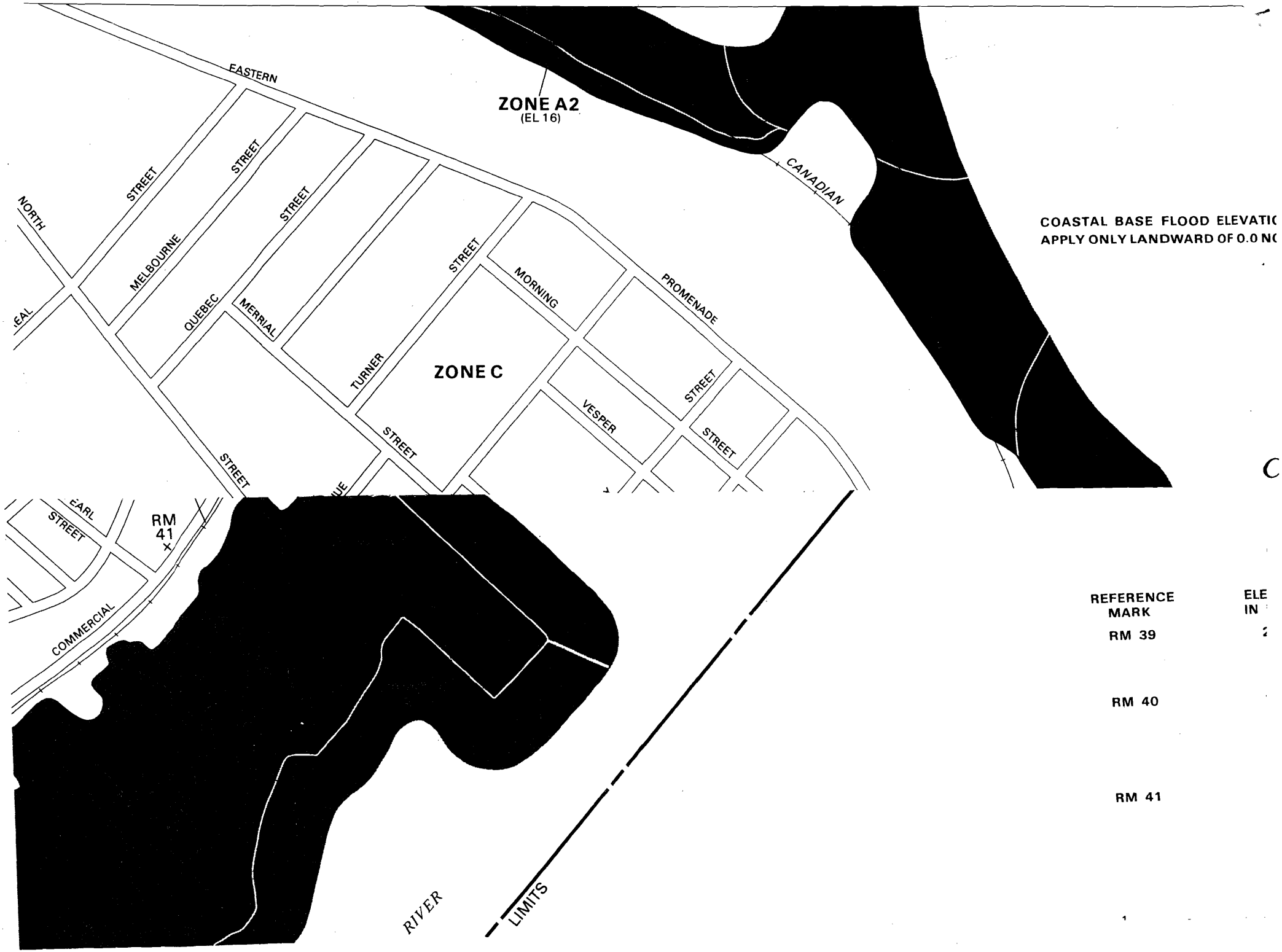
DESIGNED BY: JBC/DAS | CHECKED BY: BSS
DRAWN BY: JBC/DAS | FLOOD MAP.dwg

CITY OF PORTLAND AND MAINE
DEPARTMENT OF TRANSPORTATION

OCEAN GATEWAY

JOB NO: 203438.02
DATE: FEBRUARY 2004
SCALE: 1" = 500'±

Flood Map



COASTAL BASE FLOOD ELEVATI
APPLY ONLY LANDWARD OF 0.0 N

C

REFERENCE MARK	ELE IN
RM 39	
RM 40	
RM 41	

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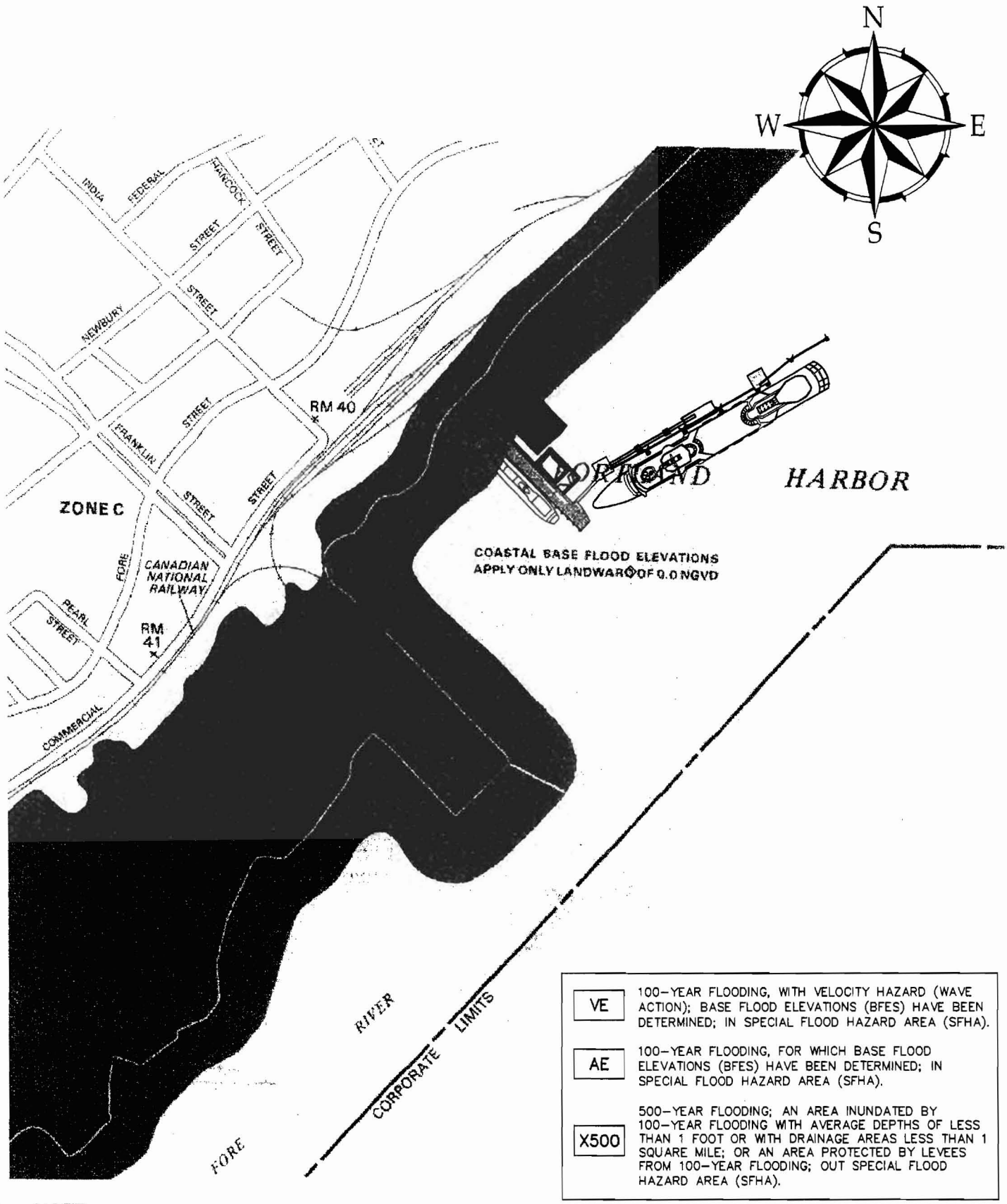
G:\PROJECTS\26354\012\Client Memo.doc



VE	100-YEAR FLOODING, WITH VELOCITY HAZARD (WAVE ACTION); BASE FLOOD ELEVATIONS (BFES) HAVE BEEN DETERMINED; IN SPECIAL FLOOD HAZARD AREA (SFHA).
AE	100-YEAR FLOODING, FOR WHICH BASE FLOOD ELEVATIONS (BFES) HAVE BEEN DETERMINED; IN SPECIAL FLOOD HAZARD AREA (SFHA).
X500	500-YEAR FLOODING; AN AREA INUNDATED BY 100-YEAR FLOODING WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; OR AN AREA PROTECTED BY LEVEES FROM 100-YEAR FLOODING; OUT SPECIAL FLOOD HAZARD AREA (SFHA).

NOTE:

SOURCE: FIRM FLOOD INSURANCE RATE MAP – FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), ~~MAINE OFFICE OF GEOGRAPHIC~~ COMMUNITY ~~INFORMATION SYSTEMS (MEGIS, COMP.)~~ PANELS ____ & ____.

500 0 500 1000

scale feet

WOODARD & CURRAN
Engineering · Science · Operations
PORTLAND, MAINE 800-426-4262

FLOOD MAP

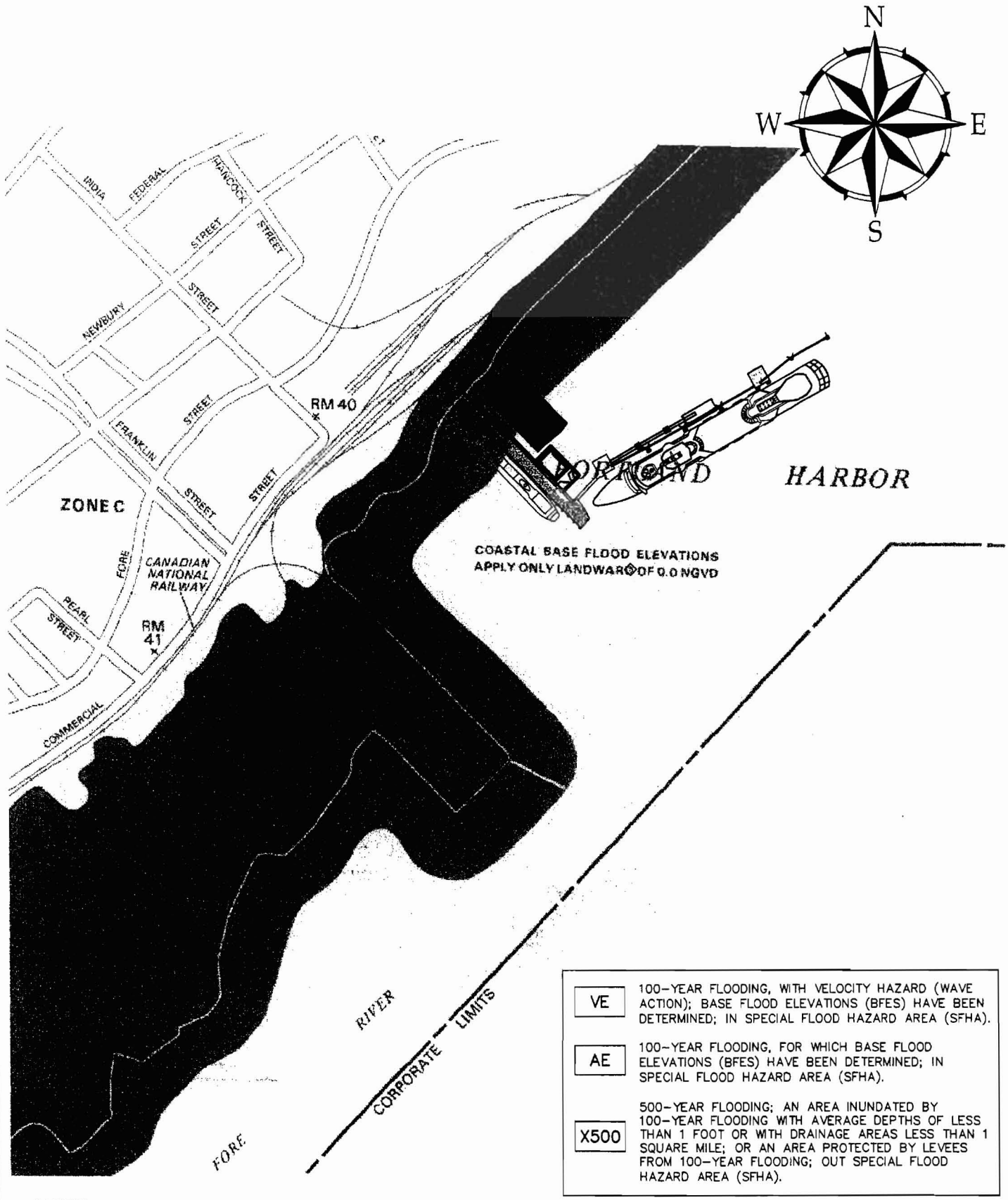
DESIGNED BY: JBC/DAS	CHECKED BY: BSS
DRAWN BY: JBC/DAS	FLOOD MAP.dwg

CITY OF PORTLAND AND MAINE DEPARTMENT OF TRANSPORTATION

OCEAN GATEWAY

JOB NO: 203438.02
DATE: FEBRUARY 2004
SCALE: 1" = 500'±

Flood Map



VE	100-YEAR FLOODING, WITH VELOCITY HAZARD (WAVE ACTION); BASE FLOOD ELEVATIONS (BFES) HAVE BEEN DETERMINED; IN SPECIAL FLOOD HAZARD AREA (SFHA).
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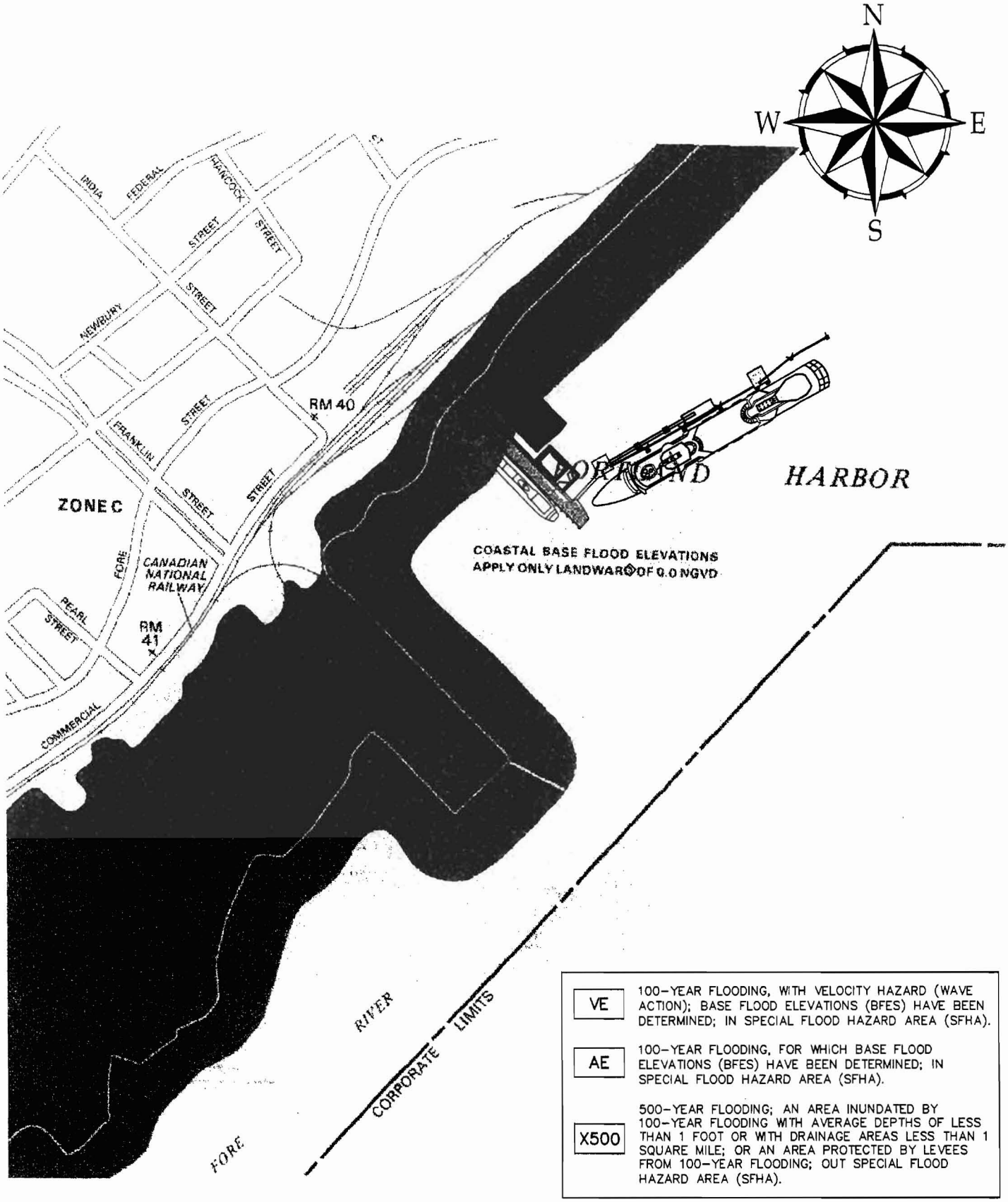
NOTE:

SOURCE: FIRM FLOOD INSURANCE RATE MAP – FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), ~~MAINE OFFICE OF GEOGRAPHIC~~ COMMUNITY ~~INFORMATION SYSTEMS (MEGIS, COMP.)~~ PANELS ____ & ____.

500 0 500 1000

scale feet

WOODARD & CURRAN Engineering · Science · Operations PORTLAND, MAINE 800-426-4262	FLOOD MAP	CITY OF PORTLAND AND MAINE DEPARTMENT OF TRANSPORTATION	JOB NO: 203438.02 DATE: FEBRUARY 2004 SCALE: 1" = 500'±
	DESIGNED BY: JBC/DAS CHECKED BY: BSS DRAWN BY: JBC/DAS FLOOD MAP.dwg	OCEAN GATEWAY	Flood Map



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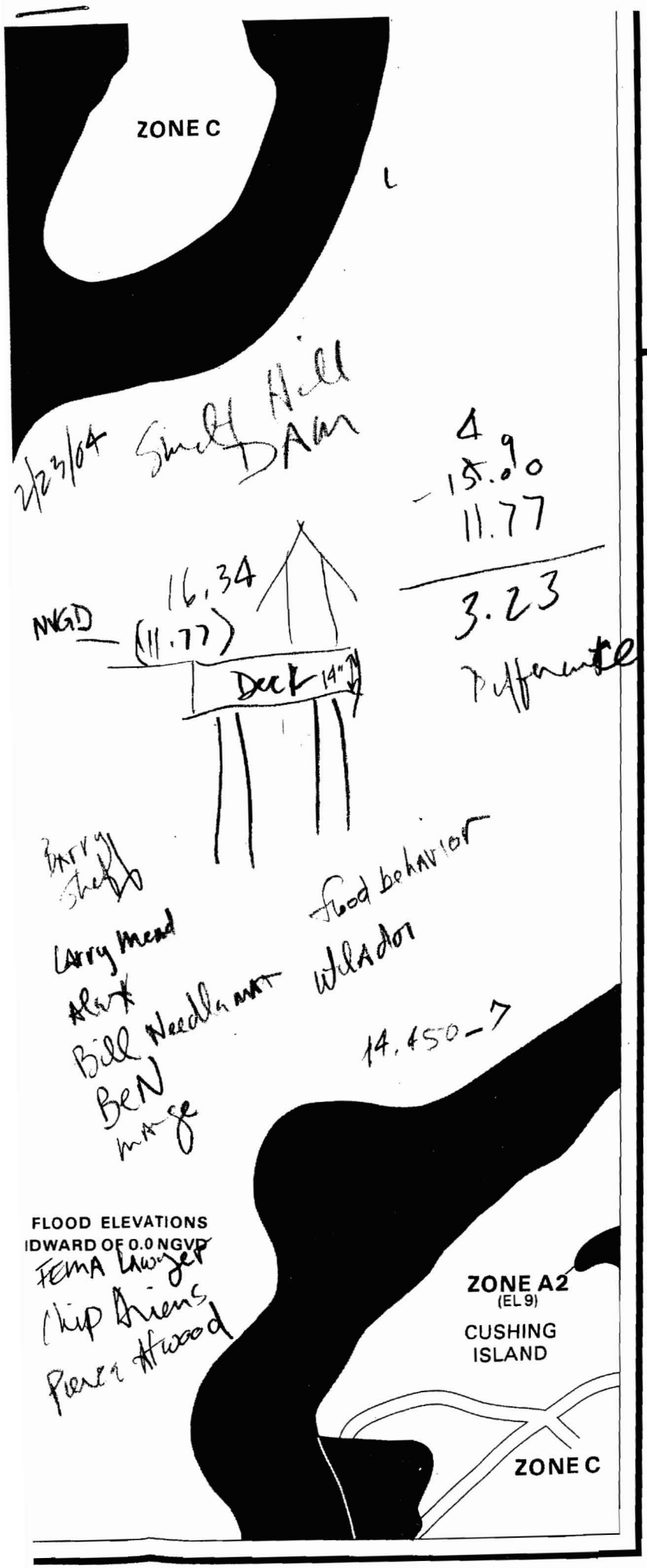
NOTE:

SOURCE: FIRM FLOOD INSURANCE RATE MAP – FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), ~~MAINE OFFICE OF GEOGRAPHIC~~ COMMUNITY ~~INFORMATION SYSTEMS (MEGIS, COMP.)~~ PANELS ____ & ____.

500 0 500 1000

scale feet

WOODARD & CURRAN Engineering · Science · Operations PORTLAND, MAINE 800-426-4262	FLOOD MAP	CITY OF PORTLAND AND MAINE DEPARTMENT OF TRANSPORTATION	JOB NO: 203438.02 DATE: FEBRUARY 2004 SCALE: 1" = 500'±
	DESIGNED BY: JBC/DAS CHECKED BY: BSS DRAWN BY: JBC/DAS FLOOD MAP.dwg	OCEAN GATEWAY	Flood Map



structures in the zones where elevations or depths have been established.

To determine if flood insurance is available in this community, contact your insurance agent, or call the National Flood Insurance Program, at (800) 638-6620.

APPROXIMATE SCALE

400 0 400 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

CITY OF
PORTLAND, MAINE
CUMBERLAND COUNTY

PANEL 14 OF 17
(SEE MAP INDEX FOR PANELS NOT PRINTED)

14" Th

COMMUNITY-PANEL NUMBER
230051 0014 B

EFFECTIVE DATE:
JULY 17, 1986

built per 82-83 1979 Aerial

Federal Emergency Management Agency

203438.01 / 1.25

FILE

Department of Transportation
Port of Portland
Portland Fish Pier Authority

CITY OF PORTLAND

Capt. Jeffrey W. Monroe
Director

Benjamin Snow
Manager, Marine
Operations and Administration

December 24, 2003

Mr. Barry Sheff
Woodard & Curran
41 Hutchins Drive
Portland, Maine 04102

Re: Stormwater Management at Ocean Gateway

Dear Barry,

In response to your request, PDOT is pleased to provide its commitment to inspect, clean and maintain the casco traps, catch basins and stormwater treatment units (in accordance with manufacturers recommendations) to be installed on the Ocean Gateway site as part of the project. The commitment will cover all units, outside new or existing street ROW's, including surface parking lots and the intermodal loop.

We understand that the Portland Public Works department is committing to stormwater systems maintenance in the new public ROW's planned for the extensions of Hancock Street and the extension of Commercial Street.

Sincerely,

Capt. Jeffrey Monroe, MM
Director

Cc: David Cohan, PDOT Asset Manager

C:/mydocuments/stormwater12242003.doc

WOODARD & CURRAN
Engineering • Science • Operations

41 Hutchins Drive • Portland, ME 04102
(207) 774-2112 • 1-800-426-4262
Fax: (207) 774-6635

CORPORATE OFFICES: Maine, Massachusetts,
New Hampshire, Connecticut, New York, New York, Florida
Operational offices throughout the U.S.

TRANSMITTAL

TO: Mike Nugent, Manager
Inspection Services Program
City Hall – Room 315
Portland, ME 04103

DATE: September 26, 2005
PROJECT NAME: Ocean Gateway
PROJECT NUMBER: 203438.11

DEPT. OF BUILDING INSPECTION
CITY OF PORTLAND, ME
SEP 27 2005
RECEIVED

RE: Certificate of Design and Accessibility Certificate Forms

WE ARE SENDING:

- ☐ Quotation
- ☐ Brochure
- ☐ Change Order
- ☐ Drawings
- ☐ Schedule
- ☐ Manuals
- ☐ Bid Package
- ☐ Installation Package
- ☒ Other (specify): Permit Forms
- ☐ Floppy Disk / CD
- ☐ Sample

Qty	Doc. No.	Rev. No.	Dated	Description
1			9/12/2005	Accessibility Cert. and Cert. of Design forms from Architect (4 total – 2 bldgs)
1			9/16/2005	Certificate of Design – Pier 2, from Marine Engineer

For Your:

- ☐ USE
- ☒ APPROVAL
- ☐ REVIEW/COMMENTS
- ☐ INFORMATION
- ☐ OTHER

Sent By:

- ☐ REGULAR MAIL
- ☐ FEDERAL EXPRESS
- ☐ UPS
- ☐ COURIER
- ☒ OTHER – Dropped off by W&C at City Hall

Mike:

Enclosed are the 1999 BOCA Certificate of Design forms and the Accessibility Certificate for the Ocean Gateway project. We are putting together the Statement of Special Inspections and hope to get that to you very soon. Please contact me if you have any questions, (207) 774-2112.

Thanks,
Dave Senus

CC: Dustin Littlefield, Reed & Reed

BY: DAS

WOODARD & CURRAN
Engineering • Science • Operations

41 Hutchins Drive • Portland, ME 04102
(207) 774-2112 • 1-800-426-4262
Fax: (207) 774-6635

CORPORATE OFFICES: Maine, Massachusetts,
New Hampshire, Connecticut, New York, New York, Florida
Operational offices throughout the U.S.

TRANSMITTAL

TO: Mike Nugent, Manager
Inspection Services Program
City Hall – Room 315
Portland, ME 04103

DATE: October 13, 2005
PROJECT NAME: Ocean Gateway
PROJECT NO: 4[illegible]1

DEPT. OF BUILDING INSPECTION
CITY OF PORTLAND, ME
OCT 13 2005
RECEIVED

RE: Special Inspection Plan – Ocean Gateway

WE ARE SENDING:

- ☐ Quotation
- ☐ Brochure
- ☐ Change Order
- ☐ Drawings
- ☐ Schedule
- ☐ Manuals
- ☐ Bid Package
- ☐ Installation Package
- ☒ Other (specify): Inspection Plan
- ☐ Floppy Disk / CD
- ☐ Sample

Qty	Doc. No.	Rev. No.	Dated	Description
1			10/11/2005	**Special Inspection Plan for Ocean Gateway**

For Your:

- ☐ USE
- ☒ APPROVAL
- ☐ REVIEW/COMMENTS
- ☐ INFORMATION
- ☐ OTHER

Sent By:

- ☐ REGULAR MAIL
- ☐ FEDERAL EXPRESS
- ☐ UPS
- ☐ COURIER
- ☒ OTHER – Dropped off by W&C at City Hall

Mike:

Enclosed is the Special Inspection Plan drafted by the design team and signed by the Special Inspections Coordinator, the City of Portland (Owner) and the two design firms (Architect's Structural Engineer and Marine Structural Engineer) that developed the inspection plan and the design drawings. Please let me know if you have any questions.

Thanks,
Dave ~~Senus~~ DAS

CC: Dustin Littlefield, Reed & Reed

BY: DAS

SPECIAL INSPECTION PLAN
Ocean Gateway, Phase I
Portland, ME

Part 1 GUIDELINE

Abbreviations:

RDP – Registered Design Professional
SIC – Special Inspections Coordinator
SI – Special Inspector
TL – Testing Laboratory
BO – Building Official

The Registered Design Professional (**RDP**) that developed, stamped and signed the Official (permitted) Documents has prepared this plan, outlining the required testing and inspection program.

The Special Inspection Coordinator (**SIC**) identified in this plan shall keep records of all inspection and shall furnish Field Reports to the Building Official (**BO**) and the **RDP.**

The Special Inspector (**SI**) shall observe that the portions of the work identified in this plan are performed in substantial compliance with the Official (permitted) Documents and any subsequent written revisions or clarifications issued by the **RDP**. The Official Documents comprise the plans approved by the **BO**, issued amendments, specifications with associated amendments and the approved Special Inspection Plan.

The **SI** shall not make any design decisions, direct the Contractor's work, be responsible for construction means and methods, be responsible for job site safety nor for enforcing or monitoring compliance with any OSHA or Labor Regulation whatsoever.

The **SI** shall hold a current and valid certificate of authorization, or license which allows the **SI** to perform this kind of work, and must posses at least 10 years of verifiable experience and be knowledgeable of the structural system being used in this project.

1.1 DUTIES

The **SIC** shall maintain a record (Field Report) of the progress, working conditions, comments and observations given to the Contractor and any deviation from the Approved Documents. The **SIC** and **SI** must be thoroughly familiar with Project Specifications and the applicable Building Codes and are also responsible for the exercise of good judgment.

The **SIC** must bring to the attention of the **RDP** any deficiency, deviation from Official Documents or suspected deficiencies or deviations. In addition, the **SIC** must secure

clarifications to the drawings and responses to field generated problems as the need arises.

The **SIC** is to prepare a Field Report after each inspection leaving always a copy with the Contractor at the job site. The **SIC** must also maintain in a readily available location, preferably near the Official Documents, a Log of Inspections, summarizing the areas inspected and whether approved or not, which will be turned submitted the **RDP** and **BO** along with the Final Certificate of Compliance.

Each Field Report should clearly indicate all areas inspected and whether approved or not. If approval is denied, then the deficiencies and an indication on whether a re-inspection is required should be clearly noted. In addition, applicable Testing Laboratory (**TL**) Reports (compaction, pile monitoring, mill reports, etc.) should be made available to the **SIC** as soon as possible, for inclusion with the Field Report. The **TL** and **SI** shall duly make the **SIC** immediately aware of any changes, modifications done in the field, deviations from the Official Documents, poor workmanship (exposed reinforcement, excessive slumps, columns out of plumb, honeycombs, eccentricities, cracks, etc.) and areas poured or covered up without inspection.

Each Field Report should also indicate the date, time, weather conditions and the name and signature of the **SI** and/or **TL**.

The **SIC** must, as soon as possible, bring to the attention of the **RDP** changes generated in the field, deviations from the Approved Documents and areas of poor or faulty workmanship which require resolution through directives issued by the **RDP**. Any observed changes, deviations or areas of poor or faulty workmanship shall be recorded in the Field Report. The resolution to these issues must also be recorded in the Field Report.

1.2 RESPONSIBILITY

The presence of an **SI** or **TL** on site does not relieve the **BO** or the **RDP** of their respective responsibilities; additionally, the Contractor's contractual or statutory obligations are not in any way relieved or forgone. The Contractor has the sole responsibility for any deviations from the approved Official Documents, for quality control, for job site safety and compliance with OSHA and Labor Laws.

It is the responsibility of the **SI** to observe and ensure the placement and installation of structural components is in conformance with the Official Documents and to work with the **SIC** in preparing a Field Report as described above.

It is the responsibility of the **SIC** to ensure that inspections and testing occur in conformance with this plan, to generate Field Reports as described above, to create a Log of Inspections as described above, to bring to the attention of the **RDP** any

observed discrepancies or deviations from the Official Documents and to issue a Final Certificate of Compliance at the end of the structural work to the **BO** and **RDP**.

The **SI**, **TL** and **SIC** are to provide services only with regard to the components identified within this Inspection Plan.

1.3 SUBMITTALS

Once a week, or as required by the **BO**, the **SI** shall submit copies of the Field Reports to the **BO,** the **RDP**, and any other party designated by the Architect to receive them. The reports are to be submitted with a signed and sealed cover letter which identifies the period and the reports being submitted.

1.4 FINAL CERTIFICATION

Upon completion of the job, a signed and sealed Certificate of Compliance for each structure requiring inspection shall be issued by the **SIC** to the **BO** with copies to the **RDP**, the Owner, and any other designated person. The Final Certificates of Compliance shall state substantially: "To the best of my knowledge, ability and belief, the above referenced structure's load bearing components have been constructed in compliance with the Approved Official Documents and any clarifications or corrections issued by the Engineer of Record. In addition, the shoring and re-shoring of this structure conforms with the approved shoring and re-shoring plans submitted to the Building Official and made available to us."

1.5 CONCLUSION

These Guidelines together with the Inspection Plan that follows are intended to be an outline of the minimum requirements for the performance of the **SIC**'s work. Additional requirements may be deemed necessary during the course of construction due to the progress of and the manner in which the job is conducted by the General Contractor.

The Owner must make available to the **SIC** all pertinent documents relating to the construction of this project - Approved Shop Drawings, Concrete Cylinder and Soil Compaction Test results, Pile Driving Logs, Stressing Records, Mill Records, etc.

Part 2 INSPECTION PLAN

2.1 FOUNDATIONS

2.1.1 STEEL PILE FOUNDATIONS

TL: Confirm pipe steel grade; verify qualifications of welding personnel; verify adequacy of welding electrodes used; verify weld procedure specifications; verify and certify

adequacy of pipe splice fit-up and welds; concrete-fill mix verification,

SI: Verify pile size, length, and pile tip; inspect pile coating for defects and damage; confirm pile straightness; inspect and log pile driving operations recording pile driving resistance, tip elevation; verify compliance with driving criteria; verify pile location; inspect piles for damage from driving and plumbness; inspect and verify placement of concrete-fill.

2.1.2 CONCRETE SPREAD FOOTINGS

TL: Verify grade of reinforcing steel; concrete mix verification; slump and concrete cylinder tests; bottom of excavation compaction monitoring and testing.

SI: Verify reinforcing steel placement, grade, size, quantity, cover, splices; verify quantity and size of column dowels. Secure column redesign, if required, from **RDP**.

2.2 SLAB ON GRADE

TL: Verify grade of reinforcing steel; concrete mix verification; slump and concrete cylinder tests; compaction monitoring and testing.

SI: Verify reinforcing steel placement, grade, size, quantity, cover, splices.

2.3 COLUMNS

TL: Verify grade of reinforcing steel; concrete mix verification; slump and concrete cylinder tests.

SI: Verify reinforcing steel placement, grade, size, quantity, cover, splices. Monitoring and approving all data.

2.4 REINFORCED MASONRY

TL: Verify masonry unit compressive strength; confirm grout mix; verify through Prism Tests.

SI: Verifying reinforcing steel placement, grade, size, quantity, cover, splices; verify full cell grouting; visually check wall alignment and plumbness.

2.5 CONCRETE SLABS

TL: Verify grade of reinforcing steel; concrete mix verification; slump and concrete cylinder tests.

SI: Verify reinforcing steel placement, grade, size, quantity, cover, splices; verify size and location of supporting chairs.

2.6 STRUCTURAL STEEL

TL: Verify and certify adequacy of welds and bolt torque (33% at random minimum) in connections; verify qualifications of welding personnel; verify adequacy of welding electrodes used; verify bolt type; confirm steel grade.

SI: Verify adequacy of installation; verify end anchorage, inserts (if any) and member to member connections; verify required bridging; look for bent, warped, or damaged members and secure required corrections from **RDP**; secure from **RDP** verification of any special or unusual conditions. Use digital photography as part of formal record-keeping and send **RDP** photos of end anchorage, inserts and member-to-member connections.

2.7 PRESTRESSED CONCRETE

SI: Verify top surface finish of panels; inspect panels for damage; verify location of panels; verify grade, placement, and cover of overlay reinforcement; secure from **RDP** verification of any special or unusual conditions; verify shear key grout; verify high-pressure cleaning of shear keys; confirm placement of shear key grout. Verify the following from the precast supplier: Concrete mix verification; verify air content, unit weight, slump, w/c ratio, and concrete cylinder tests; verify reinforcing steel placement, grade size, quantity, cover, and splices; verify stressing and protection of prestressed tendons.

2.8 LIGHT GAUGE METAL FRAMING

TL: Verify member gauge.

SI: Verify adequacy of installation; verify end anchorage, inserts (if any) and member to member connections; verify required bridging: look for bent, warped or damaged members and secure required corrections from **RDP**; secure from **RDP** verification of any special or unusual conditions.

2.9 SHORING AND RESHORING

TL: Verify lumber stress grade.

SI: Relay formwork designer's signed and sealed shoring drawings and calculations to the **BO**, **RDP** by way of the **SIC**; verify adequacy of field installation and certify same prior to any slab pour. Shoring drawings to indicate all required vertical members, spacing, bracing; all horizontal members, spacing, bracing; shoring and re-shoring

sequence and requirements. Verify that the Formwork Designer has certified the shoring and reshoring prior to any slab pour.

2.10 SEISMIC JOINT

TL: Verify conformance with specification

SI: Verify adequacy of installation

2.11 GENERAL

SI: Verify column plumbness; finished concrete surfaces; check for honeycombing, cracks, poor workmanship; report any problems or conflicts immediately and secure from RDP any required corrections or re-designs.

2.12 RO-RO RAMP MECHANICAL

SI: Observe Testing as described in Section 14900 RO-RO Ramp, Section 6.0 Testing.

Part 3 APPROVALS

Title	Individual / Firm	Address, Phone #
Special Inspection Coordinator	Ken Page Maine Department of Transportation	Job Trailer at Ocean Gateway 36 Commercial St, Portland (207) 772-2579
Special Inspector	Ken Page Maine Department of Transportation	Job Trailer at Ocean Gateway 36 Commercial St, Portland (207) 772-2579
Special Inspector	Bruce Brown Maine Department of Transportation	Job Trailer at Ocean Gateway 36 Commercial St, Portland ((207) 772-2579
Registered Design Professional (Architect's Structural Engineer)	Shirley Xue, PE BEA International	4111 Le Jeune Road Coral Gables, FL 33146-1311 Phone: (305) 461-2053
Registered Design Professional (Marine Engineer)	David Pierce, PE PN&D Inc.	811 First Avenue, Suite 570 Seattle, WA 98104 Phone: (206) 624-1387
Testing Laboratory	S.W. Cole Engineering	286 Portland Road Gray, ME 04039-9586 Phone: (207) 657-2866
Testing Laboratory	Maine Department of Transportation	16 State House Station Augusta, ME 04333
Building Official	Mike Nugent City of Portland	City Hall, 3rd Floor 389 Congress Street Portland, ME 04101 Phone: 207-874-8700

Owner's Authorization (City of Portland)

Signature — Date: 10-13-05

Special Inspection Coordinator

Signature — Date: 10-12-05

KENNETH A. PAGE — Name (Printed)

RESIDENT INSPECTOR M.D.O.T. — Title

Registered Design Professional (Terminal Bldg/Receiving Stn./Walkway/VIS)

W.S. Xue — Signature — Date: 10-11-05

W. SHIRLEY XUE — Name (Printed)

BEA International — Company

Registered Design Professional (Pier A/Ro-Ro Ramp)

Signature — Date: 10/12/05

DAVID M PIERCE — Name (Printed)

PMD Inc. — Company

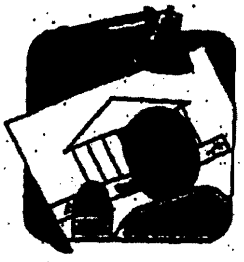
Stamp: STATE OF MAINE · WEIXING S. XUE · N 19709 · REGISTERED PROFESSIONAL ENGINEER

Stamp: STATE OF MAINE · DAVID M. PIERCE · NO. 9437 · REGISTERED PROFESSIONAL ENGINEER

Building Official

Signature — Date

Name (Printed)



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: BEA INTERNATIONAL

DATE: 9/12/05

Job Name: OCEAN GATEWAY PHASE I - RECEIVING STATION

Address of Construction: 40 COMMERCIAL ST PORTLAND MAINE

THE BOCA NATIONAL BUILDING CODE/1999 FourteenthEDITION

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

Building Code and Year BOCA 1999 Use Group Classification(s) GROUP A3-TERMINAL

Type of Construction 3B Bldg. Height 50' Bldg. Sq. Footage 5374 sq.ft.

Seismic Zone C Group Class II

Roof Snow Load Per Sq. Ft. 31 psf Dead Load Per Sq. Ft. 105 psf (Mez) 15 (Roof)

Basic Wind Speed (mph) 85 psf Effective Velocity Pressure Per Sq. Ft. 40 psf

Floor Live Load Per Sq. Ft. 200 psf

Structure has full sprinkler system? Yes X No ____ Alarm System? Yes X 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 X

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

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

PSH 6/07/2K

LICENSED ARCHITECT
BRUNO E. RAMOS
NO. 2644
STATE OF MAINE

(Designers Stamp & Signature)

9/23/05

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: BEA INTERNATIONAL

DATE: 9/12/05

Job Name: OCEAN GATEWAY PHASE I - TERMINAL BUILDING

Address of Construction: 40 COMMERCIAL STREET PORTLAND, MAINE.

THE BOCA NATIONAL BUILDING CODE/1999 FourteenthEDITION

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

Building Code and Year BOCA 1999 Use Group Classification(s) A3 - TERMINALS.

Type of Construction 2B Bldg. Height 49'-5" Bldg. Sq. Footage 16280 sq.ft.

Seismic Zone C Group Class II

Roof Snow Load Per Sq. Ft. 31 psf. Dead Load Per Sq. Ft. 105 (floor) 15 (roof)

Basic Wind Speed (mph) 85 Effective Velocity Pressure Per Sq. Ft. 40 psf.

Floor Live Load Per Sq. Ft. 100 psf 200 psf.

Structure has full sprinkler system? Yes X No ____ Alarm System? Yes X 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 X

If mixed use, what subsection of 313 is being considered N/A.

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

LICENSED ARCHITECT
BRUNO E. RAMOS
NO. 2644
STATE OF MAINE

(Designers Stamp & Signature)

9/23/04

WOODARD & CURRAN
Engineering • Science • Operations

41 Hutchins Drive • Portland, ME 04102
(207) 774-2112 • 1-800-426-4262
Fax: (207) 774-6635

CORPORATE OFFICES: Maine, Massachusetts,
New Hampshire, Connecticut, New York, New York, Florida
Operational offices throughout the U.S.

TRANSMITTAL

TO: Mike Nugent, Manager
Inspection Services Program
City Hall – Room 315
Portland, ME 04103

DATE: October 20, 2005
PROJECT NAME: Ocean Gateway
PROJECT NUMBER: 203438.12

RE: Revised Plans as per VAAP's 20.1, 22, 23, 24

WE ARE SENDING:

- ☐ Quotation
- ☐ Brochure
- ☐ Change Order
- ☒ Drawings
- ☐ Schedule
- ☐ Manuals
- ☐ Bid Package
- ☐ Installation Package
- ☐ Other (specify
- ☐ Floppy Disk / CD
- ☐ Sample

Qty	Doc. No.	Rev. No.	Dated	Description
42			**10/17/2005**	**Revised Design Plans – Ocean Gateway**

For Your:

- ☐ USE
- ☒ APPROVAL
- ☐ REVIEW/COMMENTS
- ☐ INFORMATION
- ☐ OTHER

Sent By:

- ☐ REGULAR MAIL
- ☐ FEDERAL EXPRESS
- ☐ UPS
- ☐ COURIER
- ☒ OTHER – Dropped off by W&C at City Hall

Mike:
Enclosed are some revised design plans for Ocean Gateway:
VAAP 20.1 – Relocation of Receiving Station (and associated Civil Sheets)
VAAP 22 – Redesign of framing of Terminal Bldg to Steel Framing
VAAP 23 – Redesign of framing of Passenger Walkway to Wood
VAAP 24 – Redesign of VIS Roof Columns to Steel as opposed to concrete
Thanks,
Dave Senus

CC:

BY: DAS

CITY OF PORTLAND
ACCESSIBILITY CERTIFICATE

Designer: BEA INTERNATIONAL

Address of Project 40 COMMERCIAL STREET, PORTLAND, MAINE

Nature of Project OCEAN GATEWAY PHASE I
TERMINAL BLDG., RECEIVING STATION, VEHICLE INSPECTION.

Date 9/12/05

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.

LICENSED ARCHITECT
BRUNO E. RAMOS
NO. 2644
STATE OF MAINE

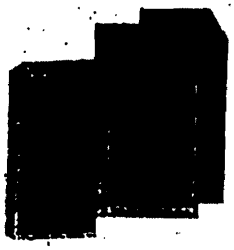
Signature

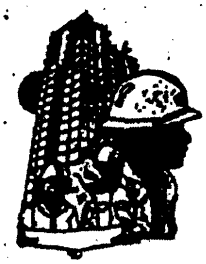
Title President

Firm BEA INTERNATIONAL

Address 4111 LE JEUNE ROAD
CORAL GABLES, FL 33146

Telephone 305 461 2053





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: BEA INTERNATIONAL

RE: Certificate of Design

DATE: 9/12/05

These plans and/or specifications covering construction work on:

40 COMMERCIAL ST. PORTLAND MAINE

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.

LICENSED ARCHITECT
BRUNO E. RAMOS
NO. 2644
STATE OF MAINE

Signature

Title President

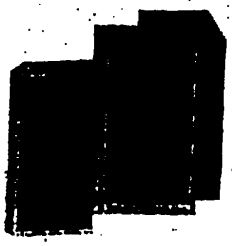
Firm BEA INTERNATIONAL

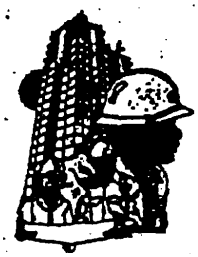
Address 4111 LE JEUNE ROAD
MIAMI FL, 33146

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





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: PND Engineers

RE: Certificate of Design

DATE: 9/16/05

These plans and/or specifications covering construction work on:

Marine / Water Components

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)

STATE OF MAINE
DAVID M. PIERCE
NO. 9437
REGISTERED PROFESSIONAL ENGINEER

Signature

Title Sr VP

Firm PND, Inc.

Address 811 First Ave, Ste 570
Seattle, WA 98110

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

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: PND ENGINEERS

DATE: 9/14/05

Job Name: OCEAN GATEWAY PHASE 1

Address of Construction: 40 COMMERCIAL STREET PORTLAND, ME

THE BOCA NATIONAL BUILDING CODE/1999 FourteenthEDITION

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

Building Code and Year BOCA 1999 Use Group Classification(s) A-3 (PASSENGER TERMINAL)

Type of Construction PIER Bldg. Height NA. Bldg. Sq. Footage NA

Seismic Zone PERFORMANCE CATEGORY 'C' Group Class II

Roof Snow Load Per Sq. Ft. NA Dead Load Per Sq. Ft. PIER DECK ~ 330 psf

Basic Wind Speed (mph) 85 mph Effective Velocity Pressure Per Sq. Ft. 26 psf

Floor Live Load Per Sq. Ft. 250 psf OR HS-25 TRUCK LOADING AT LOADING AREA

Structure has full sprinkler system? Yes____ No X Alarm System? Yes____ No X
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 X

If mixed use, what subsection of 313 is being considered N/A

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

STATE OF MAINE
DAVID M. PIERCE
NO. 9437
REGISTERED PROFESSIONAL ENGINEER

(Designers Stamp & Signature)

PSH 6/07/2K

Haley & Aldrich, Inc.
75 Washington Avenue
Suite 203
Portland, ME 04101-2617

Tel: 207.482.4 600
Fax: 207.775.7666
HaleyAldrich.com

HALEY& ALDRICH

MEMORANDUM

8 December 2005
File No. 26354-012

TO: Woodard & Curran, Inc.
David Senus, P.E.

C: BEA International
Shirley Xue, P.E.

FROM: Haley & Aldrich, Inc.
James Weaver, P.E.

SUBJECT: Foundation Recommendations
Relocated Receiving Station
Ocean Gateway Project

This memorandum presents the results of our evaluations of foundation requirements for the portion of the proposed Receiving Station that may be relocated into the limits of the former BIW Shorezone Containment Area (SCA) as described in the Value-Analysis Alternative Proposal No. 20.1 (VAAP-20.1). This work was undertaken at your request and in accordance with our proposal dated 7 November 2005.

The VAAP-20.1 proposes to move the Receiving Station to avoid the existing Portland Water District 33 inch diameter force main located in the vicinity of building line No. 1. The original building location was sited entirely to the north of the granite block seawall; we provided foundation design and construction recommendations in a 17 November 2003 memorandum to Woodard & Curran. The proposed relocation results in building foundations along Building Line No. 9 being positioned to the south of the seawall. It appears that foundations along building line 9 from A to C will be located over water, and foundations along 9 line from C to H will be located within the limits of the SCA.

The SCA was originally designed as a dredge spoil disposal area and was closed by BIW under the Maine Department of Environmental Protection (MaineDEP) Voluntary Response Action Program (VRAP). A condition of the MaineDEP VRAP certification of completion dated 25 July 2000 indicates that "Excavation of soils beneath the geosynthetic grid are prohibited without written permission of the Deaprtment".

Our primary effort to date has been to assess foundation requirements for the foundations that will be relocated into the SCA area. In our opinion, foundations located to the north of the seawall can be designed in accordance with the recommendations contained in our 17

Commercial 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: City of Portland Pier # 2 - Commercial Street		
Total Square Footage of Proposed Structure: 25,000 S.F.	Square Footage of Lot: 75.5 acre	
Tax Assessor's Chart, Block & Lot Chart# Block# Lot# See Attached Tax Info. & Figure	Owner: Maine Department of Transportation	Telephone: 207-624-3000
Lessee/Buyer's Name (If Applicable)	Applicant name, address & telephone: Reed & Reed, Inc. 275 River Rd Woolwich, ME 04579	Cost Of Work: $ 15,249,276.00 Fee: $

Current Specific use: City of Portland Pier 2

Proposed Specific use: Ocean Gateway Cruise Ship Terminal

Project description: Development of a Multi-Modal Transportation Facility - Cruise Ship Terminal including pier expansion, building construction and site development.

Contractor's name, address & telephone: Same As Applicant

Who should we contact when the permit is ready: DUSTIN LITTLEFIELD

Mailing address: Same As Applicant

Phone: 207-443-9747

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

At the discretion of the Planning and Development Department, additional information may be required prior to permit approval. For further information 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: Dustin Littlefield	**Date:** 7/29/05

Permit Fee: $30.00 for the first $1000.00 Construction Cost, $9.00 per additional $1000.00 cost

This is not a Permit; you may not commence any work until the Permit is issued.

Commercial Building Permit Application Checklist

All of the following information is required and must be submitted in order to help insure an expeditious permitting process.

A Complete Set of construction drawings must include:

Note: Construction documents for construction in excess of $50,000.00 must be prepared by a Design Professional and bear their seal.

- ❑ Cross sections w/framing details
- ❑ Detail of any new walls or permanent partitions
- ❑ Floor Plans & Elevations
- ❑ Window and door schedules
- ❑ Foundation plans with required drainage and damp proofing (if applicable)
- ❑ Electrical and plumbing layout. Mechanical drawings for any specialized equipment such as furnaces, chimneys, gas equipment, HVAC equipment (air handling) or other types of work that may require special review must be included.

Separate permits are required for internal & external plumbing, HVAC, and electrical installations.

If there are any additions to the footprint or volume of the new or existing structure(s), a plot plan is required and must include:

- ❑ The shape and dimension of the lot, footprint of the proposed structure and the distance from the actual property lines drawn to scale. Structures include decks, porches; a bow windows cantilever sections and roof overhangs, sheds, pools, garages and any other accessory structures must be shown.
- ❑ Boundary survey to scale showing North arrow; zoning district and setbacks.
- ❑ First floor sill elevation (based on mean sea level datum)
- ❑ Location and dimensions of parking areas and driveways
- ❑ Location and size of both existing utilities in the street and the proposed utilities serving the building
- ❑ Location of areas on the site that will be used to dispose of surface water.
- ❑ Existing and proposed grade contours
- ❑ Silt fence locations

Surveyor's monuments must be in place and the lot staked for a setback inspection.

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

At the discretion of the Planning and Development Department, additional information may be required prior to permit approval. For further information stop by the Building Inspections office, room 315 City Hall or call 874-8703.

Permit Fee: $30.00 for the first $1000.00 Construction Cost, $9.00 per additional $1000.00 cost

This is not a Permit; you may not commence any work until the Permit is issued.

426.1 permit

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION
AUGUSTA, MAINE
04333-0016

APR 29 2004

JOHN ELIAS BALDACCI
GOVERNOR

DAVID A. COLE
COMMISSIONER

Tax Information

Applicant: City of Portland
Project Location: Southside of Commercial Street at the former BIW site, Tax Map #19 Bk A Lots 14, 15; Tax Map #444 Bk A Lots 1,2,3,5; Tax Map #445 Bk A Lots 1, 2; Tax Map # 446 Block A Lots 1,2 in Portland
Project: Ocean Gateway
Identification Number: Div. 06-00084-A-N
Traffic Engineer: Gorrill-Palmer Consulting Engineers

Pursuant to the provision of 23 M.R.S.A. § 704-A and Chapter 305 of the Department's Regulations, the Department of Transportation has considered the application of Woodward and Curran with supportive data, agency review and other related materials on file.

PROJECT DESCRIPTION

The applicant proposes to construct a cruise ship facility that would have an expanded pier to accommodate deep-water vessels, 476 parking spaces, a 6,510 square foot Receiving Station, a 2,190 square foot Vehicle Inspection Station and areas for queuing for vehicles coming to and from the Scotia Prince, a 10,540 square foot Terminal Building and a 4,020 square foot Passenger Corridor on the Pier. This site is expected to generate 287 a.m. peak hour trips and 539 p.m. peak hour trips. The existing site is permitted for 469 a.m. peak hour trips and 168 p.m. peak hour trips and these will be in addition to the new trips.

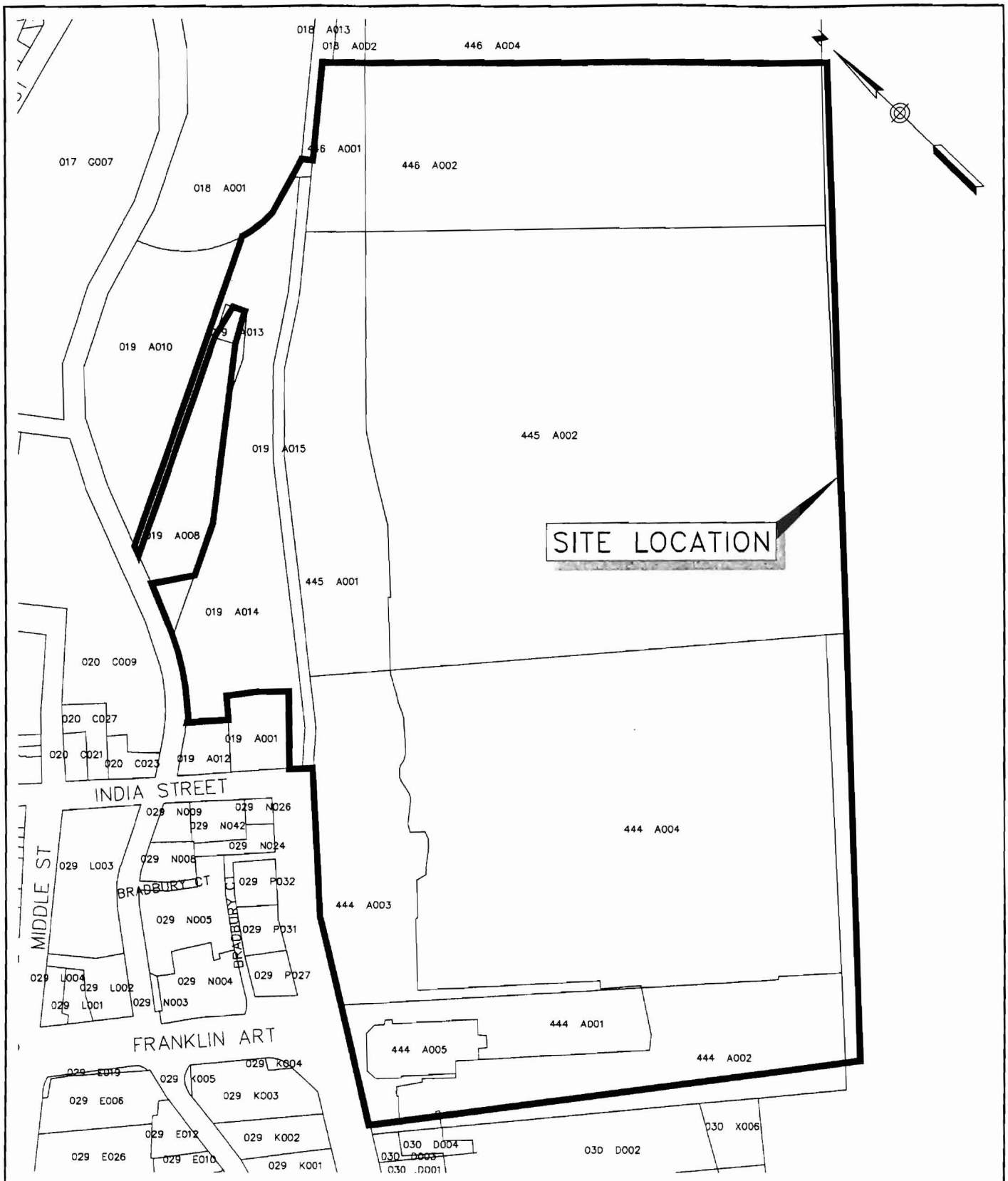
Findings

Based on the review of the files and related information, the Department approves the Traffic Movement Permit application of the Ocean Gateway Project, subject to the following conditions:

On Site Mitigation

A. Overhead lighting shall be provided, if not already existing, to illuminate the intersections of the site entrance to Commercial Street and to all parking lot entrances onto Commercial and Hancock and at the intersection of Hancock Street and Fore Street. Overhead lighting shall have an average of 0.6 to 1.0 foot candles, with the maximum to minimum lighting ration of not more than 10:1 and an average to minimum light level of not more than 4:1.

B. The on-site parking and circulation pattern shall be as shown on sheet C201 of Woodard and Curran's plans revised dated 2/20/04 signed and sealed by Barry S. Sheff. The plan shows a connection of Hancock Street to Fore Street and the construction of several parking lots, as well as direction of flow.



NOTE:

SOURCE: CITY OF PORTLAND – DEPARTMENT OF PUBLIC WORKS – 2003 PARCEL INFORMATION

300± 0 300± 600±
scale feet

WOODARD & CURRAN
Engineering · Science · Operations
PORTLAND, MAINE 800-426-4262

PROPERTY TAX MAP

DESIGNED BY: BC/DAS	CHECKED BY: JBS
DRAWN BY: BC/DAS	20343502-J002 1-SLOD.dwg

CITY OF PORTLAND AND MAINE
DEPARTMENT OF TRANSPORTATION

OCEAN GATEWAY

JOB NO: 20343B.02	
DATE: NOVEMBER 2003	
SCALE: 1" = 300±	

Figure 2.1

From: "David Senus" <dsenus@woodardcurran.com>
To: "Mike Nugent " <MJN@portlandmaine.gov>
Date: Mon, Oct 24, 2005 12:44 PM
Subject: FW: Ocean Gateway Building Permit/Few things

Mike:

We are working with the architect (BEA) to address the questions that you have raised thus far. Here are some responses to the questions you emailed last week (10/21):

Question 1: In calculating the required doorway and stair total widths based on the
occupant load of the second level, it becomes necessary to use the double doors and ramp in order to satisfy exiting requirements. My concern is that the type of construction of the ramp does not fall into the type 2 category used in the building, and where this is a component of required egress, it is a conflict. Comments?

Answer 1: We are working on this issue at this time with the Architect and MDOT. We will have an answer soon.

Question 2: Do any of fuel fired equipment stored in the mezzanines have a BTUH
input capacity greater than 400,000?

Answer 2: The Terminal Building boiler is in excess of 400,000 BTUH, however, the boiler is on the second level of the Terminal Building, not the mezzanine. The Receiving Station boiler is below 400,000 BTUH.

Question 3: On page A1000T, the railing type "A" detail has a bottom opening of 4
inches and it really need to be "less than" 4 inches.

Answer 3: BEA will revise the detail for the contractor to clarify that the distance specified in detail 7 on page A1000-T shows 4" between top of parapet and center of railing structure; therefore less than 4".

Hopefully these are helpful responses. We will be in touch regarding Question 1 and the other questions that you had.

-Dave

-----Original Message-----
From: Gabriel Chavarria [mailto:Gabriel@beai.com]
Sent: Friday, October 21, 2005 6:33 PM
To: Barry Sheff; Larry Levis; Steve Doel (Bennett Engineering)
Cc: David Senus
Subject: RE: Ocean Gateway Building Permit/Few things

Gentlemen,
I am working in question number 1. I will send it soon.

Question 2- As per our code study 2 exits are necessary only when the boiler has more than 400,000 btu.
In Terminal Building Boiler B1 located on the "Upper Level", has an input well in excess of 400,000 Btuh.
The "Receiving Building" boiler (B2) is less than 400,000.

Question 3- The distance specified in detail 7 at page A1000-T shows 4" between top of parapet and center of railing structure. That means less than 4" opening.

Anyway we will provide a small enlarge to be sure the G.C. understand the issue.

Gabriel Chavarria

BEA International

305 461 2053 ext. 220

www.beai.com <BLOCKED::http://www.beai.com/>

-----Original Message-----
From: Barry Sheff [mailto:bsheff@woodardcurran.com <mailto:bsheff@woodardcurran.com>]
Sent: Friday, October 21, 2005 9:40 AM
To: Larry Levis; Gabriel Chavarria; Steve Doel (Bennett Engineering)
Cc: David Senus
Subject: FW: Ocean Gateway Building Permit/Few things

Gentlemen,
Can you please respond to these questions as early as possible. Please coordinate with David Senus and send him responses.

Thanks
Barry

-----Original Message-----
From: Mike Nugent [mailto:MJN@portlandmaine.gov <mailto:MJN@portlandmaine.gov>]
Sent: Friday, October 21, 2005 9:33 AM
To: dpierce@pndsea.com; dlittlefield@reed-reed.com; Barry Sheff
Cc: paul.pottle@maine.gov; acavanagh@reed-reed.com; mbuckbee@reed-reed.com
Subject: Ocean Gateway Building Permit/Few things

In calculating the required doorway and stair total widths based on the occupant load of the second level, it becomes necessary to use the

double doors and ramp in order to satisfy exiting requirements. My concern is that the type of construction of the ramp does not fall into the type 2 category used in the building, and where this is a component of required egress, it is a conflict. Comments?

Do any of fuel fired equipment stored in the mezzanines have a BTUH input capacity greater than 400,000?

On page A1000T, the railing type "A" detail has a bottom opening of 4 inches and it really need to be "less than" 4 inches.

look forward to hearing from you!

CC: "Larry Levis" <LL@beai.com>, <sdoel@bennettengineering.net>, "Aurele Gorneau II (E-mail)" <aurele.gorneauii@maine.gov>, "Barry Sheff" <bsheff@woodardcurran.com>, "Gabriel Chavarria" <Gabriel@beai.com>, "Shirley Xue" <Sxue@beai.com>, "Dustin Littlefield" <dlittlefield@reed-reed.com>

Mike Nugent - FW: Ocean Gateway Building Permit.

From: "David Senus" <dsenus@woodardcurran.com>
To: "Mike Nugent " <MJN@portlandmaine.gov>
Date: 10/24/2005 1:12 PM
Subject: FW: Ocean Gateway Building Permit.

Mike:

I just faxed the sheet. I realized which one you were referring to after leaving a voicemail.

Thanks,
Dave

-----Original Message-----
From: Barry Sheff
Sent: Monday, October 24, 2005 12:43 PM
To: David Senus
Subject: FW: Ocean Gateway Building Permit.

-----Original Message-----
From: Mike Nugent [mailto:MJN@portlandmaine.gov]
Sent: Monday, October 24, 2005 12:00 PM
To: dpierce@pndsea.com; dlittlefield@reed-reed.com; Barry Sheff
Cc: paul.pottle@maine.gov; acavanagh@reed-reed.com; mbuckbee@reed-reed.com
Subject: Ocean Gateway Building Permit.

Page S001-T assigns floor loads to the Second Floor, the Mezzanine and the stairways. What is the design load of the first level of the terminal building?

Same Comment with S001-R

Also the roof load called out in S001-R is the lowest I've seen, just want to confirm the equaltion used , primarily the ground snow load.

What is the final design snow load for the Terminal, It is not specified on page S001-T

I couldn't find exterior roof system in the table of contents of the project specs, I 'm looking for compliance with Section 1505.4.1, Physical Properties and 1505.4.2, Impact resistance and 1506 Fire

classification.

I figured it out...can someone faxe me page "ii" of the spec book , I didn't get one!!!!!!!!!

From: "David Senus" <dsenus@woodardcurran.com>
To: "Mike Nugent " <MJN@portlandmaine.gov>
Date: Thu, Oct 27, 2005 2:56 PM
Subject: FW: FW: Ocean Gateway Building Permit/Ramp

Mike:

BEA is back in the office after the hurricane. Here are some responses to earlier questions. As I mentioned to you yesterday, the ramp will be constructed with structural steel framing for the walls and roof, as per the original plan set.

I know you have a question on the base flood elevation at the Terminal. I need Barry here to answer that question. When you called I was rushing on the way to a meeting so I couldn't answer the call. I promise to be in touch by the end of the day.

Thanks,
Dave

-----Original Message-----
From: Gabriel Chavarria [mailto:Gabriel@beai.com]
Sent: Thursday, October 27, 2005 2:48 PM
To: David Senus
Cc: Barry Sheff; Larry Levis
Subject: RE: FW: Ocean Gateway Building Permit/Ramp

David,
We are here again after this big storm. Thanks God, every body is OK here. Of course some damage to our houses but in my case nothing big.

I'll send you a couple of pictures in next emails.

ANSWER TO QUESTION 1. ramp of Terminal Building.

* As you say, the "ramp" that we used at the project is not a Ramp due its 5% slope (1:20).

There is no definition of RAMP in BOCA code. The only definition appear in NFPA : "A walking surface that has a slope steeper than 1 in 20" [101:3.3]

The only "Ramp" is the end of the structure (close to Receiving Station). At this portion the ramp has 1:12 slope, with the required handrails and a difference in height between landings of 18" (maximum allowed by BOCA code and NFPA is 30") . As we show in the plans, this ramp has the required landing with less than 1:48 slope.

* As a Means of Egress the width is 108 inches (bigger than 44 inches by code) and according to the required capacity (401 persons @ 0.2 inches per person = 81 inches min.).
* In addition we include handrails all over the "ramp" to be sure that the structure is safe for everybody (even though is not required by

code).
* The ramp will be surfaced with approved slip-resistant materials (not only as required by code[1016.7.1 Boca] but on all the surface of the passage).

We are reviewing the additional emails to complete the necessary additional information.

Thanks

Gabriel Chavarria
BEA International
305 461 2053 ext. 220
www.beai.com <BLOCKED::http://www.beai.com/>

-----Original Message-----
From: Mike Nugent [mailto:MJN@portlandmaine.gov <mailto:MJN@portlandmaine.gov>]
Sent: Friday, October 21, 2005 1:48 PM
To: David Senus
Cc: dlittlefield@reed-reed.com; Barry Sheff
Subject: Re: FW: Ocean Gateway Building Permit/Ramp

Thanks Dave!

Actually this plan doesn't show some on the things I need. I'm interested in the pitch (section 1016.3), intermediate landings as required (1016.2.4). The earlier type of construction question is covered in Section 1014.9 and referenced in Section 1016.7.

>>> "David Senus" <dsenus@woodardcurran.com> 10/21/2005 1:32:33 PM >>>

Mike:

I apologize for the missing plan sheet. I will send someone over with a

copy. In the meantime, the CD that we submitted has the plan set as PDF if you ever need to see a sheet (plans are numbered sequentially on the CD). I have also attached the PDF for A200 W to this email.

I can either send someone over with that sheet this afternoon, or, if the PDF is sufficient for your review, I will send someone over on Monday with not only that sheet but also the sheets addressing access to

the mezzanine levels (they are in fed ex from Florida at this time). Let me know what you prefer.

Thanks for working with us on this Mike.

Dave

-----Original Message-----
From: Barry Sheff
Sent: Friday, October 21, 2005 12:59 PM
To: David Senus
Subject: FW: Ocean Gateway Building Permit/Ramp

Can you take care of this. Maybe remind him of the CD we gave him and have a paper copy brought down there.
Thanks
B

-----Original Message-----
From: Mike Nugent [mailto:MJN@portlandmaine.gov <mailto:MJN@portlandmaine.gov>]
Sent: Friday, October 21, 2005 12:57 PM
To: dpierce@pndsea.com; dlittlefield@reed-reed.com; Barry Sheff
Cc: paul.pottle@maine.gov; acavanagh@reed-reed.com; mbuckbee@reed-reed.com
Subject: Ocean Gateway Building Permit/Ramp

Can I get page A200 W, it is not in my plan set and I need to evaluate this for compliance with Section 1016 of the 1999 BOCA Code.

WOODARD & CURRAN
Engineering • Science • Operations

41 Hutchins Drive • Portland, ME 04102
(207) 774-2112 • 1-800-426-4262
Fax: (207) 774-6635

CORPORATE OFFICES: Maine, Massachusetts, New Hampshire, Connecticut, and Florida
Operational offices throughout the U.S.

TRANSMITTAL

Project #: 203438

TO: Marge Schmuckal, Zoning Administrator
City of Portland
City Hall, 3rd Floor
389 Congress Street
Portland, ME 04101

DATE: 9-16-2005

DEPT. OF BUILDING INSPECTION CITY OF PORTLAND, ME SEP 16 2005 RECEIVED

RE: Flood Hazard Development Permit Application - Ocean Gateway

WE ARE SENDING:

QUANTITY	DESCRIPTION
1	Flood Hazard Development Permit Application
1	Article III, Div. 26.5 - Flood Plain Management Regs.

For Your...		Sent By...	
	USE		REGULAR MAIL
X	APPROVAL		FEDERAL EXPRESS
	REVIEW/COMMENTS		UPS
	INFORMATION		COURIER
	OTHER	X	OTHER

COMMENTS:

Marge:

Please find the Flood Hazard Development Permit Application signed by Joe Gray. Site Plans, Flood maps & Property Boundaries have all been submitted to the City as part of Major Site Plan & Building Permit Applications. Let me know if you have any questions, 774-2112.

Thanks,
Dave Senus

CC:

BY: DAS

Elevation Certificates submitted 11/2/04, Marge acknowledged certificates over phone, 9/14/05

FLOOD HAZARD DEVELOPMENT PERMIT APPLICATION

PORTLAND , Maine

(All applicants must complete entire application)
[60.3(e)]

Application is hereby made for a Flood Hazard Development Permit as required under Article II of the Floodplain Management Ordinance of PORTLAND, Maine, for development as defined in said ordinance. This permit application does not preclude the need for other municipal permit applications.

Owner: CITY OF PORTLAND Address: 389 CONGRESS ST, PORTLAND, ME 04101

Ph. No: (207) 541-6900 40 COMMERCIAL ST, PORTLAND, ME 04101 WATERFRONT OFFICE

Applicant: STATE OF MAINE DEPT. OF TRANSPORTATION Address: 16 STATE HOUSE STATION, AUGUSTA, ME 04333

Ph. No: (207) 624-3420 MULTIMODAL - PAUL POTTLE, PROJECT MANAGER

Contractor: REED & REED, INC C/O DUSTIN LITTLEFIELD Address: 275 RIVER ROAD, WOOLWICH, ME 04579

Ph. No: (207) 443-9747

LEGAL DESCRIPTION

Is this lot a part of a subdivision? ☐Yes ☒No If yes, give the name of the subdivision and lot number:

Subdivision: _____ Lot #: _____

Tax Map: 445 Lot #: A001 & A002

Address: 40 Commercial St
Street/Road Name

Zip Code: 04101

General explanation of proposed development: OCEAN GATEWAY - MARINE TRANSPORTATION FACILITY, CONSTRUCTION OF 2 BUILDINGS WITHIN DESIGNATED FLOOD ZONES - TERMINAL BUILDING - RECEIVING STATION

Estimated value of improvements: $15,249,276.00

OTHER PERMITS

Are other permits required from State or Federal Jurisdictions? ☒Yes ☐No

If yes, are copies of these permits attached? ☐Yes ☒No ☐Not Applicable

Federal and State Permits may include but not limited to: ME/DEP/Natural Resource Protection Act, Site Location of Development Act, Metallic Mineral Exploration, Advanced Exploration and Mining; USACE/Section 9 &10 of the Rivers and Harbors Act/ Section 404 of the Clean Water Act; Federal Energy Regulation Commission.

This Section to be completed by Municipal Official

Date: Submitted _____ Fee Paid _____ Reviewed by CEO _____ Reviewed by Planning Board _____

Permit # _____ Issued by _____ Date _____

(This section to be completed by Municipal Official)

LOCATION

Flooding source (name of river, pond, ocean, etc.) _____

☐ V1-30 Zone ☐ VE Zone ☐ AE Zone ☐ A1-30 Zone ☐ A Zone
☐ FRINGE ☐ FLOODWAY (% width of floodplain in A Zone)

If proposed development is in an 'AE' or 'A1-A30' Zone and cross section data is available in the Flood Insurance Study please note the Nearest Cross Section References and Elevation of Base Flood at Nearest Cross Section:

Cross Section	Base Flood Elevation
Above Site _____	Above Site _____
Below Site _____	Below Site _____

Base Flood Elevation (bfe) at the site _____ NGVD [Required for New Construction or Substantial Improvements]

Basis of A Zone bfe determination:
☐ From a Federal Agency ☐ USGS ☐ USDA/NRCS ☐ USACE ☐ Other _____
☐ From a State Agency ☐ MDOT ☐ Other _____
☐ Established by Professional Land Surveyor
☐ Established by Professional Engineer ☐ HEC 2 ☐ HY 7 ☐ Quick 2 ☐ Other _____
☐ Highest Known Water level
☐ Other (Explain) _____

VALUE

If the development involves improvements to an existing structure, the Market Value of existing structure: $ _____
☐ New development or Substantial improvement ☐ Minor improvement or addition to existing development

TYPE OF DEVELOPMENT

Check the appropriate box to the left for the type(s) of development requested, and complete information for each applicable line:

	Dimensions
☐ 1. Residential Structure	
☐ 1a. New Structure	_____
☐ 1b. And to Structure	_____
☐ 1c. Renovations/other changes	
☐ 2. Non-Residential Structure	
☒ 2a. New structures	TERMINAL - 112'×75' (2 FLR) RECEIVING - 77'×77'
☐ 2b. And to Structure	_____
☐ 2c. Renovations/other changes	
☐ 2d. Floodproofing	
☐ 3. Water Dependent use:	
☐ 3a. Dock	_____
☒ 3b. Pier - FOUNDATION FOR TERMINAL BLDG	150'×82'
☐ 3c. Boat Ramp	_____
☐ 3d. Other	_____
☐ 4. Paving	_____

	Cubic Yards
☐ 5. Filling[1]	_____
☐ 6. Dredging	_____
☐ 7. Excavation	_____
☐ 8. Levee	_____
☐ 9. Drilling	
	Number of Acres
☐ 10. Mining:	_____
☐ 11 . Dam: Water surface to be created	_____
☐ 12. Water Course Alteration	
Detailed description must be attached with copies of all applicable state and federal permits.	
☐ 13. Other: Explain _____	

_____

[1]Certain prohibitions apply in Velocity Zones

Attachment and Site Plan - drawn to scale with north arrow

- Show property boundaries, floodway and floodplain lines.
- Show dimensions of the lot.
- Show dimensions and location of existing and/or proposed development on the site.
- Show areas to be cut and filled.
- For New Construction or Substantial Improvement, also include existing grade elevations done by a Professional Land Surveyor, Architect or Engineer.
- For New Construction or Substantial Improvement, attach statement describing in detail how each applicable development standard in Article VI will be met.

Special Note: Substantial Improvement is defined as any reconstruction, rehabilitation, addition or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the start of construction of the improvement. Please refer to the floodplain management ordinance, Article XIII, for more complete definitions of New Construction and Substantial Improvement.
Structures in Velocity Zones are not permitted on fill or excavations. Structures must be built on open foundation systems, i.e., columns, piles, posts. (Article VI §L)

The Applicant Understands and agrees that:

- The permit applied for, if granted, is issued on the representations made herein;
- Any permit issued may be revoked because of any breach of representation;
- Once a permit is revoked all work shall cease until the permit is reissued or a new permit is issued;
- Any permit issued on this application will not grant any right or privilege to erect any structure or use any premises described for any purposes or in any manner prohibited by the ordinances, codes, or regulations of the municipality;
- The applicant hereby gives consent to the Code Enforcement Officer to enter and inspect activity covered under the provisions of the Floodplain Management Ordinance;
- If issued, the permit form will be posted in a conspicuous place on the premises in plain view and;
- If issued, the permit will expire if no work is commenced within 180 days of issuance.

I hereby certify that all the statements in, and the attachments to this application are a true description of the existing property and the proposed development project.

Owner Joseph E [illegible] signature Date 9-16-05

or

Authorized Agent _____ signature Date _____

Form Revised August 2, 1995

TERMINAL BUILDING

FLOOD HAZARD DEVELOPMENT PERMIT
PART I

PORTLAND, **Maine**

(For New Structures or Substantial Improvements)

For new Structures or Substantial Improvements, this Flood Hazard Development Permit allows construction only up to the establishment of the lowest floor. Once the lowest floor is established, the permittee must provide an elevation certificate establishing the as built lowest floor elevation. When the Code Enforcement Officer finds the documentation to be in compliance with the Floodplain Management Ordinance, the permittee must then apply for the Part II Flood Hazard Development Permit in order for construction to continue.

For new Structures or projects that are deemed Substantial Improvements, the grade elevation at the lowest grade adjacent to the existing or proposed wall is: 11.77 NGVD.

The proposed Lowest Floor Elevation will be 12.3.
(for V1-30 and VE Zones the lowest floor elevation is measured at the bottom of lowest structural horizontal part of the structure)

Sewage disposal: ☐ existing ☒ proposed ☐ not applicable Type WET WELL TO FORCEMAIN TO SHORE (INTO CITY SEWER

Tax Map: 445 Lot #: A002

The permittee understands and agrees that:

- The permit is issued on the representations made herein and on the application for permit;
- The permit may be revoked because of any breach of representation;
- Once a permit is revoked all work shall cease until the permit is reissued or a new permit is issued;
- The permit will not grant any right or privilege to erect any structure or use any premises described for any purposes or in any manner prohibited by the ordinances, codes, or regulations of the municipality;
- The permittee hereby gives consent to the Code Enforcement Officer to enter and inspect activity covered under the provisions of the Floodplain Management Ordinance;
- The permit form will be posted in a conspicuous place on the premises in plain view and;
- The permit will expire if no work is commenced within 180 days of issuance.

I hereby certify that all the statements in, and the attachments to this permit are a true description of the existing property and the proposed development project.

Owner _____ Date 9-16-05
signature

or

Authorized Agent _____ Date _____
signature

Issued by _____ Date _____

Permit # _____

RECEIVING STN

FLOOD HAZARD DEVELOPMENT PERMIT
PART I

PORTLAND, **Maine**

(For New Structures or Substantial Improvements)

For new Structures or Substantial Improvements, this Flood Hazard Development Permit allows construction only up to the establishment of the lowest floor. Once the lowest floor is established, the permittee must provide an elevation certificate establishing the as built lowest floor elevation. When the Code Enforcement Officer finds the documentation to be in compliance with the Floodplain Management Ordinance, the permittee must then apply for the Part II Flood Hazard Development Permit in order for construction to continue.

For new Structures or projects that are deemed Substantial Improvements, the grade elevation at the lowest grade adjacent to the existing or proposed wall is: 12.43 NGVD.

The proposed Lowest Floor Elevation will be 13.43.
(for V1-30 and VE Zones the lowest floor elevation is measured at the bottom of lowest structural horizontal part of the structure)

Sewage disposal: ☐ existing ☒ proposed ☐ not applicable Type SEWER SERVICE (GRAVITY) TO CITY SEWER

Tax Map: 445 Lot #: A001

The permittee understands and agrees that:

- The permit is issued on the representations made herein and on the application for permit;
- The permit may be revoked because of any breach of representation;
- Once a permit is revoked all work shall cease until the permit is reissued or a new permit is issued;
- The permit will not grant any right or privilege to erect any structure or use any premises described for any purposes or in any manner prohibited by the ordinances, codes, or regulations of the municipality;
- The permittee hereby gives consent to the Code Enforcement Officer to enter and inspect activity covered under the provisions of the Floodplain Management Ordinance;
- The permit form will be posted in a conspicuous place on the premises in plain view and;
- The permit will expire if no work is commenced within 180 days of issuance.

I hereby certify that all the statements in, and the attachments to this permit are a true description of the existing property and the proposed development project.

Owner _____ Date 9-16-05
signature

or

Authorized Agent _____ Date _____
signature

Issued by _____ Date _____

Permit # _____

WOODARD & CURRAN
Engineering • Science • Operations

41 Hutchins Drive • Portland, ME 04102
(207) 774-2112 • 1-800-426-4262
Fax: (207) 774-6635

CORPORATE OFFICES: Maine, Massachusetts, New Hampshire, Connecticut, and Florida
Operational offices throughout the U.S.

TRANSMITTAL

Project #: 203438

TO: Marge Schmuckal, Zoning Administrator
City of Portland
City Hall, 3rd Floor
389 Congress Street
Portland, ME 04101

DATE: 11/02/04

RE: Site Plan Approval Documents – Ocean Gateway

WE ARE SENDING:

QUANTITY	DESCRIPTION
1	Signed Elevation Certificate (FEMA form 81-31) for Receiving Station
1	Signed Elevation Certificate (FEMA form 81-31) for Terminal Building

For Your:		Sent By:	
X	USE	X	REGULAR MAIL
	APPROVAL		FEDERAL EXPRESS
	REVIEW/COMMENTS		UPS
	INFORMATION		COURIER
	OTHER		OTHER

COMMENTS: Marge,

As a condition of the Ocean Gateway Approval letter addressed to Jeff Monroe, dated June 8, 2004 concerning the Planning Board's approval of the Ocean Gateway Project, please find enclosed the signed and sealed Elevation Certificate for the Terminal Building and Receiving Station. These certificates are being provided in accordance with condition 2(b) of that letter.

Feel free to give me a call, if you have any questions concerning these documents.

CC: Paul Pottle, MDOT
Jeff Monroe, City of Portland (w/o ENCLOSURES)
Bill Needelman, City of Portland (w/o ENCLOSURES)

BY: Barry Sheff, P.E.
Project Manager

FEDERAL EMERGENCY MANAGEMENT AGENCY
NATIONAL FLOOD INSURANCE PROGRAM

O.M.B. No. 3067-0077
Expires December 31, 2005

ELEVATION CERTIFICATE

Important: Read the instructions on pages 1 - 7.

SECTION A - PROPERTY OWNER INFORMATION

For Insurance Company Use:

BUILDING OWNER'S NAME
City of Portland

Policy Number

BUILDING STREET ADDRESS (Including Apt., Unit, Suite, and/or Bldg. No.) OR P.O. ROUTE AND BOX NO.
Terminal Building - Ocean Gateway

Company NAIC Number

CITY	STATE	ZIP CODE
Portland	ME	04101

PROPERTY DESCRIPTION (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.)
Parcel ID - 445 A002

BUILDING USE (e.g., Residential, Non-residential, Addition, Accessory, etc. Use a Comments area, if necessary.)
Non-residential. Ferry Terminal building, City of Portland.

LATITUDE/LONGITUDE (OPTIONAL) (##° - ## - ##.## or ##.######°)
HORIZONTAL DATUM: ☐ NAD 1927 ☒ NAD 1983
SOURCE: ☐ GPS (Type):_____ ☐ USGS Quad Map ☒ Other: Survey

SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

B1. NFIP COMMUNITY NAME & COMMUNITY NUMBER	B2. COUNTY NAME	B3. STATE
City of Portland	Cumberland County	Maine

B4. MAP AND PANEL NUMBER	B5. SUFFIX	B6. FIRM INDEX DATE	B7. FIRM PANEL EFFECTIVE/REVISED DATE	B8. FLOOD ZONE(S)	B9. BASE FLOOD ELEVATION(S) (Zone AO, use depth of flooding)
230051 0014	B	7/17/1976	7/17/1976	A	-

B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in B9.
☐ FIS Profile ☐ FIRM ☐ Community Determined ☒ Other (Describe): City Approved Water Level Analysis

B11. Indicate the elevation datum used for the BFE in B9: ☐ NGVD 1929 ☐ NAVD 1988 ☒ Other (Describe): 0.0 MLLW

B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? ☐ Yes ☒ No Designation Date____

SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)

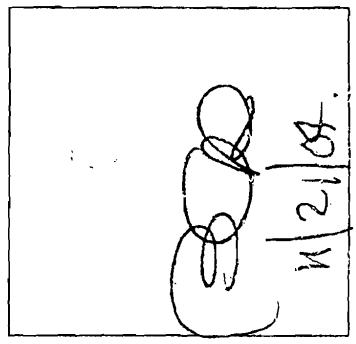
C1. Building elevations are based on: ☒ Construction Drawings* ☐ Building Under Construction* ☐ Finished Construction
*A new Elevation Certificate will be required when construction of the building is complete.

C2. Building Diagram Number 5 (Select the building diagram most similar to the building for which this certificate is being completed - see pages 6 and 7. If no diagram accurately represents the building, provide a sketch or photograph.)

C3. Elevations – Zones A1-A30, AE, AH, A (with BFE), VE, V1-V30, V (with BFE), AR, AR/A, AR/AE, AR/A1-A30, AR/AH, AR/AO
Complete Items C3.-a-i below according to the building diagram specified in Item C2. State the datum used. If the datum is different from the datum used for the BFE in Section B, convert the datum to that used for the BFE. Show field measurements and datum conversion calculation. Use the space provided or the Comments area of Section D or Section G, as appropriate, to document the datum conversion.
Datum 0.00 MLLW Conversion/Comments 0.00 MLLW = -4.57 NGVD 1929
Elevation reference mark used BM #3 1971 Does the elevation reference mark used appear on the FIRM? ☐ Yes ☒ No

☐ a) Top of bottom floor (including basement or enclosure)	16. 87 ft.(m)
☐ b) Top of next higher floor	32. 87 ft.(m)
☐ c) Bottom of lowest horizontal structural member (V zones only)	N/A. __ ft.(m)
☐ d) Attached garage (top of slab)	N/A. __ ft.(m)
☐ e) Lowest elevation of machinery and/or equipment servicing the building (Describe in a Comments area)	16. 87 ft.(m)
☐ f) Lowest adjacent (finished) grade (LAG)	16. 34 ft.(m)
☐ g) Highest adjacent (finished) grade (HAG)	16. 34 ft.(m)
☐ h) No. of permanent openings (flood vents) within 1 ft. above adjacent grade 0	
☐ i) Total area of all permanent openings (flood vents) in C3.h 0.00 sq. in. (sq. cm)	

License Number, Embossed Seal, Signature, and Date



SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION

This certification is to be signed and sealed by a land surveyor, engineer, or architect authorized by law to certify elevation information.
I certify that the information in Sections A, B, and C on this certificate represents my best efforts to interpret the data available.
I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001.

CERTIFIER'S NAME Bruno Elias Ramos LICENSE NUMBER ARC 2644

TITLE Licensed Architect COMPANY NAME BEA International

ADDRESS	CITY	STATE	ZIP CODE
4111 Le Jeune Road	Miami	FL	33146

SIGNATURE DATE 10-19-04 TELEPHONE 305 4612053

IMPORTANT: In these spaces, copy the corresponding information from Section A.			For Insurance Company Use:
BUILDING STREET ADDRESS (Including Apt., Unit, Suite, and/or Bldg. No.) OR P.O. ROUTE AND BOX NO. Terminal Building - Ocean Gateway			Policy Number
CITY Portland	STATE ME	ZIP CODE 04101	Company NAIC Number

SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION (CONTINUED)

Copy both sides of this Elevation Certificate for (1) community official, (2) insurance agent/company, and (3) building owner.

COMMENTS
City Approved Water Level Analysis conducted in May 2004 determined a finish floor elevation of 16.87 (0.00 MLLW)
Top of floor, first floor: +16.87' MLLW

Top of mech. mezzanine floor = 46.37'. Elevator machine room +16.87' MLLW ☒ Check here if attachments

SECTION E - BUILDING ELEVATION INFORMATION (SURVEY NOT REQUIRED) FOR ZONE AO AND ZONE A (WITHOUT BFE)

For Zone AO and Zone A (without BFE), complete Items E1 through E4. If the Elevation Certificate is intended for use as supporting information for a LOMA or LOMR-F, Section C must be completed.

E1. Building Diagram Number 5 (Select the building diagram most similar to the building for which this certificate is being completed – see pages 6 and 7. If no diagram accurately represents the building, provide a sketch or photograph.)

E2. The top of the bottom floor (including basement or enclosure) of the building is 0 ft.(m) 6in.(cm) ☒ above or ☐ below (check one) the highest adjacent grade. (Use natural grade, if available).

E3. For Building Diagrams 6-8 with openings (see page 7), the next higher floor or elevated floor (elevation b) of the building is __ ft.(m) __in.(cm) above the highest adjacent grade. Complete items C3.h and C3.i on front of form.

E4. The top of the platform of machinery and/or equipment servicing the building is 0 ft.(m) 6in.(cm) ☒ above or ☐ below (check one) the highest adjacent grade. (Use natural grade, if available).

E5. For Zone AO only: If no flood depth number is available, is the top of the bottom floor elevated in accordance with the community's floodplain management ordinance?
☐ Yes ☐ No ☐ Unknown. The local official must certify this information in Section G.

SECTION F - PROPERTY OWNER (OR OWNER'S REPRESENTATIVE) CERTIFICATION

The property owner or owner's authorized representative who completes Sections A, B, C (Items C3.h and C3.i only), and E for Zone A (without a FEMA-issued or community-issued BFE) or Zone AO must sign here. *The statements in Sections A, B, C, and E are correct to the best of my knowledge.*

PROPERTY OWNER'S OR OWNER'S AUTHORIZED REPRESENTATIVE'S NAME BEA International			
ADDRESS 4111 Le Jeune Road	CITY Miami	STATE FL	ZIP CODE 33146
SIGNATURE	DATE 10/19/04	TELEPHONE 305 4612053	

COMMENTS Bottom floor elevation for Terminal Building determined by City Approved Water Level Analysis.

☐ Check here if attachments

SECTION G - COMMUNITY INFORMATION (OPTIONAL)

The local official who is authorized by law or ordinance to administer the community's floodplain management ordinance can complete Sections A, B, C (or E), and G of this Elevation Certificate. Complete the applicable item(s) and sign below.

G1. ☐ The information in Section C was taken from other documentation that has been signed and embossed by a licensed surveyor, engineer, or architect who is authorized by state or local law to certify elevation information. (Indicate the source and date of the elevation data in the Comments area below.)

G2. ☐ A community official completed Section E for a building located in Zone A (without a FEMA-issued or community-issued BFE) or Zone AO.

G3. ☐ The following information (Items G4-G9) is provided for community floodplain management purposes.

G4. PERMIT NUMBER	G5. DATE PERMIT ISSUED	G6. DATE CERTIFICATE OF COMPLIANCE/OCCUPANCY ISSUED

G7. This permit has been issued for: ☒ New Construction ☐ Substantial Improvement

G8. Elevation of as-built lowest floor (including basement) of the building is: ____.__ft.(m) Datum: ____

G9. BFE or (in Zone AO) depth of flooding at the building site is: ____.__ ft.(m) Datum: ____

LOCAL OFFICIAL'S NAME	TITLE
COMMUNITY NAME	TELEPHONE
SIGNATURE	DATE

COMMENTS

☐ Check here if attachments

P | N | D
Incorporated

CONSULTING
ENGINEERS

PND No. 00439.22

May 21, 2004

Attn: Barry Sheff
Woodard & Curran
41 Hutchins Drive
Portland, ME 04102

RE: Pier 2 and Pier 2 Expansion, Recommended Finish Floor Elevation.

Dear Barry:

This letter summarizes our findings for our work effort to determine a recommended finish floor elevation for Pier 2 Terminal Building and Pier 2 Expansion Project. Our work included review of the existing FIRM report for the site and conducting an independent analysis by obtaining additional information in the area. As you know, the FIRM map did not include Pier 2. Additional requests to obtain the supporting analysis yielded no information to help validate the previous work by FEMA. We therefore relied on the existing tide gage information at the Maine State Pier and wind data from a buoy off the adjacent coast to conduct our analysis and provide our recommendation. (See final reports previously sent.) This recommendation was reviewed by STRATEX, a peer review consultant hired by the City of Portland, which concurred with our recommendation. In conclusion, our recommendation is that the minimum finish floor elevation for the project should be 12.3 feet NGVD29. This was in recognition of the project structures assessed to be in an A-Zone along with the Maine State Pier as shown on the FIRM map. The recommended finish floor elevation was determined as follows:

$$SWL + \tfrac{1}{2} H_m + H_t = \text{Finish Floor Elevation}$$

$$9.6 + (1/2)(3.6) + .9 = 12.3 \text{ feet NGVD29}$$

SWL = Still water level for 100 year tide at the Maine State Pier (FIRM)
H_m = Mean Wave Height as determined by PND using site specific information (PND)
H_t = .9 ft, an agreed upon correction accounting for tide effects (.63) and uncertainties (.27) in global climates for a 100 year future consideration. (PND & STRATEX)

If you have any additional questions, please contact me at any time.

Sincerely,
PND Incorporated | Seattle Office

David Pierce, P.E., S.E.
Vice President

FEDERAL EMERGENCY MANAGEMENT AGENCY
NATIONAL FLOOD INSURANCE PROGRAM

ELEVATION CERTIFICATE

O.M.B. No. 3067-0077
Expires December 31, 2005

Important: Read the instructions on pages 1 - 7.

SECTION A - PROPERTY OWNER INFORMATION

For Insurance Company Use:

BUILDING OWNER'S NAME
City of Portland

Policy Number

BUILDING STREET ADDRESS (Including Apt., Unit, Suite, and/or Bldg. No.) OR P.O. ROUTE AND BOX NO.
Receiving Station - Ocean Gateway

Company NAIC Number

CITY	STATE	ZIP CODE
Portland	ME	04101

PROPERTY DESCRIPTION (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.)
Parcel ID - 445 A001

BUILDING USE (e.g., Residential, Non-residential, Addition, Accessory, etc. Use a Comments area, if necessary.)
Non-residential. Receiving / Ticketing Buidling, City of Portland.

LATITUDE/LONGITUDE (OPTIONAL) (##° - ## ' - ##.## " or ##.######°)
HORIZONTAL DATUM: ☐ NAD 1927 ☒ NAD 1983
SOURCE: ☐ GPS (Type):____ ☐ USGS Quad Map ☒ Other: Survey

SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

B1. NFIP COMMUNITY NAME & COMMUNITY NUMBER	B2. COUNTY NAME	B3. STATE
City of Portland	Cumberland County	Maine

B4. MAP AND PANEL NUMBER	B5. SUFFIX	B6. FIRM INDEX DATE	B7. FIRM PANEL EFFECTIVE/REVISED DATE	B8. FLOOD ZONE(S)	B9. BASE FLOOD ELEVATION(S) (Zone AO, use depth of flooding)
230051 0014	B	7/17/1976	7/17/1976	A2	14.57

B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in B9.
☐ FIS Profile ☒ FIRM ☐ Community Determined ☐ Other (Describe):____

B11. Indicate the elevation datum used for the BFE in B9: ☐ NGVD 1929 ☐ NAVD 1988 ☒ Other (Describe): 0.0 MLLW

B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? ☐ Yes ☒ No Designation Date____

SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)

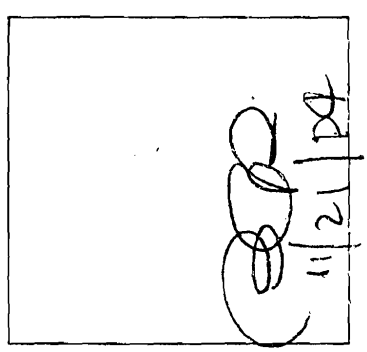
C1. Building elevations are based on: ☒ Construction Drawings* ☐ Building Under Construction* ☐ Finished Construction
*A new Elevation Certificate will be required when construction of the building is complete.

C2. Building Diagram Number 1 (Select the building diagram most similar to the building for which this certificate is being completed - see pages 6 and 7. If no diagram accurately represents the building, provide a sketch or photograph.)

C3. Elevations – Zones A1-A30, AE, AH, A (with BFE), VE, V1-V30, V (with BFE), AR, AR/A, AR/AE, AR/A1-A30, AR/AH, AR/AO
Complete Items C3.-a-i below according to the building diagram specified in Item C2. State the datum used. If the datum is different from the datum used for the BFE in Section B, convert the datum to that used for the BFE. Show field measurements and datum conversion calculation. Use the space provided or the Comments area of Section D or Section G, as appropriate, to document the datum conversion.
Datum 0.00 MLLW Conversion/Comments 0.00 MLLW = -4.57 NGVD 1929
Elevation reference mark used BM #3 1971 Does the elevation reference mark used appear on the FIRM? ☐ Yes ☒ No

☐ a) Top of bottom floor (including basement or enclosure)	18. 00 ft.(m)
☐ b) Top of next higher floor	30. 66 ft.(m)
☐ c) Bottom of lowest horizontal structural member (V zones only)	N/A. __ ft.(m)
☐ d) Attached garage (top of slab)	N/A. __ ft.(m)
☐ e) Lowest elevation of machinery and/or equipment servicing the building (Describe in a Comments area)	30. 66 ft.(m)
☐ f) Lowest adjacent (finished) grade (LAG)	17. 00 ft.(m)
☐ g) Highest adjacent (finished) grade (HAG)	17. 94 ft.(m)
☐ h) No. of permanent openings (flood vents) within 1 ft. above adjacent grade 0	
☐ i) Total area of all permanent openings (flood vents) in C3.h 0.00 sq. in. (sq. cm)	

License Number, Embossed Seal, Signature, and Date



SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION

This certification is to be signed and sealed by a land surveyor, engineer, or architect authorized by law to certify elevation information.
I certify that the information in Sections A, B, and C on this certificate represents my best efforts to interpret the data available.
I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001.

CERTIFIER'S NAME Bruno Elias Ramos — LICENSE NUMBER ARC 2644

TITLE Licensed Architect — COMPANY NAME BEA International

ADDRESS	CITY	STATE	ZIP CODE
4111 Le Jeune Road	Miami	FL	33146

SIGNATURE	DATE	TELEPHONE
	10-18-04	305 4612053

IMPORTANT: In these spaces, copy the corresponding information from Section A.			For Insurance Company Use:
BUILDING STREET ADDRESS (Including Apt., Unit, Suite, and/or Bldg. No.) OR P.O. ROUTE AND BOX NO. Receiving Station - Ocean Gateway			Policy Number
CITY Portland	STATE ME	ZIP CODE 04101	Company NAIC Number

SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION (CONTINUED)

Copy both sides of this Elevation Certificate for (1) community official, (2) insurance agent/company, and (3) building owner.

COMMENTS
Mezzanine Level with mechanical equipment is 12'-8" (plan) / 30'-8" (MLLW)

☐ Check here if attachments

SECTION E - BUILDING ELEVATION INFORMATION (SURVEY NOT REQUIRED) FOR ZONE AO AND ZONE A (WITHOUT BFE)

For Zone AO and Zone A (without BFE), complete Items E1 through E4. If the Elevation Certificate is intended for use as supporting information for a LOMA or LOMR-F, Section C must be completed.

E1. Building Diagram Number _(Select the building diagram most similar to the building for which this certificate is being completed – see pages 6 and 7. If no diagram accurately represents the building, provide a sketch or photograph.)

E2. The top of the bottom floor (including basement or enclosure) of the building is __ ft.(m) __ in.(cm) ☐ above or ☐ below (check one) the highest adjacent grade. (Use natural grade, if available).

E3. For Building Diagrams 6-8 with openings (see page 7), the next higher floor or elevated floor (elevation b) of the building is __ ft.(m) __ in.(cm) above the highest adjacent grade. Complete items C3.h and C3.i on front of form.

E4. The top of the platform of machinery and/or equipment servicing the building is __ ft.(m) __ in.(cm) ☐ above or ☐ below (check one) the highest adjacent grade. (Use natural grade, if available).

E5. For Zone AO only: If no flood depth number is available, is the top of the bottom floor elevated in accordance with the community's floodplain management ordinance?
☐ Yes ☐ No ☐ Unknown. The local official must certify this information in Section G.

SECTION F - PROPERTY OWNER (OR OWNER'S REPRESENTATIVE) CERTIFICATION

The property owner or owner's authorized representative who completes Sections A, B, C (Items C3.h and C3.i only), and E for Zone A (without a FEMA-issued or community-issued BFE) or Zone AO must sign here. *The statements in Sections A, B, C, and E are correct to the best of my knowledge.*

PROPERTY OWNER'S OR OWNER'S AUTHORIZED REPRESENTATIVE'S NAME BEA International			
ADDRESS 4111 Le Jeune Road	CITY Miami	STATE FL	ZIP CODE 33146
SIGNATURE	DATE 10/19/04	TELEPHONE 305 4612053	

COMMENTS

☐ Check here if attachments

SECTION G - COMMUNITY INFORMATION (OPTIONAL)

The local official who is authorized by law or ordinance to administer the community's floodplain management ordinance can complete Sections A, B, C (or E), and G of this Elevation Certificate. Complete the applicable item(s) and sign below.

G1. ☐ The information in Section C was taken from other documentation that has been signed and embossed by a licensed surveyor, engineer, or architect who is authorized by state or local law to certify elevation information. (Indicate the source and date of the elevation data in the Comments area below.)

G2. ☐ A community official completed Section E for a building located in Zone A (without a FEMA-issued or community-issued BFE) or Zone AO.

G3. ☐ The following information (Items G4-G9) is provided for community floodplain management purposes.

G4. PERMIT NUMBER	G5. DATE PERMIT ISSUED	G6. DATE CERTIFICATE OF COMPLIANCE/OCCUPANCY ISSUED

G7. This permit has been issued for: ☒ New Construction ☐ Substantial Improvement

G8. Elevation of as-built lowest floor (including basement) of the building is: ____. __ ft.(m) Datum: ____

G9. BFE or (in Zone AO) depth of flooding at the building site is: ____. __ ft.(m) Datum: ____

LOCAL OFFICIAL'S NAME	TITLE
COMMUNITY NAME	TELEPHONE
SIGNATURE	DATE

COMMENTS

☐ Check here if attachments

From: "Barry Sheff" <bsheff@woodardcurran.com>
To: "Mike Nugent " <MJN@portlandmaine.gov>
Date: Thu, Oct 27, 2005 5:58 PM
Subject: RE: Ocean Gateway Part One Flood Hazard Development Permit

Mike-
We have reviewed the information we've submitted including the Elevation Certificates for the project (for the Terminal Building, and for the Receiving Station), and checked those against the elevations in the Flood Hazard Development Permit Part 1 (for each building) and find them all to be in agreement with no differences. I'm not sure that I understand your concerns relating to different elevations. That said, to clarify any questions you might have, the elevation certificates and the project Contract Documents are based upon MLLW=0, while the Flood Hazard Development Permit is based upon the reference vertical datum of NGVD 1929, and a difference of 4.57'. We have attempted to be clear in all of our submittals but recognize there is potential for confusion (please refer to Elevation Certificate paragraph C3 and the conversion comments).

The Receiving Station was determined to be in an A2 zone with a BFE elevation 10 NGVD (14.57 MLLW). The Terminal Building was similarly determined to be located within an A2 zone, however no BFE was determined.

As relating to the BFE, attached is a copy of our Site Plan application material relating to Flood Plain Management (as approved by the Board and accepted by the Zoning Administrator) that clarifies the flood zone determination issues. The Flood Plain Management issues took considerable effort to resolve during the Site Plan review process and regrettably you were not a participant in those discussions. When we included those Site Plan application materials with the Flood Hazard Development Permit Part 1(s) for the two buildings on September 16, 2005, we had hoped it would be clear what had transpired in the process. I apologize for not reaching out sooner to try to bring you up to speed.

We recognize that you are trying to get this issue resolved, I've cc'd the Zoning Administrator to be sure that you have the opportunity to confirm this information with her.

As relating to the conditions you propose, we have some comments:
Condition 1-Certification requirements are acceptable.
Condition 2-Certificate of Design for Pier A submitted on September 26, 2005 covers the certification that the project meets the BOCA design standards, and the condition could/should be revised and limited to the need for construction certification.
Condition 3-Condition should be revised to refer to our Waiver Request (submitted on October 20, 2005) and your Agreement with that Waiver Request and the testing methods proposed (response by email on October 20, 2005).

I hope that this provides you the necessary information for you to issue the Ocean Gateway Part One Flood Hazard Development Permit. Please contact me if you have any questions or need additional information.
Barry

Barry Sheff, PE
Project Manager
207.774.2112 x3266

Woodard & Curran
41 Hutchins Drive
Portland, ME 04102
1.800.426.4262
www.woodardcurran.com

-----Original Message-----
From: Mike Nugent [mailto:MJN@portlandmaine.gov]
Sent: Thursday, October 27, 2005 3:43 PM
To: dpierce@pndsea.com; Barry Sheff; David Senus
Cc: LL@beai.com; rjohnson@pndsea.com; dlittlefield@reed-reed.com
Subject: Ocean Gateway Part One Flood Hazard Development Permit

I am prepared to issue the above permit with the following conditions attached, I'm waiting for confirmation of the base flood elevation: (I actually have three draft elevation ceriticates with three different elevations specified)

--This permit is a Part One Flood Hazard Permit. It allows the holder to install the pilings and First level decking for the Ocean Gateway Terminal Building as associated access pier ONLY. The Design professional must then certify that the construction complies with the elevation required by the Floodplain Management standards in the Zoning Ordinance on a FEMA Elevation Certificate.

--The Pile Cap Connections and seimic ties must be designed & constructed in accordance with Section 1816.11.1 and 1816.11.2, plans, certifying this specific standard must be submitted and approved, prior to that phase of construction.

--Pilings must be installed and tested in accordance with Section 1817.4 of the 1999 BOCA Code. Copies of all inspection and testing records must be forwarded to this office prior to the Issuance of the Part Two permit.

CC: <LL@beai.com>, <dpierce@pndsea.com>, "David Senus" <dsenus@woodardcurran.com>, "Paul Pottle (MaineDOT)" <Paul.Pottle@maine.gov>, "Larry Mead " <LSM@portlandmaine.gov>, "Marge Schmuckal (Portland)" <mes@portlandmaine.gov>

WOODARD & CURRAN
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CORPORATE OFFICES: Maine, Massachusetts,
New Hampshire, Connecticut, New York, New York, Florida
Operational offices throughout the U.S.

TRANSMITTAL

TO: Dustin Littlefield
Reed & Reed
P.O. Box 370
Woolwich, ME 04579

DATE: February 01, 2006
PROJECT NAME: Ocean Gateway
PROJECT NUMBER: 203438.12

RE: Revised Plans – Walkway, Receiving Stn

WE ARE SENDING:

- ☐ Quotation
- ☐ Brochure
- ☐ Change Order
- ☒ Drawings
- ☐ Schedule
- ☐ Manuals
- ☐ Bid Package
- ☐ Installation Package
- ☐ Other (specify
- ☐ Floppy Disk / CD
- ☐ Sample

Qty	Rev. No.	Dated	Description
3 sets of 3 sheets		**01/31/2006**	**Revised Walkway Plans**

For Your

Send

- ☒ USE
- ☐ APPROVAL
- ☐ REVIEW/COMMENTS
- ☐ INFORMATION
- ☐ OTHER

- ☐ REGULAR MAIL
- ☐ FEDERAL EXPRESS
- ☐ UPS
- ☐ COURIER
- ☒ OTHER – Dropped off at Site Trailer

Dustin:

Please find enclosed the following revised plans. These plans clarify the roof column line locations and clarify the framing connections.

S100-W, S101-W, S200-W

Thanks, Dave Senus

43D5

CC: Ken Page (1 Set of Drawings)
Ben Snow (1 Set of Drawings)
Mike Nugent (1 Set of Drawings)

BY: DAS

Public Works Engineering Memorandum

Date: January 5, 2004

To: Barry Sheff, P.E., Woodard and Curran Inc.

From: Eric J. Labelle, P.E., City Engineer, Portland ME

Cc: Michael Bobinsky, Director of Public Works
Katherine Earley, P.E., Engineering Manager

RE: Proposed Commercial and Hancock Street Extension

This memo serves as confirmation that the City of Portland's Public Works Department does intend to inspect, clean, and maintain the casco traps and catch basins which are to be installed as part of this project which are installed within the right of way consistent with the City's Best Management Practices. The City of Portland, being an MS4 community, shall be conducting its BMPs per its NPDES Phase II Stormwater Workplan approved by the Maine Department of Environmental Protection. Furthermore, the City of Portland does not object to connecting stormwater lines to its existing outfalls, including the 15"CPE and 30"CMP at the east end of the Ocean Gateway site, and the 21" RCP at the CBITD facility.

2003438.01

FILE

Portland Water District

225 Douglass St. • P.O. Box 3553 • Portland, ME 04104-3553
(207) 774-5961
FAX (207) 761-8307
www.pwd.org

November 17, 2003

Mr. Kenneth Vollock, Engineer
Woodard & Curran
41 Hutchins Drive
Portland, Maine 04102

Subject: Ocean Gateway – Phase I
Reference: Your letter to Jim Pandiscio dated October 14, 2003

Dear Mr. Vollock:

Thank you for your letter and its detailed explanation of the potential water demands your project may impose on the District's water system. I am pleased to indicate that the existing water system can meet your stated needs with only minor off-site expansion. Further, we need to carefully consider how the water system internal to your project connects to the public system, to assure that existing customers are not adversely affected by the large demands of major ships.

We undertook a hydraulic model study of a 1500 gallon per minute (gpm) flow taken from the existing system at the corner of India and Commercial Streets to determine the pressure impact in the vicinity and to see if there would be any adverse impact away from the site. We found that normal static pressures at average demands are approximately 102 pounds per square inch (psi) in the project vicinity. The higher elevations of Munjoy Hill have corresponding static pressures of approximately 45 psi. When we apply the 1500 gpm demand to the system, project area pressures drop by 6 psi, to approximately 96 psi. Corresponding pressures on Munjoy Hill drop to approximately 43 psi. Although 96 psi is substantial water pressure, and we believe very good normal service to surrounding customers, we are concerned that the 6 psi drop under routine conditions would be noticeable. The 2 psi drop that would be experienced by some Munjoy Hill customers is relatively greater as a percentage of static and also concerns us.

To reduce the variation of water pressure in the project vicinity and elsewhere, we looked at several upgrade alternatives including larger water mains on Franklin Arterial, India Street and Mountfort Street. These would all be

expensive, disruptive during construction and produce relatively small positive impact. Of these, increasing the main on India Street from Commercial to Congress where it would connect into the existing 20" main was the most beneficial. This had some additional impact on Munjoy Hill however.

Your letter mentions extending both Commercial and Hancock Streets. We proceeded to investigate water system improvements in these extended streets. We propose that you extend the 12" main on Commercial Street easterly from India Street and tie this through the extension of Hancock Street to the intersection of Hancock and Newbury Streets with 8" main. This has the effect of drawing the water for your project from a wider area and minimizes pressure fluctuations as a result. Multiple service points and meters to your project may also further minimize pressure fluctuations due to Ocean Gateway demand.

One final point is that the projected maximum volume of 540,000 gallons per day is available within the existing capacity of our treatment and pumping facilities. Thus, no upgrade of these facilities is anticipated to result from the Ocean Gateway project.

We will be interested to discuss these findings further with you and to understand more completely the site plan for your project. Please contact me at your convenience as your plans develop so that we can coordinate the points of service and metering issues that would have to be addressed for the project.

Yours truly,
Portland Water District

Jay C. Hewett, P.E.
Chief Engineer