

Construction Management Plan

Craig Morin, PE - HNTB

MaineDOT/Maine Port Authority – IMT Wharf Infill/Building Removal

For the construction site management plan, please see sheet C01 in the attached plan set.

Note: At this time, the project has not gone out to bid, and thus a contractor has not been selected. The client and design team will coordinate closely with the selected contractor to ensure this Construction Management Plan is followed.

A. Construction Management Principles

The following narrative provides an overview of the construction management principles that the HNTB, MaineDOT, and the Maine Port Authority (MPA) have identified to minimize impacts from the construction, such as noise, vibrations, ground movement, truck traffic, and other construction related factors to the surrounding building and communities.

The project will take place at the existing International Marine Terminal (IMT) wharf located at 460 Commercial Street, on the eastern side of the Casco Bay Bridge. The overall IMT property abuts New Yard, LLC, but the work for this project will not be close to New Yard and will not affect New Yard's operations.

Truck traffic from construction will enter and exit the construction area from the primary IMT entrance on Commercial Street. Any noises or vibrations due to construction will take place during the City's construction hours unless otherwise coordinated and approved by the City.

B. Development Review of Construction Management Plan

HNTB, MaineDOT, and the Maine Port Authority shall submit a construction management plan that provides a comprehensive logistics and safety program for the construction project, which will be reviewed and approved as part of the site plan review process. Minimizing impacts to areas surrounding the building/construction site will be primary considerations in the process.

The Planning Authority and the Department of Public Works have the right to seek revisions to an approved Construction Management Plan or require a condition of approval that states an applicant shall coordinate a project's construction schedule with the timing of nearby construction activity, in order to avoid cumulative impacts on a neighborhood. Such a condition may involve a delay in commencement of construction, if necessary.

The following details define the intended approach to the successful management of the project construction and the construction management plan will address the general conditions contained below.

C. Performance Guarantees, Inspection Fees, Preconstruction Meeting, and Permits

Prior to scheduling a preconstruction meeting and the issuance of any city required permits, HNTB, MaineDOT, and the MPA shall meet all of the requirements contained in Section 14-530. Development review fees and post approval requirements and 14-532. General

requirements and enforcement of Portland's Land Use Code.

The required application fee has been submitted as part of this application. Please see section 9 of this application regarding the requirements of Portland's Land Use Code. Street opening/occupancy permits, blasting permits, and building code permits do not apply to this project.

D. Construction Administration and Communication

HNTB, MaineDOT, the Maine Port Authority, and the Contractor will work diligently to implement a communication strategy as outlined below:

1. *The Contractor, MaineDOT, Maine Port Authority, and Resident Engineer (HNTB) shall all have contact people. These people are as follows:*
 - *HNTB (Engineer of Record):*
Craig Morin, PE
(207) 228-0908
cmorin@hntb.com
 - *MaineDOT (Resident Engineer):*
Ed Karpinski
(207) 504-1916
ekarpinski@keville.com
 - *Maine Port Authority (Applicant)*
Michael Carter
(207) 200-2430
michael.carter@maineports.com
2. *Meetings will be held weekly between the Contractor, Resident Engineer, and Applicant. Meetings will ensure the Contractor provides a 3-week lookout plan and address any site operational concerns as well as City coordination concerns.*
3. *All construction site signage is temporary and shall be removed at project completion.*

E. Construction Schedule

1. *The timeline for the construction of the project is as follows:*
 - a. *Contractor Bid Awarded:* 11/15/18
 - b. *Mobilization:* November 2018
 - c. *Construction:* December 2018-October 2019
 - d. *Demobilization:* November 2019 – December 2019
 - e. *Project Close Out:* 12/31/19
2. *Hours of construction will be in compliance with Section 17-18.*
3. *Extended construction hours or night work will not be performed without proper coordination with the City.*
4. *Materials will be delivered primarily during the mobilization stage of construction. Materials will be stored on the Fingerpier and in the Chassis Yard at the IMT.*

F. Security & Public Safety

1. *The construction site may not be accessed by the public due to security concerns at the IMT.*
2. *The Maintenance Building that is being demolished will be in compliance with NFPA 1 Chapter 16 Safeguarding Construction, Alteration, and Demolition Operations.*
3. *Once selected, the contractor will submit a demolition plan that will include a safety plan that satisfies the City's requirements.*
4. *No blasting will be required as part of this project.*
5. *Any proposed temporary security lighting shall be shown on CMP and all fixtures shall be full cutoffs.*

G. Construction Permitting and Traffic Control Plans

1. Construction Activity in Public Streets: *Not applicable*
2. Sewer and Stormwater: *No new sewer/stormwater connections will be made as part of this project.*
3. Traffic Control Plans: *Construction will not occur on a public street and therefore does not require a traffic control plan.*

H. Site Management and Controls

The final Construction Management Plan will address maintaining the site in a safe condition and will include the following:

1. Regular trash and debris removal: *Trash and debris will be cleaned up and disposed of daily by the Contractor.*
2. Street cleaning and damage controls: *Not applicable.*
3. Dust controls- The construction shall comply with Portland's requirements under Section 25-129 on Noise, dust and debris (Attachment 2).
4. Noise: The construction shall comply with Portland's requirements under Section 17-18 of the City Code (Attachment 1) and Section 25-129 on Noise, dust and debris (Attachment 2).
5. Rodent Control: *Not applicable.*
6. Snow Removal: Pursuant to Section 25-173 Contractors to ensure a safe means of travel within the work zone.
 - 1) *Snow/ice removal or commence automatically from (1" of snow and up) or Ice*
 - 2) *Remove snow as needed within the work zone, including parking spaces & not to block any driveways or sight lines with the piles of snow.*
 - 3) *Clear all walks & ramps with the work zone*
 - 4) *Sand or Salt as needed*
 - 5) *Clear all basin or drainage to help snow melt*
 - 6) *The above items apply at all times.*

I. Erosion Control and Preservation of Trees

1. *The contractor shall install all erosion and sedimentation controls as depicted on the approved erosion and sedimentation control plan that will be inspected by the City. The contractor shall regularly inspect the control measures, no less than weekly and*

after significant storm events, and maintain any installed temporary or permanent stormwater management systems in working order. The contractor shall document all inspection activities and corrective actions and be prepared to provide these documents for inspection by the City, Maine Department of Environmental Protection or the U.S. Environmental Protection Agency upon request.

- 2. There are no trees or vegetation within the construction zone, so the Contractor will not have any clearing of vegetation to document.*
- 3. The storage of materials shall be identified and avoid being located under/near trees.*

J. Construction Staging Area

- 1. Material staging areas include areas within the Terminal: the Fingerpier and the Chassis Yard.*
- 2. Delivery trucks will enter the site through the primary entrance so as to avoid back-ups on Commercial Street.*

K. Parking During Construction

- 1. Construction workers may park in the Chassis Yard at the IMT or in the Terminal construction zone. Space may also be provided by the Maine Port Authority for construction workers to park on the wharf or in the storage yard.*
- 2. The existing employee parking lot will not be affected.*
- 3. Truck routes will include trucks arriving at the IMT via Commercial Street. Volumes will insignificant and will not affect Commercial Street traffic.*

L. Special Measures as Necessary

Information on silt curtains and the debris boom used to prevent debris from polluting the water can be found in the documents at the end of this section.



Type 3 HEAVY DUTY
Silt Barrier

www.Type3SiltBarrier.com

OR

www.TurbidityBarriers.com

- Current, Waves and Wind
- 1.5 Knot, 2 Foot Waves, 30 Mph wind
- Rugged for USACE and DOT projects for dredging and remediation work.
- Bays, Rivers and Inland Waters
- Meets and Exceeds most State DOT Federal Requirement
- Rapid deployment - durable

DESCRIPTION:

Granite Type 3 Heavy Duty Silt Barrier is manufactured with permeable silt filter panels or impermeable silt blocking skirts with marine grade floats seamed into heavy duty coated reinforced PVC membrane, 2 each steel load bearing cables, a heavy ballast chain to assist in keeping skirt vertical and lower tension member.

TYPICAL LENGTH:

Normally 100 feet (30 m) but adjustable by special order to any length. (additional cost applies for varied length/s)

DRAFT:

Any depths from 3 feet (1 m) to 100 feet (30 m).

FREEBOARD:

12 inches.

FLOTATION ELEMENT:

12" diameter GRADE A octagonal marine quality floats placed end to end and dielectrically sealed into coated membrane sleeve along the top of the barrier. These have joints between floats to allow folding for shipment, storage and more importantly for conformance to wave action.

100' (30m) and 50' (15m) Long sections x 3' (1 m) wide to 100' (30m)

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Web: www.GraniteEnvironmental.com

MEMBRANE: 22 ounce per square yard vinyl coated nylon or polyester or a combination with geotextile filter panel depending on application.

BASE: 22 oz PVC fabric International Safety Yellow
500 x 550 Lbs/square inch tensile strength
(specification sheet available on request)

FILTER PANEL:
(Optional Skirt design) W-70 @ 6% with vertical flow of 70gpm
(specification sheet available on request)

TENSION CABLES: 2 each 5/16 inch vinyl coated galvanized steel cable, one on each side of the skirt 20 inches below the flotation. These cables are secured to each end connector of the curtain section and clipped together with lap links and grommets every 30 inches for superior performance in current.

LOWER TENSION & BALLAST: Ballast is provided by a 3/8 inch galvanized steel chain sheathed in 22 oz membrane along the bottom edge of the skirt. This acts as a lower tension member by terminating in stainless steel stress plates on each skirt corner and bolted with no fewer than 4 stainless steel bolts allowing minimum load transfer of 5000 lbs of tensile from membrane.

SECTION CONNECTION: Sections of Heavy Duty Type 3 Silt Barrier connect by sliding together the two halves of Universeal slide bulk connectors that extend from the top of the flotation down a minimum of 20". The skirts are joined by ties between reinforced steel grommets on the two opposing silt barriers. The ballast connect via galvanized steel snap hook and galvanized ring make the joint complete from top to bottom. This is a tool free connection.

ANCHOR POINTS: Anchor points are provided every 50' at the tension cable line on both side of the barrier.

Skirt Furling System: To furl/raise and lower the curtain skirt to varied operation depths
(Optional at additional charge).

Accessories: Oil Spill Equipment, Navigational Warning Lights, Marker Buoys, Anchor Systems, Geotextile Sludge Tubes, Repair Kits, Debris Boom.

[Installation Guide available](#) < -- CLICK HERE or visit www.SILT-BARRIER.com

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PRODUCT DATA SHEET

GEOTEX® 111F

GEOTEX 111F is a woven polypropylene geotextile produced by Propex, and will meet the following Minimum Average Roll Values (MARV) when tested in accordance with the methods listed below. The individual filaments are woven into a regular network such that filaments retain dimensional stability relative to each other. These characteristics make **GEOTEX 111F** ideal for filtration beneath hard armor systems and around leachate collection pipes. The geotextile is resistant to ultraviolet degradation and to biological and chemical environments normally found in soils.

GEOTEX 111F conforms to the property values listed below.¹ Propex performs internal Manufacturing Quality Control (MQC) tests that have been accredited by the Geosynthetic Accreditation Institute – Laboratory Accreditation Program (GAI-LAP).

PROPERTY	TEST METHOD	MARV ²	
		ENGLISH	METRIC
Mechanical			
Tensile Strength (Grab)	ASTM D-4632	370 x 220 lbs	1645 x 980 N
Elongation	ASTM D-4632	20 x 15 %	20 x 15 %
Puncture	ASTM D-4833	115 lbs	510 N
CBR Puncture	ASTM D-6241	850 lbs	3780 N
Mullen Burst	ASTM D-3786	470 psi	3240 kPa
Trapezoidal Tear	ASTM D-4533	115 x 75 lbs	510 x 335 N
Endurance			
UV Resistance % Retained at 500 hrs	ASTM D-4355	90%	90%
Hydraulic			
Apparent Opening Size (AOS) ³	ASTM D-4751	30 US Std. Sieve	0.600 mm
Percent Open Area (POA)	CW-02215 Mod. ⁴	8 %	8 %
Permittivity	ASTM D-4491	1.50 sec ⁻¹	1.50 sec ⁻¹
Water Flow Rate	ASTM D-4491	115 gpm/ft ²	4,685.1 l/min/m ²
Roll Sizes		12.5 ft x 300 ft	3.81 m x 91.5 m

NOTES:

1. The property values listed above are effective 09/2008 and are subject to change without notice.
2. Values for machine (warp) and cross-machine (fill), respectively, under dry or saturated conditions. Minimum average roll values (MARV) are calculated as the typical minus two standard deviations. Statistically, it yields a 97.7% degree of confidence that any samples taken from quality assurance testing will exceed the value reported.
3. Maximum average roll value.
4. Army Corp of Engineers test method correlated to light emitted through fabric. (Area of Openings/Total Area X 100%)



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