

JULY 2018
SUNOCO PARTNERS MARKETING & TERMINALS

EAST BOSTON SEAWALL & MOORING POINT MAINTENANCE PROJECT

NOTICE OF INTENT
MASSACHUSETTS WETLANDS PROTECTION ACT

03 July 2018

Boston Conservation Commission
1 City Hall Square, Room 709
Boston, MA 02201

ADDRESS COWI North America, Inc.
35 Braintree Hill Office Park
Suite 100
Braintree, MA 02184
USA
TEL +1 508 830 1110
WWW cowi.com
DATE 03 July 2018
PAGE 2/65
REF Sunoco USACE PCN
PROJECT NO A101337

RE: Notice of Intent
Sunoco Partners Marketing & Terminals
East Boston Seawall and Mooring Point Maintenance Project
Chelsea River, Boston, MA

Dear Commission Members & Staff:

On behalf of Sunoco Partners Marketing & Terminals ("SPMT" or the "Applicant"), COWI North America, Inc. ("COWI" or the "Agent") in association with Normandeau Associates, Inc. ("Normandeau"), is pleased to submit this Notice of Intent ("NOI") to the Boston Conservation Commission. This NOI has been prepared and submitted in accordance with the Massachusetts Wetland Protection Act (MGL c. 131 s. 40) and implementing regulations (310 CMR 10.00) ("WPA" or "the Act") for authorization to conduct routine maintenance activities at an existing marine terminal facility in Boston, Massachusetts.


The Applicant seeks to conduct routine maintenance and repairs to an existing seawall along the Chelsea River in East Boston, Massachusetts. Project activities consist of filling voids and cracks along a 1,150 linear foot section of granite block seawall to prevent further deterioration of the seawall. Two areas of scour protection (approximately 4,680 total square feet) are proposed between the existing seawall and an existing toe wall to prevent further erosion and undermining of the seawall. Project activities will not extend into the river channel further than the existing toe wall, as such no expansion of the existing facility is proposed. Seven upland mooring points on steel pipe piles are proposed to replace seven existing upland mooring points to maintain mooring capacity for existing operations.

The Project area is adjacent to and within the Chelsea River and the Project includes activities within intertidal areas and subtidal areas within the Chelsea River immediately adjacent to the existing seawall. As such, Project activities will occur within and result in alteration to Land Under the Ocean immediately adjacent to the seawall (i.e. scour protection). Project activities within the upland portion of the site will involve minor and temporary activities within previously developed and degraded 25-foot Riverfront Area and Land Subject to Coastal Storm Flowage. The top of the seawall and corresponding top of Coastal Bank will not be altered by the Project. The Project site also contains 100-foot Buffer Zone to Coastal Bank which will not be altered by Project activities. The entirety of the Project site is located within the Chelsea Creek Designated Port Area.

Should you have any questions or require further information, please do not hesitate to contact me via telephone at (856) 313-5262 or via email at madn@cowi.com.

Sincerely,

COWI North America, Inc.



Matthew Dalon, P.E.
Project Manager

CC: MassDEP – Northeast Regional Office
Division of Marine Fisheries – North Shore Office
Sunoco Partners Marketing & Terminals – Steve Mun, Doug Pfluger, Andrew Strine
Normandeau Associates, Inc. – Victoria (Tory) Fletcher, Senior Regulatory Specialist

JULY 2018
SUNOCO PARTNERS MARKETING & TERMINALS

EAST BOSTON SEAWALL & MOORING POINT MAINTENANCE PROJECT

NOTICE OF INTENT – MASSACHUSETTS WETLANDS PROTECTION ACT

PROJECT NO.

A101337

DOCUMENT NO.

1.0

VERSION

FINAL

DATE OF ISSUE

03 July 2018

DESCRIPTION

NOI

PREPARED

Normandeau

CHECKED

COWI-MADN

APPROVED

SPMT

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WPA Form 3 – Notice of Intent



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

MassDEP File Number
Document Transaction Number
Boston
City/Town

Important:
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Note:
Before completing this form consult your local Conservation Commission regarding any municipal bylaw or ordinance.

A. General Information

1. Project Location (**Note:** electronic filers will click on button to locate project site):

<u>467 Chelsea Street</u>	<u>Boston</u>	<u>02128</u>
a. Street Address	b. City/Town	c. Zip Code
Latitude and Longitude:	<u>42.384420</u>	<u>-71.024803</u>
-	d. Latitude	e. Longitude
f. Assessors Map/Plat Number	<u>0103711006</u>	g. Parcel /Lot Number

2. Applicant:

<u>Steve</u>	<u>Mun</u>	
a. First Name	b. Last Name	
<u>Sunoco Partners Marketing & Terminals</u>		
c. Organization		
<u>3807 West Chester Pike, NEC-216</u>		
d. Street Address		
<u>Newtown Square</u>	<u>PA</u>	<u>19073</u>
e. City/Town	f. State	g. Zip Code
<u>215-246-8329</u>	<u>-</u>	<u>steve.mun@energytransfer.com</u>
h. Phone Number	i. Fax Number	j. Email Address

3. Property owner (required if different from applicant): Check if more than one owner

<u></u>	<u></u>	
a. First Name	b. Last Name	
<u></u>		
c. Organization		
<u></u>		
d. Street Address		
<u></u>	<u></u>	<u></u>
e. City/Town	f. State	g. Zip Code
<u></u>	<u></u>	<u></u>
h. Phone Number	i. Fax Number	j. Email address

4. Representative (if any):

<u>Michael</u>	<u>Ajemian</u>	
a. First Name	b. Last Name	
<u>COWI North America, Inc.</u>		
c. Company		
<u>35 Braintree Hill Office Park, Suite 100</u>		
d. Street Address		
<u>Braintree</u>	<u>MA</u>	<u>02128</u>
e. City/Town	f. State	g. Zip Code
<u>508-830-1110</u>	<u>mpaj@cowi.com</u>	
h. Phone Number	i. Fax Number	j. Email address

5. Total WPA Fee Paid (from NOI Wetland Fee Transmittal Form):

<u>\$2759.50</u>	<u>\$1259.50</u>	<u>\$1500.00 (Boston fee)</u>
a. Total Fee Paid	b. State Fee Paid	c. City/Town Fee Paid



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

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A. General Information (continued)

6. General Project Description:

The Applicant seeks to conduct routine maintenance and repairs to an existing seawall along the Chelsea River in East Boston, Massachusetts. Please see attached narrative for more information.

7a. Project Type Checklist: (Limited Project Types see Section A. 7b.)

- 1. Single Family Home
- 2. Residential Subdivision
- 3. Commercial/Industrial
- 4. Dock/Pier
- 5. Utilities
- 6. Coastal engineering Structure
- 7. Agriculture (e.g., cranberries, forestry)
- 8. Transportation
- 9. Other

7b. Is any portion of the proposed activity eligible to be treated as a limited project (including Ecological Restoration Limited Project) subject to 310 CMR 10.24 (coastal) or 310 CMR 10.53 (inland)?

1. Yes No If yes, describe which limited project applies to this project. (See 310 CMR 10.24 and 10.53 for a complete list and description of limited project types)

2. Limited Project Type

If the proposed activity is eligible to be treated as an Ecological Restoration Limited Project (310 CMR10.24(8), 310 CMR 10.53(4)), complete and attach Appendix A: Ecological Restoration Limited Project Checklist and Signed Certification.

8. Property recorded at the Registry of Deeds for:

<u>Middlesex</u>	<u>128519 (Bk 638 Pg 119)</u>
a. County	b. Certificate # (if registered land)
<u>48361</u>	<u>71</u>
c. Book	d. Page Number

B. Buffer Zone & Resource Area Impacts (temporary & permanent)

- 1. Buffer Zone Only – Check if the project is located only in the Buffer Zone of a Bordering Vegetated Wetland, Inland Bank, or Coastal Resource Area.
- 2. Inland Resource Areas (see 310 CMR 10.54-10.58; if not applicable, go to Section B.3, Coastal Resource Areas).

Check all that apply below. Attach narrative and any supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.



Massachusetts Department of Environmental Protection
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B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

For all projects affecting other Resource Areas, please attach a narrative explaining how the resource area was delineated.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. <input type="checkbox"/> Bank	1. linear feet	2. linear feet
b. <input type="checkbox"/> Bordering Vegetated Wetland	1. square feet	2. square feet
c. <input type="checkbox"/> Land Under Waterbodies and Waterways	1. square feet	2. square feet
	3. cubic yards dredged	

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
d. <input type="checkbox"/> Bordering Land Subject to Flooding	1. square feet	2. square feet
	3. cubic feet of flood storage lost	4. cubic feet replaced
e. <input type="checkbox"/> Isolated Land Subject to Flooding	1. square feet	
	2. cubic feet of flood storage lost	3. cubic feet replaced

f. Riverfront Area
Chelsea River (coastal)
 1. Name of Waterway (if available) - **specify coastal or inland**

2. Width of Riverfront Area (check one):
- 25 ft. - Designated Densely Developed Areas only
 - 100 ft. - New agricultural projects only
 - 200 ft. - All other projects

3. Total area of Riverfront Area on the site of the proposed project: 28,435 square feet

4. Proposed alteration of the Riverfront Area:

<u>700</u>	<u>700 (0-25 feet)</u>	
a. total square feet	b. square feet within 100 ft.	c. square feet between 100 ft. and 200 ft.

5. Has an alternatives analysis been done and is it attached to this NOI? Yes No

6. Was the lot where the activity is proposed created prior to August 1, 1996? Yes No

3. Coastal Resource Areas: (See 310 CMR 10.25-10.35)

Note: for coastal riverfront areas, please complete **Section B.2.f.** above.



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C. Other Applicable Standards and Requirements

- This is a proposal for an Ecological Restoration Limited Project. Skip Section C and complete Appendix A: Ecological Restoration Limited Project Checklists – Required Actions (310 CMR 10.11).

Streamlined Massachusetts Endangered Species Act/Wetlands Protection Act Review

- Is any portion of the proposed project located in **Estimated Habitat of Rare Wildlife** as indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetland Wildlife published by the Natural Heritage and Endangered Species Program (NHESP)? To view habitat maps, see the *Massachusetts Natural Heritage Atlas* or go to http://maps.massgis.state.ma.us/PRI_EST_HAB/viewer.htm.

a. Yes No **If yes, include proof of mailing or hand delivery of NOI to:**

**Natural Heritage and Endangered Species Program
Division of Fisheries and Wildlife
1 Rabbit Hill Road
Westborough, MA 01581**

2017 _____
b. Date of map

If yes, the project is also subject to Massachusetts Endangered Species Act (MESA) review (321 CMR 10.18). To qualify for a streamlined, 30-day, MESA/Wetlands Protection Act review, please complete Section C.1.c, and include requested materials with this Notice of Intent (NOI); *OR* complete Section C.2.f, if applicable. *If MESA supplemental information is not included with the NOI, by completing Section 1 of this form, the NHESP will require a separate MESA filing which may take up to 90 days to review (unless noted exceptions in Section 2 apply, see below).*

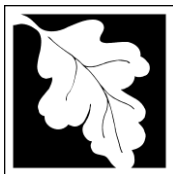
c. Submit Supplemental Information for Endangered Species Review*

- Percentage/acreage of property to be altered:
 - (a) within wetland Resource Area _____ percentage/acreage
 - (b) outside Resource Area _____ percentage/acreage
- Assessor's Map or right-of-way plan of site

- Project plans for entire project site, including wetland resource areas and areas outside of wetlands jurisdiction, showing existing and proposed conditions, existing and proposed tree/vegetation clearing line, and clearly demarcated limits of work **
 - (a) Project description (including description of impacts outside of wetland resource area & buffer zone)
 - (b) Photographs representative of the site

* Some projects **not** in Estimated Habitat may be located in Priority Habitat, and require NHESP review (see <http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/regulatory-review/>). Priority Habitat includes habitat for state-listed plants and strictly upland species not protected by the Wetlands Protection Act.

** MESA projects may not be segmented (321 CMR 10.16). The applicant must disclose full development plans even if such plans are not required as part of the Notice of Intent process.



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C. Other Applicable Standards and Requirements (cont'd)

- (c) MESA filing fee (fee information available at http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/mesa/mesa_fee_schedule.htm). Make check payable to “Commonwealth of Massachusetts - NHESP” and **mail to NHESP** at above address

Projects altering 10 or more acres of land, also submit:

- (d) Vegetation cover type map of site
- (e) Project plans showing Priority & Estimated Habitat boundaries
- (f) OR Check One of the Following
1. Project is exempt from MESA review.
Attach applicant letter indicating which MESA exemption applies. (See 321 CMR 10.14, http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/mesa/mesa_exemptions.htm; the NOI must still be sent to NHESP if the project is within estimated habitat pursuant to 310 CMR 10.37 and 10.59.)
 2. Separate MESA review ongoing. _____ a. NHESP Tracking # _____ b. Date submitted to NHESP
 3. Separate MESA review completed.
Include copy of NHESP “no Take” determination or valid Conservation & Management Permit with approved plan.
3. For coastal projects only, is any portion of the proposed project located below the mean high water line or in a fish run?
- a. Not applicable – project is in inland resource area only b. Yes No

If yes, include proof of mailing, hand delivery, or electronic delivery of NOI to either:

South Shore - Cohasset to Rhode Island border, and the Cape & Islands:

Division of Marine Fisheries -
Southeast Marine Fisheries Station
Attn: Environmental Reviewer
836 South Rodney French Blvd.
New Bedford, MA 02744
Email: DMF.EnvReview-South@state.ma.us

North Shore - Hull to New Hampshire border:

Division of Marine Fisheries -
North Shore Office
Attn: Environmental Reviewer
30 Emerson Avenue
Gloucester, MA 01930
Email: DMF.EnvReview-North@state.ma.us

Also if yes, the project may require a Chapter 91 license. For coastal towns in the Northeast Region, please contact MassDEP’s Boston Office. For coastal towns in the Southeast Region, please contact MassDEP’s Southeast Regional Office.



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Provided by MassDEP:

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Boston

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C. Other Applicable Standards and Requirements (cont'd)

Online Users:
Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

4. Is any portion of the proposed project within an Area of Critical Environmental Concern (ACEC)?
a. Yes No If yes, provide name of ACEC (see instructions to WPA Form 3 or MassDEP Website for ACEC locations). **Note:** electronic filers click on Website.
-
b. ACEC
5. Is any portion of the proposed project within an area designated as an Outstanding Resource Water (ORW) as designated in the Massachusetts Surface Water Quality Standards, 314 CMR 4.00?
a. Yes No
6. Is any portion of the site subject to a Wetlands Restriction Order under the Inland Wetlands Restriction Act (M.G.L. c. 131, § 40A) or the Coastal Wetlands Restriction Act (M.G.L. c. 130, § 105)?
a. Yes No
7. Is this project subject to provisions of the MassDEP Stormwater Management Standards?
a. Yes. Attach a copy of the Stormwater Report as required by the Stormwater Management Standards per 310 CMR 10.05(6)(k)-(q) and check if:
1. Applying for Low Impact Development (LID) site design credits (as described in Stormwater Management Handbook Vol. 2, Chapter 3)
2. A portion of the site constitutes redevelopment
3. Proprietary BMPs are included in the Stormwater Management System.
b. No. Check why the project is exempt:
1. Single-family house
2. Emergency road repair
3. Small Residential Subdivision (less than or equal to 4 single-family houses or less than or equal to 4 units in multi-family housing project) with no discharge to Critical Areas.

D. Additional Information

- This is a proposal for an Ecological Restoration Limited Project. Skip Section D and complete Appendix A: Ecological Restoration Notice of Intent – Minimum Required Documents (310 CMR 10.12).

Applicants must include the following with this Notice of Intent (NOI). See instructions for details.

Online Users: Attach the document transaction number (provided on your receipt page) for any of the following information you submit to the Department.

1. USGS or other map of the area (along with a narrative description, if necessary) containing sufficient information for the Conservation Commission and the Department to locate the site. (Electronic filers may omit this item.)
2. Plans identifying the location of proposed activities (including activities proposed to serve as a Bordering Vegetated Wetland [BVW] replication area or other mitigating measure) relative to the boundaries of each affected resource area.



Massachusetts Department of Environmental Protection
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Provided by MassDEP:

MassDEP File Number

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D. Additional Information (cont'd)

3. Identify the method for BVW and other resource area boundary delineations (MassDEP BVW Field Data Form(s), Determination of Applicability, Order of Resource Area Delineation, etc.), and attach documentation of the methodology.

4. List the titles and dates for all plans and other materials submitted with this NOI.

SPMT EAST BOSTON SEAWALL & UPLAND MOORING POINTS MAINTENANCE

a. Plan Title

COWI Marine North America, Inc.

Michael Ajemian

b. Prepared By

c. Signed and Stamped by

05/25/2018

1" = 40'

d. Final Revision Date

e. Scale

-

-

f. Additional Plan or Document Title

g. Date

5. If there is more than one property owner, please attach a list of these property owners not listed on this form.

6. Attach proof of mailing for Natural Heritage and Endangered Species Program, if needed.

7. Attach proof of mailing for Massachusetts Division of Marine Fisheries, if needed.

8. Attach NOI Wetland Fee Transmittal Form

9. Attach Stormwater Report, if needed.

E. Fees

1. Fee Exempt: No filing fee shall be assessed for projects of any city, town, county, or district of the Commonwealth, federally recognized Indian tribe housing authority, municipal housing authority, or the Massachusetts Bay Transportation Authority.

Applicants must submit the following information (in addition to pages 1 and 2 of the NOI Wetland Fee Transmittal Form) to confirm fee payment:

3442

5/22/2018

2. Municipal Check Number

3. Check date

3441

5/22/2018

4. State Check Number

5. Check date

COWI North America Inc

6. Payor name on check: First Name

7. Payor name on check: Last Name



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent



Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:
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F. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Notice of Intent and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge. I understand that the Conservation Commission will place notification of this Notice in a local newspaper at the expense of the applicant in accordance with the wetlands regulations, 310 CMR 10.05(5)(a).

I further certify under penalties of perjury that all abutters were notified of this application, pursuant to the requirements of M.G.L. c. 131, § 40. Notice must be made by Certificate of Mailing or in writing by hand delivery or certified mail (return receipt requested) to all abutters within 100 feet of the property line of the project location.

		6/28/2018
1. Signature of Applicant	<small>DocuSigned by:</small>  <small>C7D4A7B4FF59466...</small>	2. Date
		6/28/2018
3. Signature of Property Owner (if different)		4. Date
5. Signature of Representative (if any)		6. Date

For Conservation Commission:

Two copies of the completed Notice of Intent (Form 3), including supporting plans and documents, two copies of the NOI Wetland Fee Transmittal Form, and the city/town fee payment, to the Conservation Commission by certified mail or hand delivery.

For MassDEP:

One copy of the completed Notice of Intent (Form 3), including supporting plans and documents, one copy of the NOI Wetland Fee Transmittal Form, and a **copy** of the state fee payment to the MassDEP Regional Office (see Instructions) by certified mail or hand delivery.

Other:

If the applicant has checked the "yes" box in any part of Section C, Item 3, above, refer to that section and the Instructions for additional submittal requirements.

The original and copies must be sent simultaneously. Failure by the applicant to send copies in a timely manner may result in dismissal of the Notice of Intent.

Filing Fee Information



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands
NOI Wetland Fee Transmittal Form
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



A. Applicant Information

1. Location of Project:

467 Chelsea Street Boston
 a. Street Address b. City/Town
 3441 \$1259.50
 c. Check number d. Fee amount

2. Applicant Mailing Address:

Steve Mun
 a. First Name b. Last Name
 Sunoco Partners Marketing & Terminals
 c. Organization
 3807 West Chester Pike
 d. Mailing Address
 Newtown Square PA 19073
 e. City/Town f. State g. Zip Code
 215-246-8329 steve.mun@energytransfer.com
 h. Phone Number i. Fax Number j. Email Address

3. Property Owner (if different):

a. First Name b. Last Name
 c. Organization
 d. Mailing Address
 e. City/Town f. State g. Zip Code
 h. Phone Number i. Fax Number j. Email Address

B. Fees

Fee should be calculated using the following process & worksheet. **Please see Instructions before filling out worksheet.**

Step 1/Type of Activity: Describe each type of activity that will occur in wetland resource area and buffer zone.

Step 2/Number of Activities: Identify the number of each type of activity.

Step 3/Individual Activity Fee: Identify each activity fee from the six project categories listed in the instructions.

Step 4/Subtotal Activity Fee: Multiply the number of activities (identified in Step 2) times the fee per category (identified in Step 3) to reach a subtotal fee amount. Note: If any of these activities are in a Riverfront Area in addition to another Resource Area or the Buffer Zone, the fee per activity should be multiplied by 1.5 and then added to the subtotal amount.

Step 5/Total Project Fee: Determine the total project fee by adding the subtotal amounts from Step 4.

Step 6/Fee Payments: To calculate the state share of the fee, divide the total fee in half and subtract \$12.50. To calculate the city/town share of the fee, divide the total fee in half and add \$12.50.

To calculate filing fees, refer to the category fee list and examples in the instructions for filling out WPA Form 3 (Notice of Intent).



Massachusetts Department of Environmental Protection
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NOI Wetland Fee Transmittal Form
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

B. Fees (continued)

Step 1/Type of Activity	Step 2/Number of Activities	Step 3/Individual Activity Fee	Step 4/Subtotal Activity Fee
Cat 5	1	\$1696x1.5rfa	\$2544
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
Step 5/Total Project Fee:			\$2544
Step 6/Fee Payments:			
Total Project Fee:			\$2544
State share of filing Fee:			\$1259.50
City/Town share of filing Fee:			\$1500.00 (Boston Fee)
			a. Total Fee from Step 5
			b. 1/2 Total Fee less \$12.50
			c. 1/2 Total Fee plus \$12.50

C. Submittal Requirements

- a.) Complete pages 1 and 2 and send with a check or money order for the state share of the fee, payable to the Commonwealth of Massachusetts.

Department of Environmental Protection
 Box 4062
 Boston, MA 02211

- b.) **To the Conservation Commission:** Send the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and the city/town fee payment.

To MassDEP Regional Office (see Instructions): Send a copy of the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and a **copy** of the state fee payment. (E-filers of Notices of Intent may submit these electronically.)

3442

COWI NORTH AMERICA INC
1191 2ND AVE STE 1110
SEATTLE WA 98101
(206) 216-3933

Nordea
Nordea Bank AB (publ)
New York Branch
1-1078/260

Check Fraud Protection for Business

CHECK DATE
May 22, 2018

PAY One Thousand, Five Hundred and 00/100 Dollars

AMOUNT \$1,500.00

TO City of Boston

[Signature]
AUTHORIZED SIGNATURE

⑈003442⑈ ⑆026010786⑆ 4080053002⑈

Security features. Details on back.

COWI NORTH AMERICA INC

3442

Check Date: 05/22/2018

Invoice Number	Date	Voucher	Amount	Discounts	Previous Pay	Net Amount
ConCom Fee	04/12/2018		1,500.00			1,500.00
City of Boston			TOTAL			1,500.00
COWI NA INC Nordea USD						

3441

COWI NORTH AMERICA INC
1191 2ND AVE STE 1110
SEATTLE WA 98101
(206) 216-3933

Nordea
Nordea Bank AB (publ)
New York Branch
1-1078/260

Check Fraud Protection for Business

CHECK DATE
May 22, 2018

PAY One Thousand, Two Hundred Fifty-nine and 50/100 Dollars

AMOUNT \$1,259.50

TO Commonwealth of Massachusetts

[Signature]
AUTHORIZED SIGNATURE

⑈003442⑈ ⑆026010786⑆ 4080053002⑈

Security features. Details on back.

COWI NORTH AMERICA INC

3441

Check Date: 05/22/2018

Invoice Number	Date	Voucher	Amount	Discounts	Previous Pay	Net Amount
WPA Fee	05/22/2018		1,259.50			1,259.50
Commonwealth of Massachusetts			TOTAL			1,259.50
COWI NA INC Nordea USD						

Appendix A Project Narrative

1 Introduction

On behalf of Sunoco Partners Marketing & Terminals ("SPMT" or the "Applicant"), COWI North America, Inc. ("COWI") in association with Normandeau Associates, Inc. ("Normandeau"), is pleased to submit this Notice of Intent ("NOI") to the Boston Conservation Commission (the "Commission"). This NOI has been prepared and submitted in accordance with the Massachusetts Wetland Protection Act (MGL c. 131 s. 40) and implementing regulations (310 CMR 10.00) ("WPA" or "the Act") for authorization to conduct routine maintenance activities at an existing marine terminal facility.

The Applicant seeks to conduct routine maintenance and repairs to an existing seawall and associated structures along the Chelsea River in East Boston, Massachusetts. Approximately 910 cubic feet of grout bags and hand applied cementitious material are proposed to fill voids and cracks along a 1,150 linear foot section of granite block seawall to prevent further deterioration of the seawall. Two areas of scour protection (approximately 4,680 total square feet) are proposed between the existing seawall and the existing toe wall to prevent further erosion and undermining of the seawall. Project activities will not extend into the river channel further than the existing toe wall, as such no expansion of the existing facility is proposed. Seven upland mooring points anchored by an array of three 12-inch micropiles at each mooring point location are proposed to replace seven existing upland mooring points to maintain mooring capacity for existing operations.

The Project area is adjacent to and within the Chelsea River and the Project includes activities within intertidal areas (the face of the seawall itself) and subtidal areas within the Chelsea River immediately adjacent to the seawall (that makes up the human-made shoreline at this location). As such, Project activities will occur within and result in alteration to Land Under the Ocean immediately adjacent to the seawall (i.e., scour protection). Project activities within the upland portion of the site will involve minor and temporary activities within previously developed and degraded 25-foot Riverfront Area and Land Subject to Coastal Storm Flowage. The top of the seawall and corresponding top of Coastal Bank will not be altered by the Project. The Project site also contains 100-foot Buffer Zone to Coastal Bank which will not be altered by Project activities. The entirety of the Project site is located within the Chelsea Creek Designated Port Area.

1.1 Project Purpose and Need

The purpose of the Project is to maintain the existing seawall, and associated existing structures, and prevent potential detrimental impacts to the environment or to public safety that could result from further deterioration, or failure, of the seawall. Another important Project objective is to provide for continued efficient and secure operations at the existing facility.

The proposed localized seawall repairs are intended to reduce further deterioration of the seawall and minimize the seepage and loss of fill from the landward side of the wall into the aquatic environment. The repairs will also reduce the potential for sinkholes to form on the landward side of the seawall. The scour protection is proposed to prevent further undermining of the base of the seawall which could lead to further localized displacement of the bottom blocks, sliding of the wall, or overturning. The installation of micropile foundations for the upland mooring points is intended to provide sufficient mooring capacity with improved stability in order to maintain current operations at the facility.

2 Existing Conditions

2.1 Project Location

The SPMT facility is located along the Chelsea River in East Boston, Massachusetts. The mailing and street address for the facility is 467 Chelsea St., East Boston, Massachusetts, 02128. Coordinates for the approximate center of the Project site are as follows:

- WGS84 Latitude, Longitude: 42° 23' 05", 71° 01' 28".
- NAD83 Massachusetts Mainland State Plane Feet Easting, Northing: 784,611; 2,965,547.

2.2 Facility Overview

The SPMT facility is responsible for loading and unloading liquid petroleum products, including jet fuel. The terminal has a dedicated supply pipeline to Boston's Logan International Airport. The terminal is located on the southern bank of the Chelsea River, immediately west of the Chelsea Street Bridge. This section of the Chelsea River is heavily developed and largely used for industrial purposes (see Figures 1 & 2 in Appendix B).

The marine terminal has approximately 1,150 linear feet (lf) of waterfront along the Chelsea River. Existing structures include a granite block seawall that runs along the entire length of the terminal (approximately 1,150 feet), eleven (11) upland mooring points, two (2) sheet pile breasting cells, two (2) pile supported breasting dolphins, one (1) product transfer platform, and a toe wall offshore of the seawall. The following sections provide additional information on the granite block seawall, toe wall, and upland mooring points (also please see site photographs and graphics provided in Attachment C).

2.2.1 Granite Block Seawall

The granite block seawall is an earth retaining gravity structure consisting of dry-stacked granite block construction. The seawall is approximately 1,150 feet long with an exposed face (measured from mudline to top of seawall) that varies from 25 feet to 40 feet in height. Historic site reference drawings indicate that the overall height of the wall varies 38 feet to 44 feet. The bottom elevation of the seawall ranges from -22.0' Mean Low Water ("MLW") to -24.5' MLW. The portion of the wall which exists behind the original product transfer platform has a cast-in-place retaining wall that is approximately 8 feet tall. Additionally, there are multiple vintage of previous repair work which include grout bags and full height concrete encasement.

The seaward face of the seawall is irregular. Historic reference drawings indicate that the granite block was stacked with a slope going downward and in a seaward direction (similar slope on the landward side). A uniform slope downwards and seaward is observable for the upper seven (7) courses of the wall. From Course 8 to the mudline (varies up to Course 14) the blocks step landward and seaward irregularly.

2.2.2 Toe Wall

A toe wall was added in the 1990s during a berth deepening project. The toe wall runs approximately 777 feet parallel to the seawall and centered on the ship berth and is constructed of various sized steel sheet piles and steel pipe piles. The cut off elevation of the toe wall ranges from -18 to -22 feet MLW.

2.2.3 Upland Mooring Points

There are eleven (11) upland mooring points at the site. Seven (7) of the upland mooring points are quick release mooring hooks. The remaining four (4) of the eleven (11) upland mooring points are single bit bollards.

2.3 Facility Conditions

The following description of existing conditions at the facility are based on dive inspection reports conducted at the site from 2012 and 2017.

2.3.1 Granite Block Seawall

The granite block seawall has widespread minor to moderate deterioration and localized major to severe deterioration (See Attachment C - Photographs 3 & 4). The major to severe defects consist of voids, failed grout bag repairs, rotated and displaced granite blocks, and cracked granite blocks. These defects appear to facilitate the loss of backfill landward of the seawall resulting in isolated sinkholes along the waterfront surface course.

Two (2) areas along the length of the granite block seawall are of concern. The average mudline elevation relative to the seawall depth is less than two (2) feet. The loss of fill at the toe of seawall presents an increased risk for seawall undermining.

2.3.2 Toe Wall

The toe wall was rated to be in satisfactory condition. The steel sheeting exhibited 75 to 100% coating loss, minor corrosion, and minor pitting. Near the eastern breasting cell, there is a sheet that is cut 7 feet short of the adjacent sheets that creates a gap that is 3'-10" wide.

2.3.3 Upland Mooring Points

Several upland mooring points show signs of previous overstressing, as evidenced by rotation and displacement of the concrete caps in the offshore direction (see Attachment C - Photographs 5 & 6). The mooring hardware (quick release hooks) appears to be in fair condition. This condition suggests that while the mooring hardware is adequately sized for the loads, the concrete foundations that they are connected to may not be intended to resist the same loading. It is believed that the mooring hardware and concrete foundations are of two different construction vintages. The capacity of the existing mooring point foundation is unknown.

2.4 Wetland Resource Areas

Wetland resource areas at the Project site were evaluated by Normandeau during a site visit conducted on March 26, 2018. State jurisdictional coastal resource areas present at or proximate to the Project area include Land Under the Ocean, Land Subject to Tidal Action, Land Containing Shellfish, Coastal Bank, Land Subject to Coastal Storm Flowage and 25-foot Riverfront Area. The entirety of the site is located within the Chelsea Creek Designated Port Area. Additional information regarding these resource areas is provided in the following sections (see Figure 3 in Appendix B and the NOI Permit Drawings for an overview of existing wetland resource areas at and proximate to the Project site).

2.4.1 Designated Port Area

Designated Port Areas are defined at 310 CMR 10.26(2) and mean "those areas designated in 301 CMR 25.00: *Designation of Port Areas*." According to 310 CMR 10.26(1) "land under the ocean in designated port areas is likely to be significant to marine fisheries, storm damage prevention and flood control. In designated port areas, salt marshes, coastal dunes, land under salt ponds, coastal beaches, tidal flats, barrier beaches, rocky intertidal shores and land containing shellfish are not likely to be significant to marine fisheries, storm damage prevention or flood control."

According to the Boston Inner Harbor map produced by the Massachusetts Office of Coastal Zone Management ("CZM") dated April 2016, the entirety of the Project area is located within the Chelsea Creek DPA.¹

2.4.2 Land Under the Ocean

Land Under the Ocean ("LUO") as defined in 310 CMR 10.25 (2), is (in part), "land extending from the mean low water line seaward to the boundary of the municipality's jurisdiction and includes land under estuaries." LUO does not have a 100-foot buffer zone.

¹ <https://www.mass.gov/service-details/designated-port-area-boundary-maps>

Land Under the Ocean exists within Chelsea River seaward of the mean low water line at elevation 0.0 feet (MLLW datum). The LUO consists of unconsolidated sediments, rocky material, existing structures, and debris found within the regularly submerged portion of the channel.

According to data maintained by the Massachusetts Office of Geographic Information ("MassGIS") Online Data Viewer ("OLIVER"), the Project site does not contain any mapped eelgrass beds, mapped shellfish suitable areas, or areas identified as anadromous fishways.

2.4.3 Land Subject to Tidal Action

As defined at 310 CMR 10.04, Land Subject to Tidal Action means "land subject to the periodic rise and fall of a coastal water body, including spring tides."

Land Subject to Tidal Action at the site extends from Extreme Low Water (defined by NOAA as Mean Lower Low Water), at elevation -0.3 feet (MLLW datum) to Extreme High Water (defined by NOAA as Mean Higher High Water), at elevation 9.96 feet (MLLW datum) which occurs during spring tides. Land Subject to Tidal Action overlaps other WPA resource areas at the site and occurs at and on the outward face of the existing granite block seawall.

2.4.4 Land Containing Shellfish

As defined at 310 CMR 10.34(2), Land Containing Shellfish means "land under the ocean, tidal flats, rocky intertidal shores, salt marshes and land under salt ponds when any such land contains shellfish."

As established by 310 CMR 10.34(3), such lands are significant to the protection of land containing shellfish and to the protection of marine fisheries when they have been identified and mapped by the conservation commission or the Department in consultation with Division of Marine Fisheries or the local shellfish constable.

The most recently available Shellfish Area Classification Map² for Boston Inner Harbor (Growing Area Code: GBH4) produced June 28, 2013 by the Massachusetts Division of Marine Fisheries identifies this section of the Chelsea River as prohibited to shellfishing. As such, the Project area does not currently contain the resource area Land Containing Shellfish.

2.4.5 Coastal Bank

According to 310 CMR 10.30, Coastal Bank is "the seaward face or side of any elevated landform, other than a coastal dune, which lies at the landward edge of a

² <http://www.mass.gov/eea/agencies/dfg/dmf/programs-and-projects/designated-shellfish-growing-areas.html>

coastal beach, land subject to tidal action, or other wetland.” Coastal Bank has a 100-foot buffer zone that extends from the upper boundary of the Bank.

The upper boundary of Coastal Bank was delineated within the Project Area in accordance with the procedures outlined in the DEP Wetland Program Policy 92-1. At the Project site, the top of Coastal Bank is located along the top of the granite block seawall bank of the Chelsea River and was defined according to Standard 4 in the Policy. Standard 4 states a “top of coastal bank will fall below the 100-yr floodplain elevation and is the point where the slope ceases to be greater than or equal to 10:1” (DEP Wetlands Program Policy 92-1: Coastal Banks). Coastal bank will not be altered by the Project.

2.4.6 Riverfront Area

According to 310 CMR 10.58 (in part), a Riverfront Area (“RFA”) is the area of land between a river’s mean annual high water line (“MAHWL”) and, in the City of Boston, a parallel line measured 25-feet horizontally outward. A river means any natural flowing body of water that empties to any ocean, lake, pond or other river and which flows throughout the year (see 310 CMR 10.04 and 310 CMR 10.58(2)). The RFA area may include or overlap other resource areas or their 100-foot Buffer Zones. The RFA itself does not have a 100-foot Buffer Zone.

The Chelsea River is a perennial river and is tidally influenced in this location. According to the WPA regulations (310 CMR 10.58), the Chelsea River therefore has a Riverfront Area that extends from its approximate mean annual high water line. According to 310 CMR 10.58(2)(a)(2), the MAHWL of a tidal river is coincident with mean high water as determined under 310 CMR 10.23. Mean high water occurs at elevation 9.52 (MLLW) and therefore the 25-Riverfront Area extends horizontally outward from elevation 9.52 and was delineated on the Permit Drawings as extending from the top of the existing seawall into the developed, upland portion of the site. Riverfront Area at the site generally consists of existing paved, concrete, stone, and metal surfaces associated with the existing marine terminal facility.

As a result of the above-described site conditions, the Riverfront Area within the Project area may be considered previously developed and/or degraded as defined by the regulations. According to 310 CMR 10.58(5), a previously developed RFA contains areas degraded prior to August 7, 1996 by impervious surfaces from existing structures or pavement, absence of topsoil, junkyards, or abandoned dumping grounds. RFA is characterized as either “previously developed” and/or “degraded” in this case because the entirety of RFA within the limit of work consists of artificial and/or impervious surfaces (i.e. pavement, concrete, metal, etc.).

2.4.7 Land Subject to Coastal Storm Flowage

Land Subject to Coastal Storm Flowage is defined at 310 CMR 10.04 as “land subject to any inundation caused by coastal storms up to and including that caused by the 100-year storm, surge of record or storm of record, whichever is greater.”

The current FEMA Flood Insurance Rate Map for the City of Boston, Massachusetts, Community Panel No. 25025C0019J, dated March 16, 2016, identifies portions of the Project area as located within Zone AE (special flood hazard area subject to inundation by the 1% annual chance flood) at base flood elevation 15.19 MLLW datum, EL 10 NAVD 88. LSCSF at the Project site consists of the entirely developed marine terminal facility. There are no performance standards under the WPA regulations and no 100-foot buffer zone associated with LSCSF (see Figure 5 – FEMA mapping).

2.5 Natural Heritage and Endangered Species Program Atlas

The Project is not located within areas mapped as Priority Habitat of Rare Species and/or Estimated Habitat of Rare Wildlife by the Natural Heritage and Endangered Species Program under the Massachusetts Endangered Species Act and the Massachusetts Wetlands Protection Act, respectively (Natural Heritage Atlas, 2017). There are no mapped potential vernal pools or certified vernal pools in the vicinity of the Project area (please see Figure 4 – NHESP Mapping).

3 Project Description

The NOI Permit Drawings are included in Attachment G which detail the proposed improvements. The proposed seawall improvements are described below.

The Applicant seeks to install scour protection at the base of the seawall, perform localized seawall repairs, and replace seven (7) upland mooring points. These repairs are proposed to be conducted in summer and fall 2018. The general anticipated Project duration is one to two months. Additionally, during the life of the permits to be issued for the Project, SPMT anticipates performing routine maintenance of existing waterfront structures to maintain safe operations.

3.1 Localized Seawall Repairs

Localized repairs are proposed to fill the large voids along the length of the granite block seawall and to repair one (1) severely displaced granite block. The void repairs shall consist of grout bags and hand-applied cementitious material. The displaced block repair shall consist of filling the large void left by a rotated block with a slightly smaller granite block to help repair and reinforce the seawall in this location. The estimated void defects proposed for repair are detailed in Attachment D – Volume of Voids to be Repaired in Existing Seawall.

Localized seawall void repairs will be performed by underwater divers assisted by barge mounted cranes. For large voids in the seawall (greater than 6 inches), the dive crew will install a grout bag as deep into the void as possible with hand tools. The grout bag will then be pumped full of non-shrink, high-strength, cementitious grout from a work barge. The dive crew members will provide assistance by hand for the placement of the grout. Once the bag is filled, it will be sealed and the process will be repeated for other voids.

The severely displaced granite block is located at approximate STA. 10+40 (see Permit Drawings). There are other granite blocks along the seawall that are displaced, but do not require repair at this time. The displaced block at STA. 10+40 has rotated almost 90 degrees and is insecurely positioned with only a few inches of bearing on the granite blocks above and below it. The repair proposed for this defect is to have a block of granite ordered from a quarry that will fit the void left by the rotated block. The new, smaller, granite block will be lifted into place by a barge mounted crane. The new granite block will be positioned such that adequate bearing will be restored to the blocks above and below the severely rotated block. As needed, grout bags and or chinking stone may be used to improve bearing conditions and fill voids around the perimeter of the new stone.

3.2 Scour Protection

Two areas of scour protection (approximately 4,680 total square feet) are proposed between the existing seawall and the existing toe wall to prevent further erosion and undermining of the seawall. The scour protection is proposed to prevent further undermining of the base of the seawall which could lead to further localized displacement of the bottom blocks, sliding of the wall, or overturning. Scour protection will consist of a 12 inch layer of bedding stone (approximately 1.5 inch diameter stone) and a 12 inch armor layer (material to be determined: rip-rap, marine mattress, or articulating concrete mattress).

The proposed scour protection to the east of the product transfer platform will be approximately 154 l.f. along the seawall. The scour protection will extend from the toe of the seawall to the existing cutoff wall. Where scour protection is installed beyond the length of the cutoff wall, the width of the scour protection will be approximately 19 feet wide and will not extend further into the river than the adjacent existing cutoff wall. The east side scour protection area is approximately 2,820 s.f. This results in approximately 210 CY of clean aggregate fill to be placed in the Chelsea River at the base of the seawall. Existing mudline elevations range from approximately -16' to -24' MLW. After the proposed activities the resulting elevations in the locations of scour protection will range from approximately -14' to -22' MLW. A steel patch plate (approx. 6 feet x 10 feet) will be welded in place to close the void in the steel sheet pile toe wall located east of the East Breasting Dolphin. The patch plate will be installed on the inshore side of the toe wall to prevent the loss of fill and scour protection into the berth area. The top elevation of the patch plate will match the cutoff elevation of the adjacent existing sheets.

The proposed scour protection to the west of the product transfer platform will be approximately 270 l.f. along the seawall. The scour protection will extend from the toe of the seawall to the cutoff wall. Where scour protection is installed beyond the length of the cutoff wall, the width of the scour protection will be approximately 7 feet wide and will not extend further into the river than the adjacent cutoff wall. The west side scour protection area is approximately 1,860 s.f. This results in approximately 140 CY of clean aggregate fill to be placed in the Chelsea River at the base of the seawall. Existing mudline elevations range approximately -17' to -25' MLW. After the proposed activities the resulting elevations in the locations of scour protection will range approximately -15' to -23' MLW.

The scour protection will be installed from a barge mounted crane. No excavation or alteration to the existing mudline is proposed. A layer of bedding stone will be installed to provide a stable foundation for the scour protection material. Materials will be lowered below the water surface and placed near the mudline to reduce disruption of granular sediments. Scour protection will be placed in a manner to reduce potential loss of fill into the berth area. The scour protection will be placed no closer than 45 feet from the limits of the federal navigation channel and no fill will be placed within the federal navigation channel.

As the proposed maintenance work cannot be done in the dry given the tidal elevations at the site, turbidity controls (i.e. floating turbidity curtains) may be utilized as necessary during the placement of scour protection at the base of the seawall to prevent any temporary turbidity impacts within the Chelsea River beyond the limit of work. Please see Section 6.0 below for more information.

3.3 Upland Mooring Point Replacements

There are seven (7) upland mooring points on the site that have been designated for replacement. The replacement work is intended to ensure safe mooring of vessels calling on the terminal. The proposed work would include demolition of the existing foundations and replacement with a new array of three 12-inch micropiles and a reinforced concrete cap, as shown on the attached plans. The top of the concrete cap would be approximately equal to the finish grade elevation upon which new quick release hook hardware would be fastened. All work will occur above the HTL within paved or concrete surfaces.

Five (5) of the seven (7) mooring points scheduled for rehabilitation have a capstan with a concrete foundation nearby. The hardware and foundation at these locations may also be removed.

During demolition and installation of the upland mooring points, wetland resource areas will be protected from discharges of excavated sediments through the use of sedimentation control measures and protection of potential points of entry such as catch basins. Potential measures may include sediment control socks around the catch basins. Any soils excavated during Project activities shall be managed according to existing site management procedures (including oversight by a Licensed Site Professional) utilizing standard Best Management Practices ("BMPs").

3.4 Continued Maintenance

In addition to the structural maintenance activities described herein, the Applicant seeks to authorize routine and substantial maintenance, repair, and/or replacement of its waterfront structures. The work would be conducted as necessary to maintain existing structures for operational safety. SPMT performs regular inspections of its waterfront structures. Inspections are performed both topside and underwater. As potential maintenance needs are identified, repairs are designed to extend the services life of the structure while minimizing impacts to the environment.

Proposed types of maintenance work include replacement in-kind, updating materials (i.e. replacing timber with steel or concrete), cathodic protection, renewal of scour protection, bulkhead over-sheeting, painting of structural steel, steel patch plates, and structural rehabilitation. The improvements will extend the service life of the shoreline and marine facilities and allow for continued safe operation, mooring, liquids handling, and navigation of bulk liquid transshipment vessels.

4 Wetland Resource Area Impacts & Compliance with WPA Performance Standards

The Project area is adjacent to and within the Chelsea River and the Project includes activities within intertidal areas (the face of the seawall itself) and subtidal areas within the Chelsea River immediately adjacent to the seawall that establishes the human-made shoreline at this location. As such, Project activities will occur within and result in alteration to Land Under the Ocean immediately adjacent to the seawall (i.e. scour protection). Project activities within the upland portion of the site will involve minor and temporary activities within previously developed and degraded 25-foot Riverfront Area and Land Subject to Coastal Storm Flowage. The top of the seawall and corresponding top of Coastal Bank will not be altered by the Project. The Project site also contains 100-foot Buffer Zone to Coastal Bank which will not be functionally altered by Project activities. The entirety of the Project site is located within the Chelsea Creek Designated Port Area.

4.1 Land Under the Ocean

Proposed alteration within LUO includes a total of approximately 4,680 s.f. and 350 cubic yards of permanent fill (i.e., scour protection) within the previously-disturbed subtidal areas immediately adjacent to the existing seawall that defines the human-made shoreline of the Chelsea River at this location. Project activities will not extend further into the river channel or LUO than existing structures (i.e., submerged toe wall). LUO areas that will be altered consist predominantly of Estuarine Subtidal Unconsolidated Bottom with sand, cobble-gravel, and mud substrate and a special modifier of "excavated" according to the *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al., 1979).³ The location of proposed scour protection and alteration within LUO is predominately an erosive environment consisting of granular sediments and fill materials. Turbidity controls will be utilized as necessary during placement of scour protection to prevent any temporary impacts to LUO resulting from temporary increases in suspended sediments.

4.1.1 LUO Consistency with Performance Standards

The applicable performance standards are shown below with a discussion of how the Project meets the performance standards for LUO.

³ HGM classification: Marine Fringe; Tiner, R.W. 2014 classification: Marine subtidal (Dichotomous Keys and Mapping Codes for Wetland Landscape Position, Landform, Water Flow Path, and Waterbody Type: Version 3.0).

310 CMR 10.25(3): *"Improvement dredging for navigational purposes affecting land under the ocean shall be designed and carried out using the best available measures so as to minimize adverse effects on such interests caused by changes in:*

- a) *bottom topography which will result in increased flooding or erosion caused by an increase in the height or velocity of waves impacting the shore;*
- b) *sediment transport processes which will increase flood or erosion hazards by affecting the natural replenishment of beaches;*
- c) *water circulation which will result in an adverse change in flushing rate, temperature, or turbidity levels; or*
- d) *marine productivity which will result from the suspension or transport of pollutants, the smothering of bottom organisms, the accumulation of pollutants by organisms, or the destruction of marine fisheries habitat or wildlife habitat."*

This standard is not applicable as the Project does not involve improvement dredging for navigational purposes.

310 CMR 10.25(4): *Maintenance dredging for navigational purposes affecting land under the ocean shall be designed and carried out using the best available measures so as to minimize adverse effects on such interests caused by changes in marine productivity which will result from the suspension or transport of pollutants, increases in turbidity, the smothering of bottom organisms, the accumulation of pollutants by organisms, or the destruction of marine fisheries habitat or wildlife habitat.*

This standard is not applicable as the Project does not involve maintenance dredging for navigational purposes.

310 CMR 10.25(5): *"Projects not included in 310 CMR 10.25(3) or (4) which affect nearshore areas of land under the ocean shall not cause adverse effects by altering the bottom topography so as to increase storm damage or erosion of coastal beaches, coastal banks, coastal dunes, or salt marshes."*

Within the Project area, the Chelsea River contains no natural beaches, coastal dunes or salt marshes. Coastal bank at the site consists of a vertical human-made granite block seawall which will be repaired and stabilized as part of the proposed Project activities. The bottom topography of LUO immediately adjacent to the seawall will be altered by the addition of scour protection, however, no increase in potential storm damage or erosion of coastal resources is anticipated.

310 CMR 10.25(6): *"Projects not included in 310 CMR 10.25(3) which affect land under the ocean shall if water-dependent be designed and constructed, using best available measures, so as to minimize adverse effects, and if non-water-dependent, have no adverse effects, on marine fisheries habitat or wildlife habitat caused by:*

- (a) *alterations in water circulation;*

- (b) *destruction of eelgrass (*Zostera marina*) or widgeon grass (*Rupia maritima*) beds;*
- (c) *alterations in the distribution of sediment grain size;*
- (d) *changes in water quality, including, but not limited to, other than natural fluctuations in the level of dissolved oxygen, temperature or turbidity, or the addition of pollutants; or*
- (e) *alterations of shallow submerged lands with high densities of polychaetes, mollusks or macrophytic algae."*

As discussed above, alteration to LUO is limited to the installation of scour protection immediately adjacent to the existing seawall within previously disturbed and filled areas within the Chelsea River. The installation of scour protection will not result in significant changes to water circulation at the site and there are no eelgrass or widgeon grass beds present within the Project area. The Project will not result in significant changes to the existing sediment grain size. The Project site does not appear to contain high densities of polychaetes, mollusks or macrophytic algae due to the heavily developed and industrialized character of the work area. In addition, turbidity controls will be utilized as necessary during construction so as to minimize potential temporary effects to marine fisheries or wildlife habitat.

310 CMR 10.25(7): *"Notwithstanding the provisions of 310 CMR 10.25(3) through (6), no project may be permitted which will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.37."*

This standard is not applicable as current Natural Heritage Atlas mapping (14th editions, effective August 2017) does not identify an area of estimated habitat, priority habitat, certified vernal pools or potential vernal pools on or near the Project site.

4.2 25-foot Riverfront Area

As described above, the Riverfront Area at the Project site is previously developed and/or degraded as defined by the regulations because the entirety of RFA within the limit of work consists of artificial and/or impervious surfaces (e.g., pavement, concrete, metal, etc.). The upland mooring point replacement activities will temporarily impact approximately 700 square feet of previously developed and degraded 25-foot Riverfront Area. Project activities will not affect the existing character of the previously developed RFA within the Project area or negatively impact the ability of the RFA at the site to contribute to the interests identified in the WPA.

4.3 Land Subject to Coastal Storm Flowage

LSCSF at the site consists of the entirely developed existing marine terminal facility. The upland mooring point replacement activities will temporarily impact

approximately 700 square feet of LSCSF. Project activities will not result in a decrease of flood storage capacity or impact LSCSF's ability to provide storm damage prevention or flood control. There are no performance standards for LSCSF defined in the WPA.

5 Avoidance, Minimization & Mitigation Measures

The SPMT East Boston facility is an active marine terminal that provides critical offloading of fuel to a dedicated transfer pipeline that serves Logan Internal airport, and has been previously authorized by the USACE and the State of Massachusetts. The authorization being requested in this permit application is to enable the Applicant to maintain the site and existing operations. As an existing, authorized facility with waterfront structures, the need for maintenance of those structures is a component of the continued safe use of the site. The permits being sought are solely for maintenance of the facility as a safe and dependable operation and not for any proposed expansion or change in use. Avoidance, mitigation and mitigation measures as described below reflect existing site conditions, the critical activities that are undertaken at the site of the site, and its Designated Port Area status.

The Project will incorporate measures to minimize potential impacts to wetland resources, including implementation of Best Management Practices ("BMPs") for construction activities that will occur within and proximate to jurisdictional resource areas. These measures are designed to ensure that impacts to water quality and habitat are avoided where possible and sufficiently monitored and mitigated, where appropriate.

As the proposed seawall maintenance work cannot be done in the dry (during low tide) given the tidal elevations at the site, if required turbidity controls (i.e. floating turbidity curtains installed so as to extend from water surface to the mudline) will be utilized during the placement of scour protection at the base of the seawall to prevent any temporary turbidity impacts within the Chelsea River beyond the limit of work. If determined to be necessary, turbidity curtains will surround the area where scour protection is being installed by being secured to the face of the seawall, to the work barge, and then back to the face of the seawall (forming an enclosed work space approximately 100 feet in length). Turbidity curtains will move along with the scour protection work to ensure that sediment resuspension during fill placement is mitigated. Catch basin protection (i.e., drain filter socks) will be utilized during the upland portions of the work located above the HTL (please see Permit Drawings).

As part of the planning process for the proposed Project, steps were taken to ensure avoidance and minimization of impacts to wetland resource areas. A No-Action alternative would result in additional deterioration of the waterfront structures with potential negative impacts to site operations, safety, and the environment. Rehabilitation alternatives include oversheeting the existing seawall which would increase the quantity of fill and impacts to LUO. To avoid and minimize impacts to wetland resource areas, the Applicant seeks to limit repair activities to those necessary to maintain existing operations and forestall the potential failure of the

seawall and resultant inadvertent impacts to the environment. The impacts associated with the proposed repairs will be localized, temporary in nature, and are not anticipated to adversely impact wetland resource areas, therefore the Applicant is not proposing to undertake or provide additional compensatory mitigation in support of this Project other than the mitigation measures and BMPs described herein.

5.1 Turbidity and Sedimentation Controls

Turbidity and erosion control devices and other BMPs will be utilized as designated in the Permit Drawings and described in this application, and as required in compliance with the permits and authorizations to be issued for the Project. Catch basin protection (i.e. drain filter socks) will be utilized during the upland portions of the work located above the HTL.

5.2 Dewatering & Excavation

Dewatering activities would be limited to the upland excavation work areas surrounding the upland mooring points. Should water accumulate within the areas of areas of excavation that needs to be removed to facilitate construction during the Project, the water will be pumped directly from the work area and into geotextile filter bags, temporary portable settling basins, or portable fractionation tanks (depending on the volume of water encountered) which will act as sediment traps during construction. Subsequent to settling and containment of solids, discharge will be piped to the surface waters of the Chelsea River.

5.3 Spill Prevention & Response Plan

During construction, a spill containment kit will be kept on site at all times. In the event that there is an accidental release of petroleum or other product into a wetland or waterbody, the Boston Conservation Commission will be notified along with appropriate emergency response agencies. Equipment will be serviced or maintained offsite and kept in a condition that prevents leakage or discharge of pollutants during the Project construction period.

5.4 Fisheries

The Chelsea River is a high traffic industrial waterway bordered by industrial and commercial facilities. The overall depth of the channel, along with the limited suitable shoreline habitat limits the potential of the channel to provide suitable habitat for spawning and/or critical life stages fish species potentially present within the river. Most of these species and lifestages use the water column as habitat and the Project should not substantially affect this habitat. The scour protection has the

potential to affect 4,680 square feet of benthic habitat, but is proposed to improve water quality by reducing turbidity associated with scour.

ESA-listed fishes that could occur in or near the Chelsea River and Boston Harbor include Atlantic Sturgeon (in the late fall and winter months) and Shortnose Sturgeon (in the spring through early fall). Both are expected to be infrequent visitors to Boston Harbor and to the Chelsea River in particular.

As such, Project activities are expected to have minimal to negligible impacts to any fisheries resources or habitats that may be present in the Project area based on the limited nature of the proposed in-water Project activities, the existing conditions in the Project area, and the habitat requirements for species that may occur within the Chelsea River. Notwithstanding the minimal amount of suitable habitat that may be present within the limited Project area, potential impacts to fisheries will be further minimized, avoided, and mitigated for through the implementation of best management practices (BMPs) to ensure that the proposed Project does not adversely impact fisheries and water quality within the Chelsea River.

6 Conclusion

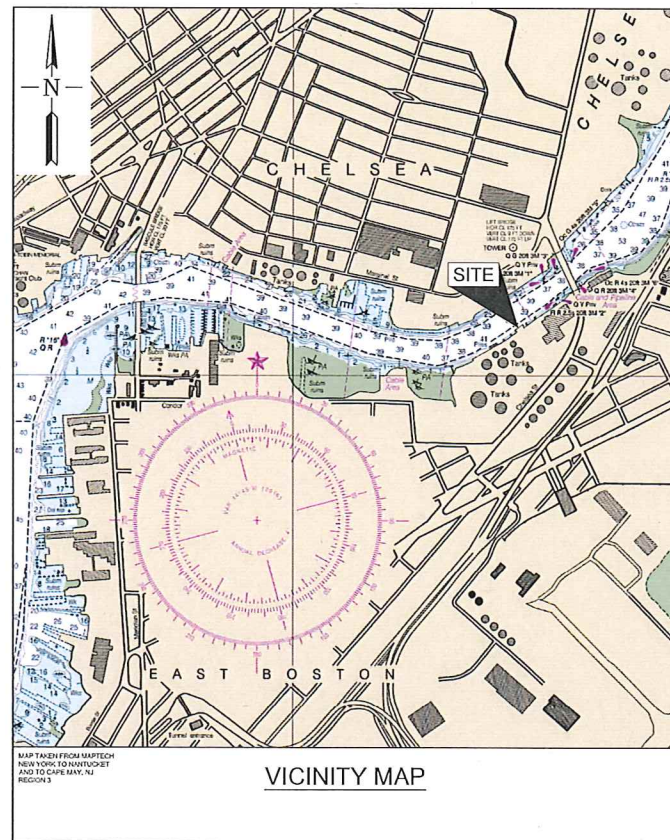
COWI, on behalf of the Applicant, respectfully submits this NOI to the Boston Conservation Commission describing the proposed Project, the purpose of which is to maintain a fully authorized existing marine terminal, and demonstrating that potential impacts have been minimized to the extent practicable; and that unavoidable impacts have been mitigated through construction-period BMPs.

Appendix B NOI Permit Drawings

SUNOCO PARTNERS MARKETING & TERMINALS

467 Chelsea Street, East Boston, MA 02128

East Boston Seawall & Upland Mooring Points Maintenance



DWG. NO.	TITLE
A101337-5A-01	COVER SHEET AND DRAWING LIST
A101337-5A-02	OVERALL EXISTING SITE PLAN
A101337-5A-03	PROPOSED MAINTENANCE PLAN
A101337-5A-04	PROPOSED TYPICAL MAINTENANCE CROSS-SECTIONS & MISC. DETAILS

PERMIT DRAWING LIST

REV	DATE	DESCRIPTION	BY	CHK
A	5/25/2018	ISSUED FOR REGULATORY REVIEW	MADN	MPAJ

CLIENT
**SUNOCO PARTNERS
MARKETING & TERMINALS**
467 CHELSEA STREET, EAST BOSTON, MA 02128

CONSULTANT
COWI Marine
North America
A Business Unit of COWI North America, Inc.
35 Braintree Hill Office Park, Suite 100 Braintree, MA 02184
Tel.: 508.830.1110 Fax: 508.830.1202
Website: www.cowi-na.com

PROJECT TITLE
SPMT EAST BOSTON SEAWALL & UPLAND MOORING POINTS MAINTENANCE

FOR PERMIT PURPOSES ONLY

DRAWING TITLE
COVER SHEET AND DRAWING LIST

SCALE AS NOTED	DESIGNED MADN	APPROVED MPAJ
DRAWN JEMC	CHECKED MPAJ	DATE 5/25/2018
JOB NO A101337	DRAWING NO. A101337-5A-01	REV. A

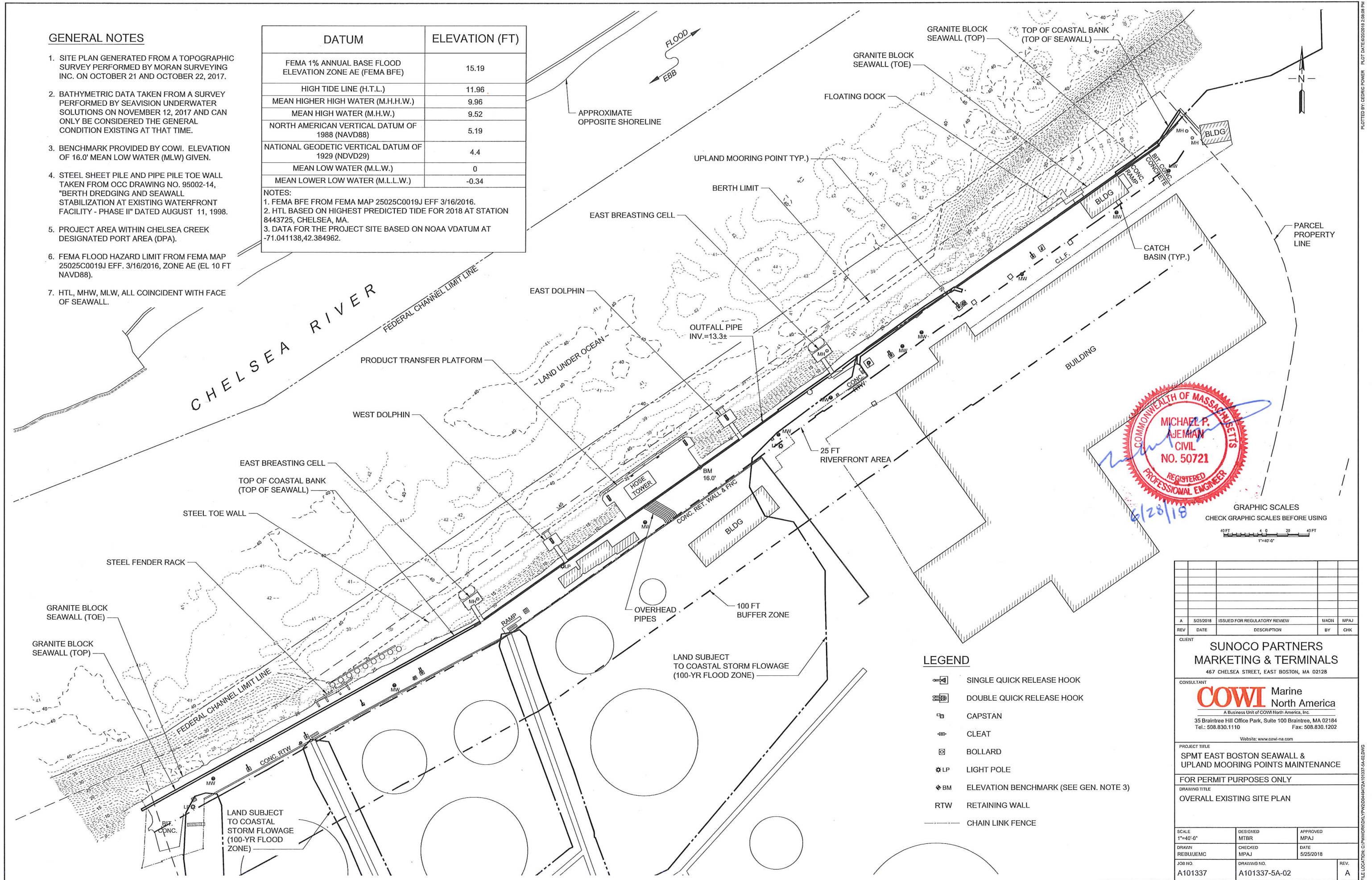


GENERAL NOTES

- SITE PLAN GENERATED FROM A TOPOGRAPHIC SURVEY PERFORMED BY MORAN SURVEYING INC. ON OCTOBER 21 AND OCTOBER 22, 2017.
- BATHYMETRIC DATA TAKEN FROM A SURVEY PERFORMED BY SEAVISION UNDERWATER SOLUTIONS ON NOVEMBER 12, 2017 AND CAN ONLY BE CONSIDERED THE GENERAL CONDITION EXISTING AT THAT TIME.
- BENCHMARK PROVIDED BY COWI. ELEVATION OF 16.0' MEAN LOW WATER (MLW) GIVEN.
- STEEL SHEET PILE AND PIPE PILE TOE WALL TAKEN FROM OCC DRAWING NO. 95002-14, "BERTH DREDGING AND SEAWALL STABILIZATION AT EXISTING WATERFRONT FACILITY - PHASE II" DATED AUGUST 11, 1998.
- PROJECT AREA WITHIN CHELSEA CREEK DESIGNATED PORT AREA (DPA).
- FEMA FLOOD HAZARD LIMIT FROM FEMA MAP 25025C0019J EFF. 3/16/2016, ZONE AE (EL 10 FT NAVD88).
- HTL, MHW, MLW, ALL COINCIDENT WITH FACE OF SEAWALL.

DATUM	ELEVATION (FT)
FEMA 1% ANNUAL BASE FLOOD ELEVATION ZONE AE (FEMA BFE)	15.19
HIGH TIDE LINE (H.T.L.)	11.96
MEAN HIGHER HIGH WATER (M.H.H.W.)	9.96
MEAN HIGH WATER (M.H.W.)	9.52
NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)	5.19
NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NDVD29)	4.4
MEAN LOW WATER (M.L.W.)	0
MEAN LOWER LOW WATER (M.L.L.W.)	-0.34

NOTES:
 1. FEMA BFE FROM FEMA MAP 25025C0019J EFF 3/16/2016.
 2. HTL BASED ON HIGHEST PREDICTED TIDE FOR 2018 AT STATION 8443725, CHELSEA, MA.
 3. DATA FOR THE PROJECT SITE BASED ON NOAA VDATUM AT -71.041138,42.384962.



GRAPHIC SCALES
 CHECK GRAPHIC SCALES BEFORE USING
 40 FT 0 20 40 FT
 1"=40'-0"

REV	DATE	DESCRIPTION	BY	CHK
A	5/25/2018	ISSUED FOR REGULATORY REVIEW	MPAJ	MPAJ

CLIENT: **SUNOCO PARTNERS MARKETING & TERMINALS**
 467 CHELSEA STREET, EAST BOSTON, MA 02128

CONSULTANT: **COWI Marine North America**
 A Business Unit of COWI North America, Inc.
 35 Braintree Hill Office Park, Suite 100 Braintree, MA 02184
 Tel.: 508.830.1110 Fax: 508.830.1202
 Website: www.cowi-na.com

PROJECT TITLE: **SPMT EAST BOSTON SEAWALL & UPLAND MOORING POINTS MAINTENANCE**

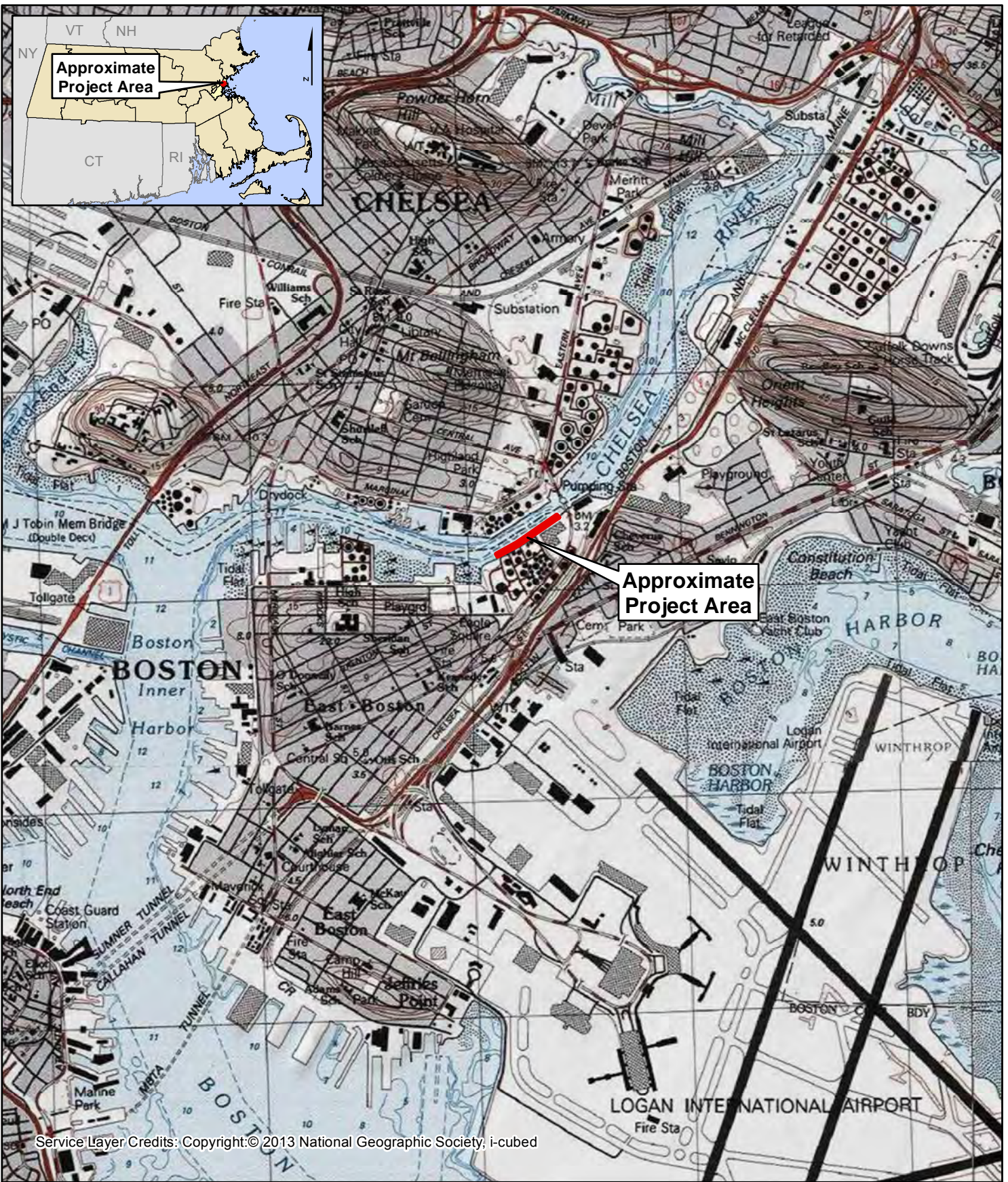
FOR PERMIT PURPOSES ONLY

DRAWING TITLE: **OVERALL EXISTING SITE PLAN**

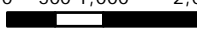

SCALE	DESIGNED	APPROVED
1"=40'-0"	MTBR	MPAJ
DRAWN	CHECKED	DATE
REBUJEMC	MPAJ	5/25/2018
JOB NO.	DRAWING NO.	REV.
A101337	A101337-5A-02	A

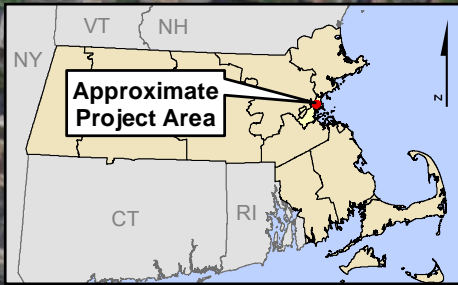
PLOTTED BY: CEDRIC POWER PLOT DATE: 2018.06.28 PM

Appendix C Figures



Service Layer Credits: Copyright:© 2013 National Geographic Society, i-cubed

	<p>1:24,000</p> <p>0 500 1,000 2,000 Feet</p> 		<p>Figure 1. USGS Locus Map Sunoco Partners & Marketing Terminals East Boston Seawall & Mooring Point Maintenance Project</p>	
			<p>Date: 5/8/2018</p>	<p>Revised:</p>



Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community



0 100 200 400 Feet



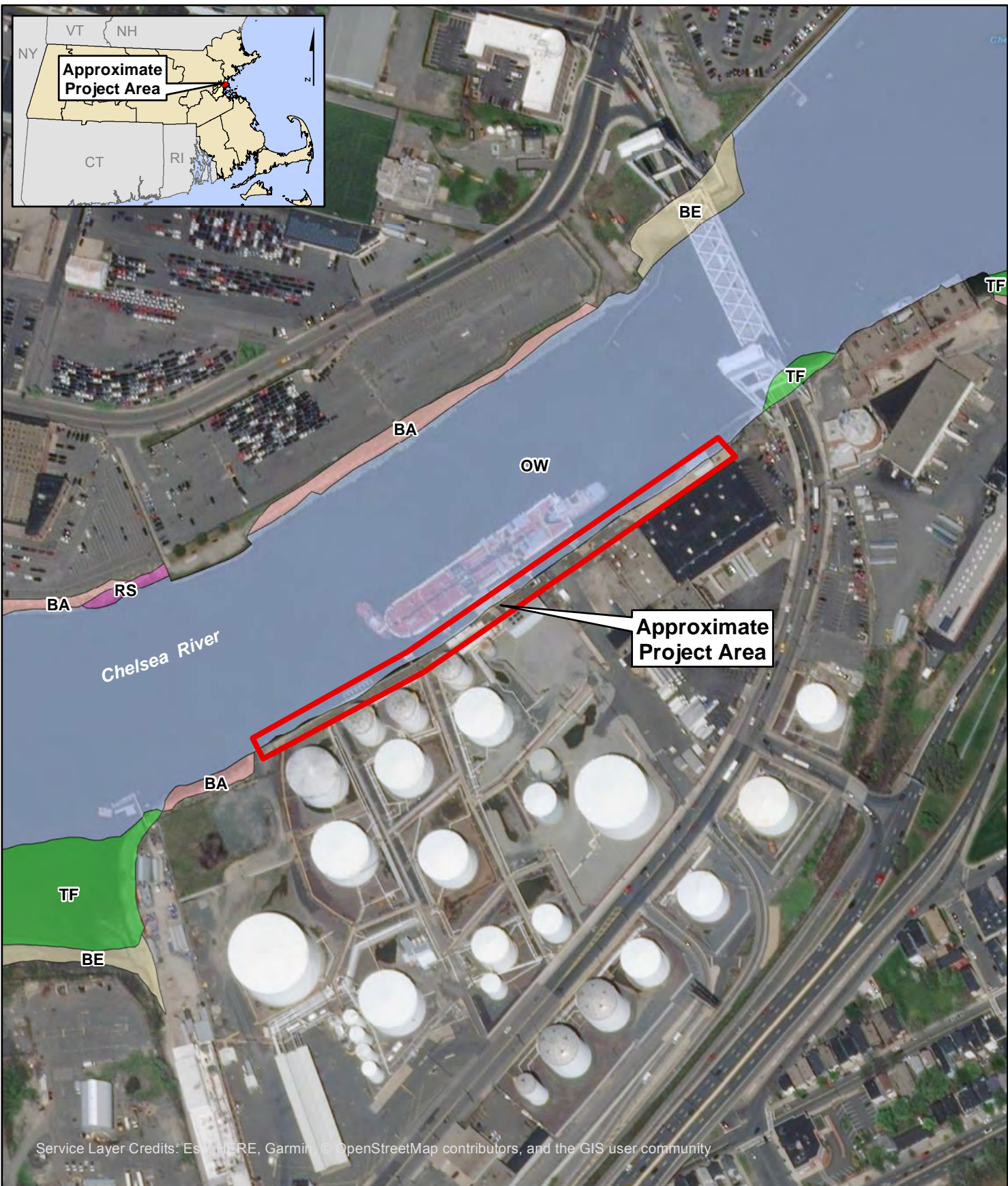
Figure 2.
Aerial Locus Map
Sunoco Partners & Marketing Terminals
East Boston Seawall
& Mooring Point Maintenance Project

Date:
5/8/2018

Revised:

25 Nashua Road Bedford, New Hampshire 03110-5527

PREPARED FOR: SDH PROJECT: 24163.000 PREPARED BY: SAS



Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community

Mass DEP Wetlands

- BA** COASTAL BANK BLUFF OR SEA CLIFF
- BE** COASTAL BEACH
- OW** OPEN WATER
- RS** ROCKY INTERTIDAL SHORE
- TF** TIDAL FLAT

0 75 150 300 Feet

Date: 5/8/2018
Revised:

Figure 3.
Mass DEP Wetlands
Sunoco Partners & Marketing Terminals
East Boston Seawall
& Mooring Point Maintenance Project

25 Nashua Road Bedford, New Hampshire 03110-5527
PREPARED FOR: SDH PROJECT: 24163.000 PREPARED BY: SAS



Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community

N

Estimated Habitats of Rare Wildlife
 Priority Habitats of Rare Species

0 425 850 1,700 Feet

NORMANDEAU ASSOCIATES
Environmental Consultants

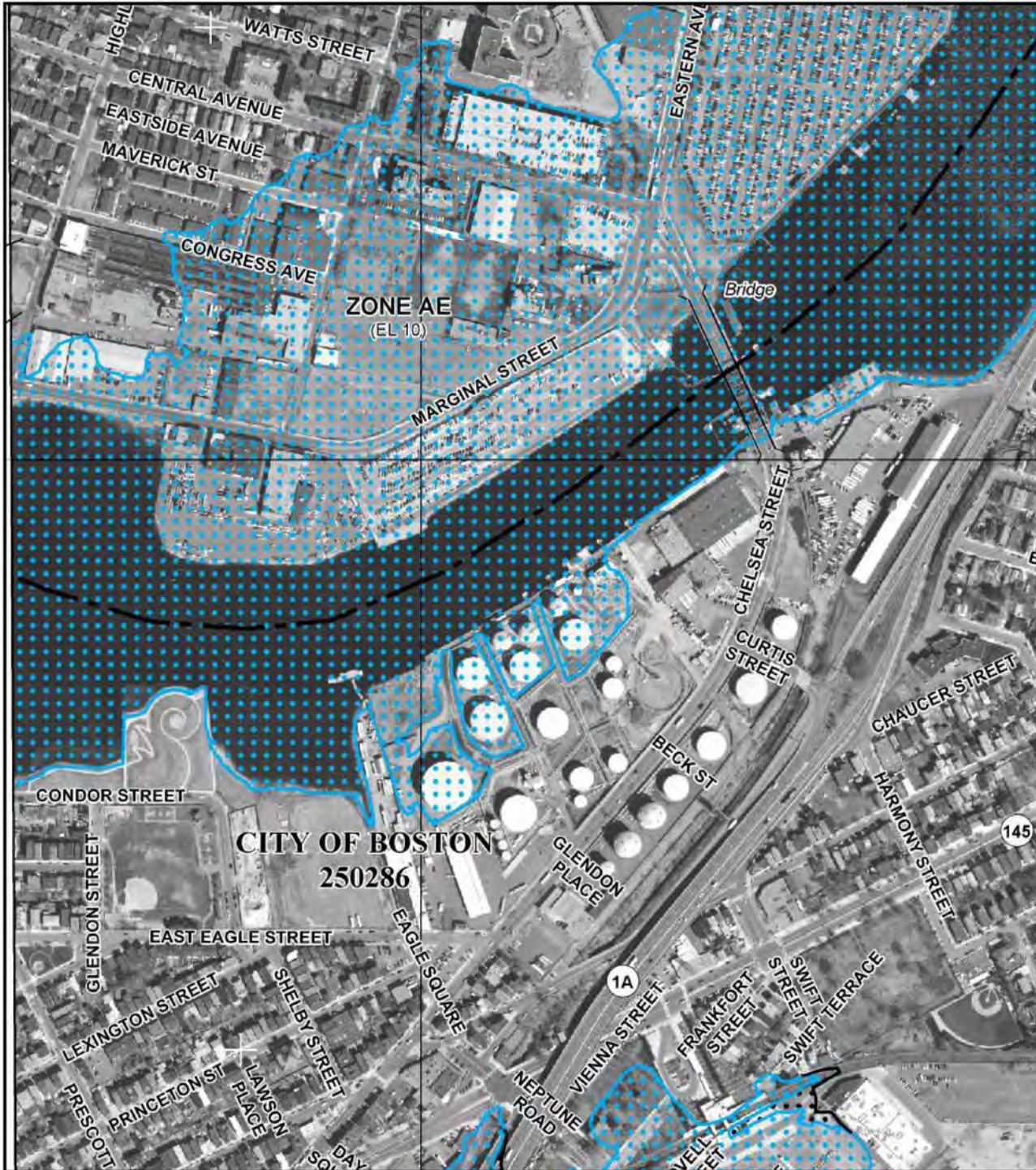
Date: 5/8/2018

Revised:

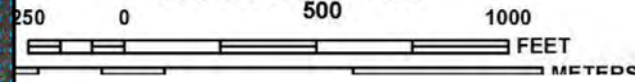
Figure 4.
NHESP Mapping
Sunoco Partners & Marketing Terminals
East Boston Seawall
& Mooring Point Maintenance Project

25 Nashua Road Bedford, New Hampshire 03110-5527

PREPARED FOR: SDH PROJECT: 24163.000 PREPARED BY: SAS



MAP SCALE 1" = 500'



NFIP
NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0019J

FIRM
FLOOD INSURANCE RATE MAP
SUFFOLK COUNTY,
MASSACHUSETTS
(ALL JURISDICTIONS)

PANEL 19 OF 176
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
BOSTON, CITY OF	250286	0019	J
CHELSEA, CITY OF	250287	0019	J
REVERE, CITY OF	250288	0019	J
WINTHROP, TOWN OF	250289	0019	J

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.



MAP NUMBER
25025C0019J
MAP REVISED
MARCH 16, 2016

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

Figure 5 - FEMA mapping

LEGEND



SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

- ZONE A** No Base Flood Elevations determined.
- ZONE AE** Base Flood Elevations determined.
- ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
- ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- ZONE AR** Special Flood Hazard Areas formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
- ZONE A99** Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
- ZONE V** Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
- ZONE VE** Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.



FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.



OTHER FLOOD AREAS

ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.



OTHER AREAS

ZONE X Areas determined to be outside the 0.2% annual chance floodplain.

ZONE D Areas in which flood hazards are undetermined, but possible.



COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS



MAP SCALE 1" = 500'



OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- 1% Annual Chance Floodplain Boundary
- 0.2% Annual Chance Floodplain Boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary

Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevation, flood depths, or flood velocities.

Limit of Moderate Wave Action

Limit of Moderate Wave Action coincident with Zone Break

513

Base Flood Elevation line and value; elevation in feet*
(EL 987) Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the North American Vertical Datum of 1988

Cross section line

Transect line

Culvert

Bridge

46° 02' 08", 93° 02' 12"
Geographic coordinates referenced to the North American Datum of 1983 (NAD 83) Western Hemisphere

4988000 M 1000-meter grid; Massachusetts State Plane Mainland Zone (FIPS Zone 2001), Lambert Conformal Conic projection

4988000 N 1000-meter Universal Transverse Mercator tick values, zone 19N

DX5510 X Bench mark (see explanation in Notes to Users section of this FIRM panel)

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
September 25, 2009

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

March 16, 2016 - to change Base Flood Elevations and Special Flood Hazard Areas, to change zone designations, to update the effects of wave action, to update corporate limits, to add roads and road names, to incorporate previously issued Letters of Map Revision and to modify Coastal Barrier Resource System units.

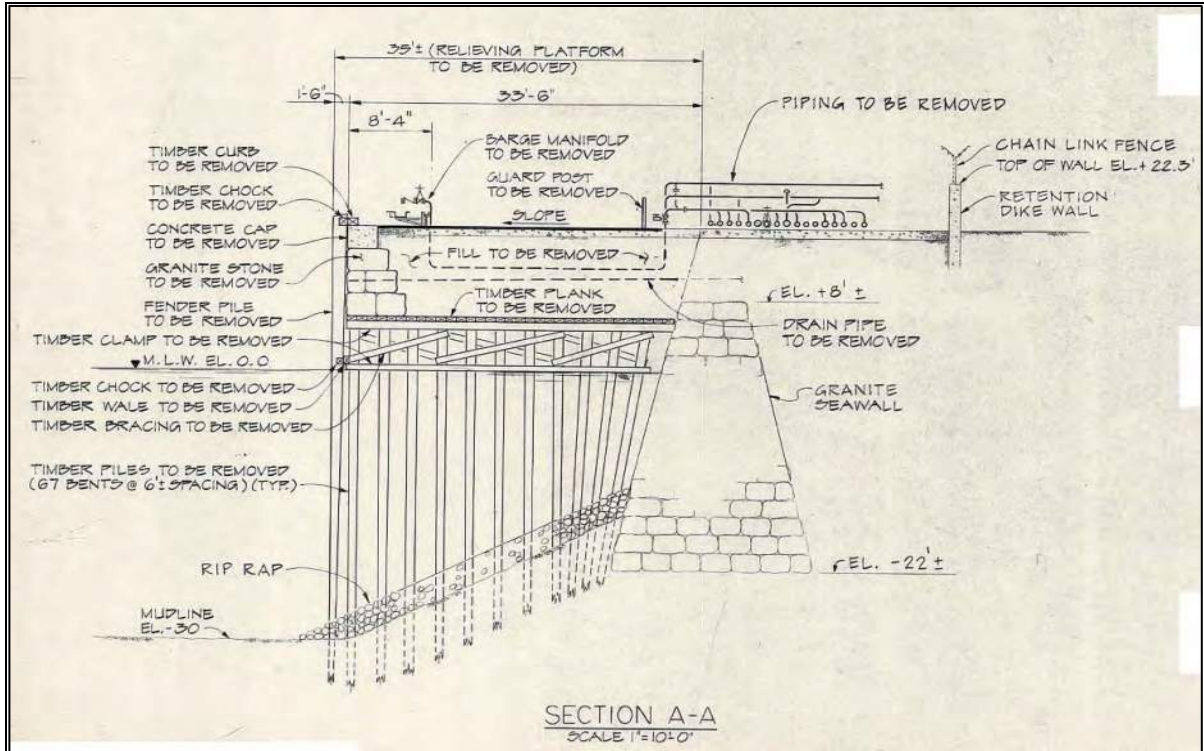
For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

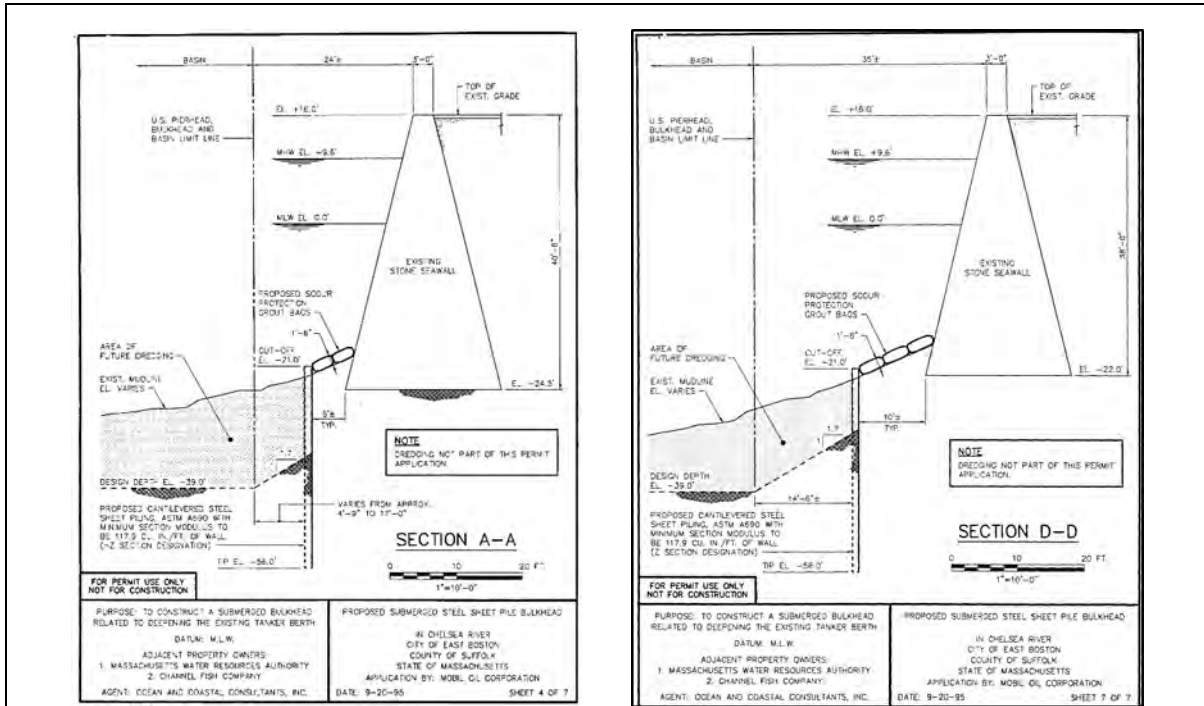
This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

Figure 5 - FEMA mapping (continued)

Appendix D Site Photos & Graphics



Graphic 1 - Construction Drawing of Waterfront Structures Section in Vicinity of Product Transfer Platform (HPA, 1987)



Graphic 2 - Permit Drawing of Waterfront Structures (OCC, 1995)



Photograph 1 – East section of existing seawall visible above waterline.



Photograph 2 – West section of existing seawall visible above waterline.



Photograph 3: Significant Void at Mudline Due to Displacement of Blocks (Sta. 10+40).



Photograph 4: Typical Cracked Granite Block Underwater.



Photograph 5: Mooring Points Rotated Slightly Seaward on Eastern Portion of Site.



Photograph 6: Mooring Hook Foundation Displacement in the Offshore Direction

Appendix E Volume of Voids to be Repaired in Seawall

Attachment D – Volume of Voids to be Repaired in Existing Seawall

Volume of Voids to be Repaired in Seawall						
STA.	Course	W (in.)	H (in.)	D (in.)	Volume (ft ³)	
0 + 3 0	8/9	12	36	60	15.0	
0 + 3 8	10	12	36	36	9.0	
0 + 8 0	9/10	36	60	60	75.0	
1 + 0 5	10	12	12	48	4.0	
1 + 3 0	10	30	36	60	37.5	
1 + 4 0	13	48	12	30	10.0	
1 + 9 0	MLW	12	30	36	7.5	
2 + 0 0	14	30	16	40	11.1	
2 + 3 5	15	72	24	36	36.0	
2 + 4 8	14/15	480	24	36	240.0	
2 + 8 0	4/5	72	6	40	10.0	
2 + 8 5	6/7	24	8	36	4.0	
2 + 8 8	14	72	24	36	36.0	
3 + 1 6	9	30	30	55	28.6	
4 + 6 5	9	12	48	60	20.0	
4 + 7 0	8/9	36	6	72	9.0	
4 + 8 7	4/5	36	12	36	9.0	
6 + 1 0	1	6	40	48	6.7	
6 + 2 0	7	10	14	48	3.9	
6 + 2 3	6/7	60	6	48	10.0	
6 + 2 5	5/6	72	8	60	20.0	
6 + 3 5	2/3	72	6	60	15.0	
6 + 5 0	5/6	72	8	60	20.0	
6 + 6 0	3/4	72	6	49	12.3	
6 + 8 0	3/4	36	30	60	37.5	
6 + 8 0	6	12	30	36	7.5	
7 + 0 0	6/7	60	7	48	11.7	
7 + 2 5	Bottom	72	8	60	20.0	
7 + 5 0	8	8	36	36	6.0	
7 + 5 0	8	24	10	36	5.0	
7 + 8 5	Bottom	24	24	36	12.0	
8 + 0 5	Bottom	24	48	48	32.0	
8 + 6 5	9/10	72	6	36	9.0	
8 + 7 0	12-14	24	60	60	50.0	
8 + 9 5	9	6	72	60	15.0	
8 + 9 5	9	6	36	60	7.5	
9 + 1 5	11	12	30	36	7.5	
9 + 5 0	15/16	7	38	24	3.7	
10 + 4 0	15	24	24	48	16.0	
10 + 5 2	15	12	24	36	6.0	
10 + 7 5	15	6	30	60	6.3	
Total Void Volume (CF)					910.0	

Appendix F Abutter Notification

Affidavit of Service
Massachusetts Wetlands Protection Act

I, Tory Fletcher, hereby certify under the pains and penalties of perjury that Normandeau Associates, Inc. gave notification to abutters in compliance with the second paragraph of Massachusetts General Laws Chapter 131, Section 40, the DEP Guide to Abutter Notification dated April 8, 1994 with regard to the following matter:

A Notice of Intent filed with the Boston Conservation Commission under the Massachusetts Wetlands Protection Act by Sunoco Partners Marketing & Terminals on July 03, 2018 for the East Boston Seawall & Mooring Point Maintenance Project in Boston, Massachusetts.

The form of notification and a list of abutters to whom it was provided and their addresses are attached to this Affidavit of Service.



Tory Fletcher

July 03, 2018
Date

Notification To Abutters Under The Massachusetts Wetlands Protection Act

In accordance with the second paragraph of Massachusetts General Laws Chapter 131, Section 40, you are notified of the following:

1. The name of the applicant is: **SUNOCO PARTNERS MARKETING & TERMINALS**
2. The applicant has filed: **a Notice of Intent with the Boston Conservation Commission for authorization to conduct routine maintenance activities at an existing marine terminal facility located on the Chelsea River in Boston, MA.**
3. The address of the lot where the project is proposed is: **467 Chelsea Street, Boston, MA, Parcel ID – 0103711006,**
4. Copies of the NOI and site plans may be examined or obtained for a fee from either the:
 - a. Copies of the NOI and site plans may be examined at the **Boston Conservation Commission office located at 1 CITY HALL SQUARE, ROOM 709 BOSTON, MA 02201, Monday through Friday 9:00 am to 5:00 pm. Please call ahead of time for an appointment at 617-635-3850.** Copy fees may be applicable.
 - b. Copies of the NOI and site plans may be obtained from the applicant's representative, **COWI North America, Inc., by calling 508-830-1110 during regular business hours.**
5. Information regarding the date, time and place of the public hearing may be obtained from the **Boston Conservation Commission by calling 617-635-3850.** A public hearing is tentatively scheduled for **July 18, 2018 at 6 pm.** Please call the referenced number to confirm the hearing date, time, and location.

NOTE: Notice of the public hearing, including its date, time and place, will be published at least five (5) days in advance in the **Boston Herald.**

NOTE: Notice of the public hearing, including its date, time and place, will be posted in City Hall at least forty-eight (48) hours in advance.

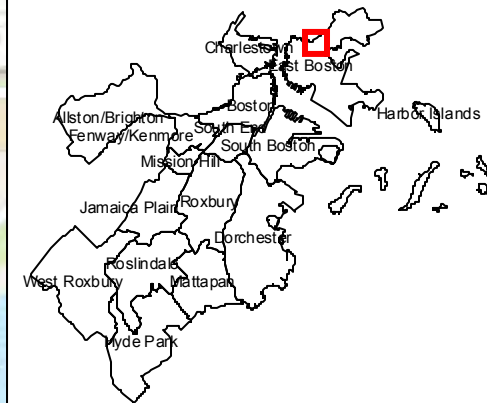


Parcel ID: 0103711006
 Address: 570 600 CHELSEA ST
 Zipcode: 02128
 Owner: SUNOCO PARTNERS MARKETING &
 Land Use: Commercial
 Lot Size: 754,926.00 sq ft
 Living Area: 88,200.00 sq ft
 Total Value: \$29,888,300.00
 Land Value: \$26,854,300.00
 Building Value: \$3,034,000.00
 Gross Tax: \$753,185.16



**MAP FOR REFERENCE ONLY
 NOT A LEGAL DOCUMENT**

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Sources: Esri, HERE, Garmin, Intel, mapinformer, Mapbox, GEBCO, USGS, FAO, NPS, NGA, Swisstopo, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS User Community

100-ft Abutters List Parcels Map from Boston Assessors Department



PID	OWNER	ADDRESSEE	MLG_ADDRESS	MLG_CITYSTATE	MLG_ZIPCODE	LOC_ADDRESS	LOC_CITY	LOC_ZIPCC
100462000	SUNOCO PARTNERS MARKETING &	C/O K E ANDREWS & COMPANY	1900 DALROCK RD	ROWLETT TX	75088	CHELSEA ST	EAST BOSTON	2128
100439000	SUNOCO PARTNERS MARKETING &	C/O K E ANDREWS & COMPANY	1900 DALROCK RD	ROWLETT TX	75088	CURTIS ST	EAST BOSTON	2128
100461000	SUNOCO PARTNERS MARKETING &	C/O K E ANDREWS & COMPANY	1900 DALROCK RD	ROWLETT TX	75088	481 CHELSEA ST	EAST BOSTON	2128
100460000	SUNOCO PARTNERS MARKETING &	C/O K E ANDREWS & COMPANY	1900 DALROCK RD	ROWLETT TX	75088	441 CHELSEA ST	EAST BOSTON	2128
100485010	MASSPORT AUTHORITY		WM F MCCLELLAN HW	EAST BOSTON MA	2128	WM F MCCLELLAN HW	EAST BOSTON	2128
100439030	MASSACHUSETTS DEPARTMENT		611 CHELSEA ST	EAST BOSTON	2128	611 CHELSEA ST	EAST BOSTON	2128
100441010	SUNOCO PARTNERS MARKETING &	C/O K E ANDREWS & COMPANY	1900 DALROCK RD	ROWLETT TX	75088	545 CHELSEA ST	EAST BOSTON	2128
100441100	SUNOCO PARTNERS MARKETING &	C/O K E ANDREWS & COMPANY	1900 DALROCK RD	ROWLETT TX	75088	525 CHELSEA ST	EAST BOSTON	2128
100441060	MASSACHUSETTS PORT AUTHORITY		CHELSEA ST	E BOSTON MA	2128	CHELSEA ST	EAST BOSTON	2128
103711005	SUNOCO PARTNERS MARKETING &	C/O K E ANDREWS & COMPANY	1900 DALROCK RD	ROWLETT TX	75088	460 CHELSEA ST	EAST BOSTON	2128
103711010	EAGLE HILL REAL ESTATE	C/O EAGLE HILL REAL ESTATE CO	1 CURTIS ST	EAST BOSTON MA	2128	610 CHELSEA ST	EAST BOSTON	2128
103711006	SUNOCO PARTNERS MARKETING &	C/O K E ANDREWS & COMPANY	1900 DALROCK RD	ROWLETT TX	75088	570 CHELSEA ST	EAST BOSTON	2128

Appendix G Stormwater Management Checklist and NPDES Supporting Documentation



Checklist for Stormwater Report

A. Introduction

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



A Stormwater Report must be submitted with the Notice of Intent permit application to document compliance with the Stormwater Management Standards. The following checklist is NOT a substitute for the Stormwater Report (which should provide more substantive and detailed information) but is offered here as a tool to help the applicant organize their Stormwater Management documentation for their Report and for the reviewer to assess this information in a consistent format. As noted in the Checklist, the Stormwater Report must contain the engineering computations and supporting information set forth in Volume 3 of the [Massachusetts Stormwater Handbook](#). The Stormwater Report must be prepared and certified by a Registered Professional Engineer (RPE) licensed in the Commonwealth.

The Stormwater Report must include:

- The Stormwater Checklist completed and stamped by a Registered Professional Engineer (see page 2) that certifies that the Stormwater Report contains all required submittals.¹ This Checklist is to be used as the cover for the completed Stormwater Report.
- Applicant/Project Name
- Project Address
- Name of Firm and Registered Professional Engineer that prepared the Report
- Long-Term Pollution Prevention Plan required by Standards 4-6
- Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan required by Standard 8²
- Operation and Maintenance Plan required by Standard 9

In addition to all plans and supporting information, the Stormwater Report must include a brief narrative describing stormwater management practices, including environmentally sensitive site design and LID techniques, along with a diagram depicting runoff through the proposed BMP treatment train. Plans are required to show existing and proposed conditions, identify all wetland resource areas, NRCS soil types, critical areas, Land Uses with Higher Potential Pollutant Loads (LUHPPL), and any areas on the site where infiltration rate is greater than 2.4 inches per hour. The Plans shall identify the drainage areas for both existing and proposed conditions at a scale that enables verification of supporting calculations.

As noted in the Checklist, the Stormwater Management Report shall document compliance with each of the Stormwater Management Standards as provided in the Massachusetts Stormwater Handbook. The soils evaluation and calculations shall be done using the methodologies set forth in Volume 3 of the Massachusetts Stormwater Handbook.

To ensure that the Stormwater Report is complete, applicants are required to fill in the Stormwater Report Checklist by checking the box to indicate that the specified information has been included in the Stormwater Report. If any of the information specified in the checklist has not been submitted, the applicant must provide an explanation. The completed Stormwater Report Checklist and Certification must be submitted with the Stormwater Report.

¹ The Stormwater Report may also include the Illicit Discharge Compliance Statement required by Standard 10. If not included in the Stormwater Report, the Illicit Discharge Compliance Statement must be submitted prior to the discharge of stormwater runoff to the post-construction best management practices.

² For some complex projects, it may not be possible to include the Construction Period Erosion and Sedimentation Control Plan in the Stormwater Report. In that event, the issuing authority has the discretion to issue an Order of Conditions that approves the project and includes a condition requiring the proponent to submit the Construction Period Erosion and Sedimentation Control Plan before commencing any land disturbance activity on the site.



Checklist for Stormwater Report

B. Stormwater Checklist and Certification

The following checklist is intended to serve as a guide for applicants as to the elements that ordinarily need to be addressed in a complete Stormwater Report. The checklist is also intended to provide conservation commissions and other reviewing authorities with a summary of the components necessary for a comprehensive Stormwater Report that addresses the ten Stormwater Standards.

Note: Because stormwater requirements vary from project to project, it is possible that a complete Stormwater Report may not include information on some of the subjects specified in the Checklist. If it is determined that a specific item does not apply to the project under review, please note that the item is not applicable (N.A.) and provide the reasons for that determination.

A complete checklist must include the Certification set forth below signed by the Registered Professional Engineer who prepared the Stormwater Report.

Registered Professional Engineer's Certification

I have reviewed the Stormwater Report, including the soil evaluation, computations, Long-term Pollution Prevention Plan, the Construction Period Erosion and Sedimentation Control Plan (if included), the Long-term Post-Construction Operation and Maintenance Plan, the Illicit Discharge Compliance Statement (if included) and the plans showing the stormwater management system, and have determined that they have been prepared in accordance with the requirements of the Stormwater Management Standards as further elaborated by the Massachusetts Stormwater Handbook. I have also determined that the information presented in the Stormwater Checklist is accurate and that the information presented in the Stormwater Report accurately reflects conditions at the site as of the date of this permit application.

Registered Professional Engineer Block and Signature

N/A - Proposed activities are maintenance of existing facilities. Stormwater controls and management plan are in place and will not be altered via the proposed maintenance. The existing controls will be protected during construction with BMPs.

Signature and Date

Checklist

Project Type: Is the application for new development, redevelopment, or a mix of new and redevelopment?

- New development
- Redevelopment
- Mix of New Development and Redevelopment



Checklist for Stormwater Report

Checklist (continued)

LID Measures: Stormwater Standards require LID measures to be considered. Document what environmentally sensitive design and LID Techniques were considered during the planning and design of the project:

- No disturbance to any Wetland Resource Areas
- Site Design Practices (e.g. clustered development, reduced frontage setbacks)
- Reduced Impervious Area (Redevelopment Only)
- Minimizing disturbance to existing trees and shrubs
- LID Site Design Credit Requested:
 - Credit 1
 - Credit 2
 - Credit 3
- Use of "country drainage" versus curb and gutter conveyance and pipe
- Bioretention Cells (includes Rain Gardens)
- Constructed Stormwater Wetlands (includes Gravel Wetlands designs)
- Treebox Filter
- Water Quality Swale
- Grass Channel
- Green Roof
- Other (describe): _____

Standard 1: No New Untreated Discharges

- No new untreated discharges
- Outlets have been designed so there is no erosion or scour to wetlands and waters of the Commonwealth
- Supporting calculations specified in Volume 3 of the Massachusetts Stormwater Handbook included.



Checklist for Stormwater Report

Checklist (continued)

Standard 2: Peak Rate Attenuation

- Standard 2 waiver requested because the project is located in land subject to coastal storm flowage and stormwater discharge is to a wetland subject to coastal flooding.
- Evaluation provided to determine whether off-site flooding increases during the 100-year 24-hour storm.
- Calculations provided to show that post-development peak discharge rates do not exceed pre-development rates for the 2-year and 10-year 24-hour storms. If evaluation shows that off-site flooding increases during the 100-year 24-hour storm, calculations are also provided to show that post-development peak discharge rates do not exceed pre-development rates for the 100-year 24-hour storm.

Standard 3: Recharge

- Soil Analysis provided.
- Required Recharge Volume calculation provided.
- Required Recharge volume reduced through use of the LID site Design Credits.
- Sizing the infiltration, BMPs is based on the following method: Check the method used.
 - Static
 - Simple Dynamic
 - Dynamic Field¹
- Runoff from all impervious areas at the site discharging to the infiltration BMP.
- Runoff from all impervious areas at the site is *not* discharging to the infiltration BMP and calculations are provided showing that the drainage area contributing runoff to the infiltration BMPs is sufficient to generate the required recharge volume.
- Recharge BMPs have been sized to infiltrate the Required Recharge Volume.
- Recharge BMPs have been sized to infiltrate the Required Recharge Volume *only* to the maximum extent practicable for the following reason:
 - Site is comprised solely of C and D soils and/or bedrock at the land surface
 - M.G.L. c. 21E sites pursuant to 310 CMR 40.0000
 - Solid Waste Landfill pursuant to 310 CMR 19.000
 - Project is otherwise subject to Stormwater Management Standards only to the maximum extent practicable.
- Calculations showing that the infiltration BMPs will drain in 72 hours are provided.
- Property includes a M.G.L. c. 21E site or a solid waste landfill and a mounding analysis is included.

¹ 80% TSS removal is required prior to discharge to infiltration BMP if Dynamic Field method is used.



Checklist for Stormwater Report

Checklist (continued)

Standard 3: Recharge (continued)

- The infiltration BMP is used to attenuate peak flows during storms greater than or equal to the 10-year 24-hour storm and separation to seasonal high groundwater is less than 4 feet and a mounding analysis is provided.
- Documentation is provided showing that infiltration BMPs do not adversely impact nearby wetland resource areas.

Standard 4: Water Quality

The Long-Term Pollution Prevention Plan typically includes the following:

- Good housekeeping practices;
 - Provisions for storing materials and waste products inside or under cover;
 - Vehicle washing controls;
 - Requirements for routine inspections and maintenance of stormwater BMPs;
 - Spill prevention and response plans;
 - Provisions for maintenance of lawns, gardens, and other landscaped areas;
 - Requirements for storage and use of fertilizers, herbicides, and pesticides;
 - Pet waste management provisions;
 - Provisions for operation and management of septic systems;
 - Provisions for solid waste management;
 - Snow disposal and plowing plans relative to Wetland Resource Areas;
 - Winter Road Salt and/or Sand Use and Storage restrictions;
 - Street sweeping schedules;
 - Provisions for prevention of illicit discharges to the stormwater management system;
 - Documentation that Stormwater BMPs are designed to provide for shutdown and containment in the event of a spill or discharges to or near critical areas or from LUHPPL;
 - Training for staff or personnel involved with implementing Long-Term Pollution Prevention Plan;
 - List of Emergency contacts for implementing Long-Term Pollution Prevention Plan.
- A Long-Term Pollution Prevention Plan is attached to Stormwater Report and is included as an attachment to the Wetlands Notice of Intent.
 - Treatment BMPs subject to the 44% TSS removal pretreatment requirement and the one inch rule for calculating the water quality volume are included, and discharge:
 - is within the Zone II or Interim Wellhead Protection Area
 - is near or to other critical areas
 - is within soils with a rapid infiltration rate (greater than 2.4 inches per hour)
 - involves runoff from land uses with higher potential pollutant loads.
 - The Required Water Quality Volume is reduced through use of the LID site Design Credits.
 - Calculations documenting that the treatment train meets the 80% TSS removal requirement and, if applicable, the 44% TSS removal pretreatment requirement, are provided.



Checklist for Stormwater Report

Checklist (continued)

Standard 4: Water Quality (continued)

- The BMP is sized (and calculations provided) based on:
 - The ½" or 1" Water Quality Volume or
 - The equivalent flow rate associated with the Water Quality Volume and documentation is provided showing that the BMP treats the required water quality volume.
- The applicant proposes to use proprietary BMPs, and documentation supporting use of proprietary BMP and proposed TSS removal rate is provided. This documentation may be in the form of the propriety BMP checklist found in Volume 2, Chapter 4 of the Massachusetts Stormwater Handbook and submitting copies of the TARP Report, STEP Report, and/or other third party studies verifying performance of the proprietary BMPs.
- A TMDL exists that indicates a need to reduce pollutants other than TSS and documentation showing that the BMPs selected are consistent with the TMDL is provided.

Standard 5: Land Uses With Higher Potential Pollutant Loads (LUHPPLs)

- The NPDES Multi-Sector General Permit covers the land use and the Stormwater Pollution Prevention Plan (SWPPP) has been included with the Stormwater Report.
- The NPDES Multi-Sector General Permit covers the land use and the SWPPP will be submitted **prior to** the discharge of stormwater to the post-construction stormwater BMPs.
- The NPDES Multi-Sector General Permit does **not** cover the land use.
- LUHPPLs are located at the site and industry specific source control and pollution prevention measures have been proposed to reduce or eliminate the exposure of LUHPPLs to rain, snow, snow melt and runoff, and been included in the long term Pollution Prevention Plan.
- All exposure has been eliminated.
- All exposure has **not** been eliminated and all BMPs selected are on MassDEP LUHPPL list.
- The LUHPPL has the potential to generate runoff with moderate to higher concentrations of oil and grease (e.g. all parking lots with >1000 vehicle trips per day) and the treatment train includes an oil grit separator, a filtering bioretention area, a sand filter or equivalent.

Standard 6: Critical Areas

- The discharge is near or to a critical area and the treatment train includes only BMPs that MassDEP has approved for stormwater discharges to or near that particular class of critical area.
- Critical areas and BMPs are identified in the Stormwater Report.



Checklist for Stormwater Report

Checklist (continued)

Standard 7: Redevelopments and Other Projects Subject to the Standards only to the maximum extent practicable

- The project is subject to the Stormwater Management Standards only to the maximum Extent Practicable as a:
 - Limited Project
 - Small Residential Projects: 5-9 single family houses or 5-9 units in a multi-family development provided there is no discharge that may potentially affect a critical area.
 - Small Residential Projects: 2-4 single family houses or 2-4 units in a multi-family development with a discharge to a critical area
 - Marina and/or boatyard provided the hull painting, service and maintenance areas are protected from exposure to rain, snow, snow melt and runoff
 - Bike Path and/or Foot Path
 - Redevelopment Project
 - Redevelopment portion of mix of new and redevelopment.
- Certain standards are not fully met (Standard No. 1, 8, 9, and 10 must always be fully met) and an explanation of why these standards are not met is contained in the Stormwater Report.
- The project involves redevelopment and a description of all measures that have been taken to improve existing conditions is provided in the Stormwater Report. The redevelopment checklist found in Volume 2 Chapter 3 of the Massachusetts Stormwater Handbook may be used to document that the proposed stormwater management system (a) complies with Standards 2, 3 and the pretreatment and structural BMP requirements of Standards 4-6 to the maximum extent practicable and (b) improves existing conditions.

Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control

A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan must include the following information:

- Narrative;
 - Construction Period Operation and Maintenance Plan;
 - Names of Persons or Entity Responsible for Plan Compliance;
 - Construction Period Pollution Prevention Measures;
 - Erosion and Sedimentation Control Plan Drawings;
 - Detail drawings and specifications for erosion control BMPs, including sizing calculations;
 - Vegetation Planning;
 - Site Development Plan;
 - Construction Sequencing Plan;
 - Sequencing of Erosion and Sedimentation Controls;
 - Operation and Maintenance of Erosion and Sedimentation Controls;
 - Inspection Schedule;
 - Maintenance Schedule;
 - Inspection and Maintenance Log Form.
- A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan containing the information set forth above has been included in the Stormwater Report.



Checklist for Stormwater Report

Checklist (continued)

Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control (continued)

- The project is highly complex and information is included in the Stormwater Report that explains why it is not possible to submit the Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan with the application. A Construction Period Pollution Prevention and Erosion and Sedimentation Control has **not** been included in the Stormwater Report but will be submitted **before** land disturbance begins.
- The project is **not** covered by a NPDES Construction General Permit.
- The project is covered by a NPDES Construction General Permit and a copy of the SWPPP is in the Stormwater Report.
- The project is covered by a NPDES Construction General Permit but no SWPPP been submitted. The SWPPP will be submitted BEFORE land disturbance begins.

Standard 9: Operation and Maintenance Plan

- The Post Construction Operation and Maintenance Plan is included in the Stormwater Report and includes the following information:
 - Name of the stormwater management system owners;
 - Party responsible for operation and maintenance;
 - Schedule for implementation of routine and non-routine maintenance tasks;
 - Plan showing the location of all stormwater BMPs maintenance access areas;
 - Description and delineation of public safety features;
 - Estimated operation and maintenance budget; and
 - Operation and Maintenance Log Form.
- The responsible party is **not** the owner of the parcel where the BMP is located and the Stormwater Report includes the following submissions:
 - A copy of the legal instrument (deed, homeowner's association, utility trust or other legal entity) that establishes the terms of and legal responsibility for the operation and maintenance of the project site stormwater BMPs;
 - A plan and easement deed that allows site access for the legal entity to operate and maintain BMP functions.

Standard 10: Prohibition of Illicit Discharges

- The Long-Term Pollution Prevention Plan includes measures to prevent illicit discharges;
- An Illicit Discharge Compliance Statement is attached;
- NO Illicit Discharge Compliance Statement is attached but will be submitted **prior to** the discharge of any stormwater to post-construction BMPs.



Sunoco Logistics

BEST MANAGEMENT PRACTICES PLAN
SUNOCO PARTNERS MARKETING & TERMINALS L.P.
EAST BOSTON TERMIAL
467 Chelsea Street
East Boston, MA 02128

NPDES Permit No. MA 0004006

Date: May 15, 2012

Certification of Annual Review

Date Plan Reviewed

Reviewed by

Title

Plan Review Procedure

This plan will be reviewed annually by the Facility Manager and the environmental specialist for accuracy.

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1.0 INTRODUCTION

This plan fulfill the requirements of developing a Best Management Practices Plan (BMPP) for the East Boston Terminal (the facility), located at 467 Chelsea Street East Boston, MA 02128 in compliance with the provisions of the Federal Clean Water Act.

It is the environmental policy of Sunoco Logistics to comply with all applicable laws, regulations, permits and orders. The facility is primarily engaged in the storage and distribution of petroleum products. The purposes of the Best Management Practices Plan are to identify potential sources of storm water pollution and to develop and implement management practices to minimize pollution in storm water discharge. The Plan has been prepared in accordance with sound engineering practices.

The facility is under and individual NPDES permit number MA 0004006. The individual permit requires the facility to develop a BMP Plan detailing the administrative and operation procedures implemented at the facility to prevent surface water pollution. Storm water sampling is required by the individual permit for the facility. Sampling is done on a monthly basis. The remainder of this document will address the specific requirements of the BMPP as required by the individual storm water permit.

2.0 GENERAL SITE DESCRIPTION

The East Boston Terminal is a petroleum products distribution and bulk storage terminal located in East Boston, MA. The facility handles various petroleum products, including gasoline, diesel fuel, and jet fuel. These significant materials are described in detail in Section 5.2.1 of this Plan. The terminal is owned by Sunoco Logistics.

The terminal is located in East Boston, on the Chelsea River and covers approximately 37 acres. The facility consists of marine bulk unloading facilities, 20 aboveground petroleum storage tanks, a truck loading rack, a truck fleet maintenance garage and offices. A former lubricant blending facility exists at the facility, but it has not operated since 1994.

Products are received by barge or ship at the dock facilities. Product is distributed by a tank truck via the truck loading rack. The truck loading rack has eight loading bays. All bays are bottom-loading bays with vapor recovery lines to a vapor recovery unit. Jet fuel is also delivered to Logan Airport via a direct, dedicated pipeline.

The 20 aboveground storage tanks have total capacity of approximately 877,511 barrels. All tanks are equipped with HTG gauges that are connected to an automatic gauging system, and all have high level alarms, both local and remote dot the dock office. Foam fire protection systems protect the storage tanks and the truck loading rack.

The receiving water for any pollution would be the Chelsea River that borders the property. A General Location Map that shows the location of this facility and the receiving waters within one mile of the facility is included in Appendix A. Also in Appendix A is a site plan map identifying storm water flows and location of the major terminal components.

3.0 SIGNATORY REQUIREMENTS AND PLAN AMENDMENTS

All reports, Best Management Practices Plans, Certifications or other information required by the U.S. EPA and the Commonwealth of Massachusetts or required by the Plan, shall be reviewed, approved, signed and certified as applicable by the proper Sunoco Logistics authority.

A new signature authorization will be submitted to the applicable permit authority if the signature authorization(s) are no longer valid due to changes in personnel, responsibilities, or position.

The facility will amend the plan whenever there is a change in design, construction, operation or maintenance, which has a significant effect on the potential for discharge of pollutants to the waters of the State or if the plan proves to be ineffective in achieving the general objectives of controlling pollutants in storm water discharges.

A written copy of this plan and associated documents will remain at the facility. The plan will be reviewed and updated by the Best Management Practices Committee (see Section 4.0). Upon request, the plan will be made available for review by the EPA and authorized state or regional storm water management representatives.

4.0 BEST MANAGEMENT PRACTICES COMMITTEE

The Best Management Practices Committee consists of a team of facility employees responsible for developing the plan and assisting in its maintenance and revision. The primary responsibilities of the Best Management Practices Committee include:

- Assign resources and manpower to the Best Management Practices Committee
- Conduct materials survey
- Identify potential spill sources
- Establish spill reporting procedures
- Prepare visual inspection programs and checklists
- Review past incidents of spills
- Coordinate departments in implementing goals of the plan
- Establish employee training programs
- Implement, review and update plan
- Conduct meetings regarding the plan

- Review new construction and process changes relative to spill prevention and control

The Terminal Manager and/or his designee have responsibility for implementation of the provisions of this plan. The Terminal Manager is responsible for assigning individuals at the facility to the Best Management Practices Committee and monitoring their responsibilities under this plan.

Table `1 identifies the individuals assigned to the Best Management Practices Committee, their responsibilities and telephone numbers. All individuals listed in Table 1 are responsible for carrying out their assigned duties. In the event that both the primary and secondary members of the Best Management practices Committee are not available, alternate personnel listed in the Facility Integrated Contingency Plan would be contacted in case of emergency.

The Best Management Practices Committee will meet annually to review and evaluate the effectiveness of the Plan. In the event that a significant spill or leak to surface water occurs, the Committee will meet as soon as possible after the spill or leak has been controlled to review the incident. The Committee will evaluate the effectiveness of the overall program and make recommendations to management in support of the facility policy. The plan will be amended as necessary. Amendments will be performed in accordance with Section 3.0 of this plan.

5.0 DESCRIPTION OF POTENTIAL POLLUTANT SOURCES

This plan provides a description of potential sources which (1) may be expected to impact storm water, (2) result in the discharge of pollutants during dry weather and (3) result in non-storm water discharges from the facility. Additionally, the plan identifies all activities and significant materials that may be potential pollutant sources. For the purposes of the Best Management Practices Plan, a significant material is defined as raw materials, fuels, solvents, detergents, plastic pellets, finished materials, raw materials used in food processing or production, hazardous substances under Section 101(14) of CERCLA, chemicals reported under Section 313 of Title III of SRAR, fertilizers, pesticides or waste products that have the potential to be released to surface water.

5.1 Site Plan

A site plan of the facility is shown as Figure 1. Included in the plan are: storm water conveyance and discharge structure locations, outline of the storm water drainage areas for each discharge point, paved areas and buildings, locations of existing storm water structural controls, surface water locations, areas of existing and potential soil erosion and vehicle service areas.

5.2 Inventory of Significant Materials

5.2.1 Description and Best Management Practice of Significant Materials

The following narrative describes the use of Significant Materials at the facility. Materials are managed to prevent the release of toxic pollutants to surface waters and minimize the potential for contact with storm water. The purpose of these Best Management Practices (BMPs) is to keep pollutants out of the storm water runoff by reducing exposure to storm water, directing the storm water away from contaminated areas, or reducing the volume of potentially polluting materials on the site. The following narrative describes the BMPs employed to prevent the release of toxic pollutants. Section 8.0 discusses spill prevention and response procedures for Significant Materials.

- Gasoline; Stored in tanks 78, 90, 124, 125, 126, 128, 129, and 130. These tanks are equipped with HTG gauges that are connected to an automatic gauging/ inventory system. All tanks have high level alarms. Each of the tanks is located in a diked area which is large enough to contain any spill which may occur in that diked area. The dike drainage system is fully described in Section 5.2.4.1 of this plan.
- Low Sulfur Diesel: Stored in tanks 73, 123, and 116. These tanks are equipped with HTG gauges that are connected to an automatic gauging/ inventory system. All tanks have high level alarms. Each of the tanks is located in a diked area which is large enough to contain any spill which may occur in that diked area. The dike drainage system is fully described in Section 5.2.4.1 of this plan.
- Jet Fuel: Stored in tanks 52, 62, 64, 67, 69, 71, 87, 104, and 127. . These tanks are equipped with HTG gauges that are connected to an automatic gauging/ inventory system. All tanks have high level alarms. Each of the tanks is located in a diked area which is large enough to contain any spill which may occur in that diked area. The dike drainage system is fully described in Section 5.2.4.1 of this plan.
- Additives: Stored in 4 unnumbered tanks: These tanks are equipped with local high level alarms. Each of the tanks is located in diked area that is large enough to contain any spill that may occur in that diked area. The dike drainage systems are fully described in Section 5.2.4.1 of this plan.
- Slop Oil: Stored in tank 94. These tanks are equipped with HTG gauges that are connected to an automatic gauging/ inventory system. The tank has a high level alarm. The tank is located in a diked area which is large enough to contain any spill which may occur in that diked area. The dike drainage system is fully described in Section 5.2.4.1 of this plan.
- Wastewater: Stored in tanks 50 and 92. . These tanks are equipped with HTG gauges that are connected to an automatic gauging/ inventory system. All tanks have high level alarms. Each of the tanks is located in a diked area which is large

enough to contain any spill which may occur in that diked area. The dike drainage system is fully described in Section 5.2.4.1 of this plan.

- Solid Waste: Office waste is stored in a dumpster located on the paved area of the facility. The dumpster has a lid. Other waste materials including oily wastes are stored in DOT specification drums that are stored in buildings or in dumpsters or roll-offs with tight fitting covers or lids. Therefore it is unlikely that storm water will come into contact with these wastes.
- Recyclables: Cardboard and co-mingled recyclables are stored in dumpsters located on the paved area of the facility. The dumpsters have lids; therefore it is unlikely that storm water will come in contact with the recyclables.

5.2.2 Significant Materials Loading, Unloading and Access Area

The location of all loading, unloading, storage, disposal and access areas associated with Significant Materials are shown on Figure 1.

Petroleum products are loaded in the loading rack area, making this an area where any pollutants that might contact the pavement as a result of miscellaneous drips or accidental overfill could potentially wash into the storm water system. In order to prevent this from occurring, the rack is covered by a canopy. In addition, any contaminants or storm water that falls under the rack flow to a separate drainage system and are collected in Tanks 92, 93, or 94. From there it is hauled offsite to a water recycling plant. Currently, it goes to LORCO, in Elizabeth, NJ. Barges and ships unloading access the dock from the Chelsea River.

5.2.3 Vehicle Storage

All Sunoco Logistics owned vehicles are stored on paved areas. These paved areas on the river side of Chelsea St. drain to sumps which pump to Tank 50 for eventual treatment in the wastewater treatment system. At night, maintenance vehicles are parked in the parking area adjacent to the office building. This area drains to municipal storm drains in the street.

5.2.4 Structural and Non-Structural Control Measures to Reduce Pollutants in Storm water

The facility incorporates several structural and non-structural control measures for the purpose of reducing pollutant discharge to surface water. The following narrative briefly describes each control measure used on-site. As previously stated, the purpose of BMPs is to prevent discharges to surface water.

5.2.4.1 Structural Control Measures

Figure 1 shows the location of each structural control measure in use at the facility. The following provides a brief narrative of structural control measures and their function.

Storm water at the facility is directed to a storage tank that leads to a wastewater treatment system, with final discharge to the Chelsea River. Surface drainage from the paved area, the truck loading rack area and tank dike areas, is collected in individual sumps that pump to Tank 50. When the level in Tank 50 reaches a certain level, it is pumped to the wastewater treatment system, which consists of 6 multimedia filters that are operated as 2 trains of 3 filters each in parallel, and 2 granular activated charcoal filters operated as a lead and guard filter.

Drainage from diked storage areas is controlled as follows: Each storage tank is within a diked area. Accumulated water in the tank dikes drains to a sump, which has a manually started pump. In accordance with the NPDES permit, water accumulation within diked areas is visually inspected for petroleum products and any accumulation of oil is removed with sorbent materials or vacuum trucks before the water is pumped to Tank 50 for eventual treatment in the wastewater treatment system.

The dock unloading area is equipped with a spill pan for catching spilled oil. The pan is covered to keep out storm water. Any product that accumulates in the pan is pumped back to product. Product is also stripped from the unloading arms and hoses and pumped back to product before the lines are disconnected from a ship or barge.

A truck brake interlock system is controlled at the truck manifold when the loader is connected to the valves. This system prevents departure of the vehicle being loaded before loading operations are complete. Drains and outlets on tank trucks are checked for leakage before loading/unloading or departure.

A Scully System is also employed at the rack. This system provides vehicle overfill protection while loading. Overfill protection is provided by probes on each truck, which, when connected to the system, shuts off flow to the truck automatically when product contacts the probe.

5.2.4.2 Non-Structural Controls

Non-structural storm water control measures implemented at the facility include the following:

- Housekeeping

Housekeeping measures are used at the facility to minimize potential pollution from on-site sources. Housekeeping measures include sweeping, spill response, neat and orderly storage of materials in approved containers, maintenance of floors (prompt repair of cracks), and maintaining adequate aisle space. See

Section 6.0 for further details concerning housekeeping. Drips and spills from vehicles parked on the facility lot are cleaned up as needed with the use of Speedy-dry.

- Spill Response

Employees are trained annually to recognize potential spill situations and respond to them appropriately. Inspections of significant materials storage locations are made on a regular basis, and therefore prompt response to a release can be made.

Drips pans are provided to contain products when drained connections are opened in the dock area. A 23-foot boat with a 155-hp engine and 1000 ft of boom are available to contain a minor spill at this facility.

- Security

The facility is enclosed by an eight foot high chain link fence. Any valves that permit outward flow of a tank's contents are locked when in non-operable or standby status. Starter controls on all oil pumps are located at a site accessible only to authorized personnel. Pumping units are not locked in the off position, except when repairs are in progress, as they are in use on a 24 hour basis.

The loading rack is equipped with a card activated loading system. The driver must have an approved customer card to initiate loading. Drivers are instructed in loading procedures and must demonstrate proficiency in loading properly before their card is activated. Barge unloading is controlled by a dock man and an operator. The dock system is equipped with gravity check valves that close immediately in the event of a spill.

Lighting at this facility is adequate in all designated work areas.

- Visual Inspections

Routine visual inspections are conducted at significant material storage locations. Visual inspections are carried out following written procedures. Visual inspections include: identifying any spills or leaks from aboveground storage tanks and determining if the storage areas are policed properly. Inspections assist in identifying spills and leaks, corroded pipes and tanks, equipment deterioration and stains and windblown significant materials. Further description of inspection procedures is provided in Section 10.0.

5.3. Significant Spills or Leaks of Hazardous Pollutants

Sunoco Logistics purchased the East Boston Terminal from the ConocoPhillips Corporation on September 1, 2011. There have been no spill events of Significant Materials since the purchase of the property.

5.4 Storm water Monitoring Data

The facility has an individual NPDES for the discharge of storm water (NPDES permit no. MA 004006). In accordance with this permit, storm water will be sampled monthly. Data is kept on file at the facility by the terminal supervisor, and is available for review upon request.

5.5 Summary of Potential Pollution Sources

No manufacturing occurs at this facility. Processing activities include tank truck loading/unloading pipeline transfers and barge unloading. Materials stored outside include virgin petroleum products, waste oils, solid waste and recyclables.

5.5.1 Facility Tank Truck Loading Rack

Tank truck loading occurs at this facility. The loading procedures meet the minimum requirements and regulations of the Department of Transportation. The loading rack has a quick drain system that leads to a sewer system and sump that pumps to Tank 93. The system is separate from the rest of the storm water management system and has the capacity to contain a single compartment of a tank truck being loaded.

Written procedures and training instruct drivers to prevent premature vehicle departure before disconnection of transfer lines. Each driver is instructed to remove or disconnect loading connections and unfasten grounding devices before departure.

A truck brake interlock system is controlled at the truck manifold when the loader is connected to the valves. This system prevents departure of the vehicle being loaded before loading operations are complete. Drains and outlets on tank trucks are checked for leakage before loading/ unloading or departure.

A Scully System is also employed at rack. The system provides vehicle over fill protection while loading. Overfill protection is provided by probes on each truck, which, when connected to the system, shuts off flow to the truck automatically when product contacts the probe.

An emergency shutdown switch is located at each load rack bay and the terminal office. When activated, they cut all power to the load racks and product pumps.

An automatic foam fire protection system protects the loading rack from fire.

5.5.2 Facility Pipeline Transfer operations and Pumping

At this facility, pipelines are wrapped and coated, where warranted, to reduce corrosion. Cathodic protection is provided for pipelines. When a pipeline is exposed, it is examined and corrective action taken as required.

Pipeline terminal connections are capped or blank-flanged if the pipeline is not in service or on stand-by status for an extended period. When a leak is detected in a pipeline, or if a line is taken out of service, the line is capped, blank-flanged or panned. Lines taken out of service are drained of their product.

Pipe supports are used to minimize abrasion and corrosion and allow for expansion and contractions.

5.5.3 Barge Unloading/Loading Facilities

The dock unloading area is equipped with a spill pan for catching spilled oil. The pan is covered to keep out storm water. Any product that accumulates in the pan is pumped back to product. Product is also stripped from the unloading arms and hoses and pumped back to product. Product is also stripped from the unloading arms and hoses and pumped back to product before the lines are disconnected from a ship or barge.

Drip pans are provided to contain products when drained connections are opened in the dock area. A 23 foot boat with a 155 hp engine and 1000 ft of boom are available to contain a minor spill at this facility.

5.5.4 Storage Tanks

Aboveground Tanks

The storage tanks at this facility are of standard API specifications. Tanks are painted to prevent corrosion. A remote gauging system allows terminal operators to continuously monitor receipts and product transfers. High level tank alarms warn of impending overfill conditions. Cathodic protection has been installed around all tanks.

Secondary containment consists of earthen and/or concrete dikes which surround all storage tanks. The volume of the diked areas is sufficient to contain 110% of product in the largest tank. The secondary containment surrounding the tanks is sufficiently impervious to contain spilled product.

Any valves which permit outward flow of tank's contents are locked closed when in non-operating or stand-by status.

Underground Tanks

There are no underground storage tanks at this facility.

5.6 Pollutants with a Reasonable Potential to be Present in Storm water Discharges

The following activities are conducted at this facility:

- Tank truck loading/unloading
- Pipeline transfers
- Barge or ship unloading

Based upon the activities and control methods identified, petroleum products would reasonably have the potential to be present in storm water runoff. Petroleum de minimus drips and leaks of vehicles and equipment can be expected.

These pollutants can best be monitored in storm water through analysis of convenient pollutants, such as Oil and Grease and Total Suspended Solids.

6.0 STORMWATER MANAGEMENT CONTROLS

This plan identifies control measures at the facility for managing storm water, thus minimizing the potential to containment waters of the United States. These controls are reviewed to determine their appropriateness and levels of priority.

The facility follows good housekeeping practices to reduce the possibility of accidental spills and to minimize safety hazards to facility personnel. Specific areas include:

Truck loading Rack- the drainage system for the loading rack has been previously described. All storm water from the rack flows to a sump that pumps to Tank 93 from which it is shipped offsite for treatment. A roof covers the rack. The roof drains empty into the Tank 127 containment area. Storm water from the paved area flows to a sump that pumps to Tank 50 for treatment in the wastewater treatment system.

Dock Area - The containment area around the manifold flows to a sump that pumps to Tank 50 for treatment in the wastewater treatment system. The road along the dock, used only when there is not a vessel at the dock, flows directly to Chelsea River.

Vehicle and Equipment Storage Areas - All Sunoco Logistics owned vehicles are parked in the paved areas of the terminal... Vehicle parking areas are inspected and maintained regularly. This maintenance program minimizes the potential for petroleum drips, spills and leaks to be discharged with storm water. Storm water from the paved area on the river side of Chelsea Street flows to a sump that pumps to Tank 50 for treatment in the wastewater treatment system. Storm water from the paved area adjacent to the office building flows to municipal storm drains in the street. Absorbent materials are properly disposed of.

Material Storage Areas - All petroleum products are stored in above ground storage tanks which prevent direct contact with storm water. Other significant materials which may be used are stored in drums with tight fitting lids, which prevent contact with storm water. Solid wastes are stored in either drums with tight fitting lids, or in roll-offs or dumpsters with covers which prevent direct contact with storm water. These materials are either stored indoors, or on the paved area of the terminal. Storm water from the paved area flows to a sump that pumps to Tank 50 for treatment.

Prompt removal of de minimums spillage - De minimus spills occur in the parking lot, materials handling and fuel transfer areas. De minimus spills are the result of overfilling or drips from containers. Absorbent material is placed on the spill and waste absorbent material is properly disposed of in accordance with applicable federal, state and local regulations.

Vehicle and Equipment Cleaning Areas -- The only equipment cleaning done onsite is the periodic washing of the loading rack area. No detergents are used. All wash water flows to the drains at the loading rack or the paved area. As previously described, water from these areas flows to a sump that pumps to Tank 50 for treatment before discharge.

7.0 PREVENTIVE MAINTENANCE

Preventive maintenance is performed on specific pieces of equipment on a regular schedule. Pumps have their oil changed and are greased on a regular basis. The loading rack systems receive specific preventative maintenance on a monthly basis.

The preventative maintenance program includes inspection of facility equipment and systems and stormwater management devices to detect conditions which may cause breakdowns or failures resulting in the discharge of Significant Materials into storm water.

Inspections

Each system and piece of equipment is inspected on a routine basis. Inspection procedures and frequency vary depending on the equipment/system. The required inspections carried out at this facility follow written procedures. The written procedures and record of inspections are kept at the terminal office. Terminal personnel are also in the tank farm daily, and have an opportunity to observe conditions.

Specific items noted in the inspections include:

- Pipe and pump leaks
- Wastewater treatment system

- Paved area surface
- Containment areas
- Tank corrosion
- Deterioration of supports or foundations
- Staining in draining areas and on tanks

More detailed information on inspections is provided in Section 10.0

8.0 SPILL PREVENTION AND RESPONSE PROCEDURES

Spill Response Procedures for each of the Significant Materials are described in detail in the facility's Integrated Contingency Plan. Copies are located in the Terminal Manager's office and in the dock office.

9.0 EMPLOYEE TRAINING

Employee training programs are developed to inform facility personnel of the components and goals of the plan, and other spill prevention plans, including the Facility Integrated Contingency plan. The training covers practices for preventing spills and the procedures for responding properly and rapidly to spills. Personnel are trained initially prior to work assignments and annually thereafter.

Employee training meetings are held annually. The meetings emphasize spill events or failures, malfunctioning equipment, new policies or programs regarding spill prevention or response and employee's responsibilities and roles.

10.0 INSPECTIONS

The loading rack is inspected weekly. These inspections are recorded.

Each system and piece of equipment is inspected on a regular basis. The loading rack is inspected. Storage tanks and ancillary equipment are inspected to API-653 requirements. A log book of those inspections is kept at the facility. The major elements of the storage tank inspections include:

- Condition of tank shell
- Corrosion
- condition of tank foundation
- leaks
- condition of tank dike
- pipe support systems

On a more frequent basis, the terminal operator makes a tour of the terminal during each shift.

11.0 DISPOSAL PROCEDURES

All solid and hazardous wastes are managed at off-site permitted facilities, in compliance with all applicable local, state and federal regulations. In addition to commercial treatment, storage, disposal or recycling facilities, wastewaters containing oil may be shipped to one of several locations. A list of these providers is kept in the Terminal File Room and maintained by the HES Department.

Other solid wastes are containerized in either DOT specification drums, or in roll-offs with tight fitting tarps. Liquids may also be stored in the tank where generated, before being loaded directly onto a tank truck for management.

12.0 RECORDKEEPING AND INTERNAL REPORTING PROCEDURES

All spills and other incidents which could cause the discharge of significant material to storm water are logged on an Incident Report Form, along with actions taken to mitigate the incident, and kept on file at the facility.

13.0 NON-STORMWATER DISCHARGES

The discharge has been evaluated for the presence of non-storm water discharges by on-site observations, a review of the piping schematics of the storm water drainage systems identified in this plan, and by visual observation of the outfall. In addition to storm water, the non-storm water discharges may include: flows from fire fighting activities, hydrostatic test water, vehicle and loading rack washings that do not contain detergents, and pavement wash water where spills or leaks have not occurred, unless the spill or leak has been clean up.

14.0 CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Peter St. Germaine
Terminal Manager

**TABLE 1
POLLUTION PREVENTION TEAM**

NAME	JOB TITLE	PHONE (WORK)
Peter St. Germaine	Terminal Manager	(617) 568-2239
Glen Gronroos	Assistant Terminal Manager	(617) 568-2249
Joseph Ciarametero	Marine Terminal Operator Leader	(617) 568-2244

Duties:

- Conduct materials inventory
- Identify potential spill sources
- Prepare visual inspection programs and checklists
- Review past incidents of spills
- Coordinate implementing goals of the plan
- Establish employee training program
- Implement, review and update the plan,
- Conduct meetings regarding the plan,
- Review new construction and process changes relative to spill prevention and control.

APPENDIX A
MAPS and CHARTS

AUTHORIZATION TO DISCHARGE UNDER
THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Clean Water Act as amended, (33 U.S.C. §§1251 et seq.; the “CWA”), and the Massachusetts Clean Waters Act, as amended, (M.G.L. Chap. 21, §§26-53),

Sunoco Partners Marketing and Terminals L.P.

is authorized to discharge from a facility located at

Sunoco Logistics Terminal
467 Chelsea Street
East Boston, MA 02128

to receiving water named

Chelsea River (MA71-06)
Mystic River Watershed

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective on the first day of the calendar month following 60 days after signature.

This permit expires at midnight, five years from the last day of the month preceding the effective date.

This permit supersedes the permit issued on August 25, 2006.

This permit consists of 26 pages in Part I including effluent limitations, monitoring requirements, 10 pages in Attachment A – Marine Acute Toxicity Test Procedure and Protocol (2012), and 25 pages in Part II, the Standard Conditions.

Signed this 24th day of September, 2014

/S/SIGNATURE ON FILE

Ken Moraff, Director
Office of Ecosystem Protection
Environmental Protection Agency
Region 1
Boston, MA

/S/SIGNATURE ON FILE

David Ferris, Director
Massachusetts Wastewater Management Program
Department of Environmental Protection
Commonwealth of Massachusetts
Boston, MA

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning on the effective date and lasting through the expiration date, the Permittee is authorized to discharge treated stormwater, hydrostatic test water, and treated groundwater from internal Outfall 002 from **Outfall Serial Number 001** to the Chelsea River. The discharge shall be limited and monitored by the Permittee as specified below:

Effluent Characteristic	Discharge Limitation		Monitoring Requirements ¹	
	Average Monthly	Maximum Daily	Measurement Frequency ²	Sample Type ³
FLOW RATE ⁴	---	600 GPM	When Discharging	Estimate
TOTAL FLOW ⁵	---	Report MGal/Mo	When Discharging	Meter
NUMBER OF EVENTS	---	Report #/Mo	When Discharging	Count
pH RANGE ^{6,7}		6.5 – 8.5 SU	Monthly	Grab
TOTAL SUSPENDED SOLIDS	30 mg/L	100 mg/L	Monthly	Grab
OIL AND GREASE	---	15 mg/L	Monthly	Grab
VOLATILE ORGANIC COMPOUNDS (VOCs) ⁸				
Benzene	40 µg/L	Report µg/L	Monthly	Grab
POLYCYCLIC AROMATIC HYDROCARBONS (PAHs) ⁹				
Benzo(a)pyrene	0.018 µg/L	Report µg/L	Monthly	Grab
Naphthalene ¹⁰	---	10 µg/L	Monthly	Grab
LEAD ¹¹	---	Report µg/L	1/Year	Grab

OXYGENATES						
		---	Report µg/L	Quarterly	Grab	
Methyl tert-butyl ether		---	Report µg/L	Quarterly	Grab	
Ethanol ¹²		---	Report mg/L	Quarterly	Grab	
POLLUTANT SCAN, EFFLUENT ¹³						
Benzene		---	Report µg/L	Quarterly	Grab	
Ethylbenzene		---	Report µg/L	Quarterly	Grab	
Toluene		---	Report µg/L	Quarterly	Grab	
Total Xylenes		---	Report µg/L	Quarterly	Grab	
Benzo(a)anthracene		---	Report µg/L	Quarterly	Grab	
Benzo(a)pyrene		---	Report µg/L	Quarterly	Grab	
Benzo(b)fluoranthene		---	Report µg/L	Quarterly	Grab	
Benzo(k)fluoranthene		---	Report µg/L	Quarterly	Grab	
Chrysene		---	Report µg/L	Quarterly	Grab	
Dibenzo(a,h)anthracene		---	Report µg/L	Quarterly	Grab	
Indeno(1,2,3-cd)pyrene		---	Report µg/L	Quarterly	Grab	
Acenaphthene		---	Report µg/L	Quarterly	Grab	
Acenaphthylene		---	Report µg/L	Quarterly	Grab	
Anthracene		---	Report µg/L	Quarterly	Grab	
Benzo(g,h,i)perylene		---	Report µg/L	Quarterly	Grab	
Fluoranthene		---	Report µg/L	Quarterly	Grab	

Fluorene	---	Report µg/L	Quarterly	Grab
Naphthalene ¹⁰	---	Report µg/L	Quarterly	Grab
Phenanthrene	---	Report µg/L	Quarterly	Grab
Pyrene	---	Report µg/L	Quarterly	Grab
Chromium	---	Report µg/L	Quarterly	Grab
Iron	---	Report µg/L	Quarterly	Grab
Cyanide	---	Report µg/L	Quarterly	Grab
Phenol	---	Report µg/L	Quarterly	Grab
tert-butyl alcohol	---	Report µg/L	Quarterly	Grab
Ammonia	---	Report mg/L	Quarterly	Grab
Fecal coliform	---	Report cfu/100mL	Quarterly	Grab
POLLUTANT SCAN, RECEIVING WATER ¹⁴				
Benzene	---	Report µg/L	Quarterly	Grab
Ethylbenzene	---	Report µg/L	Quarterly	Grab
Toluene	---	Report µg/L	Quarterly	Grab
Total Xylenes	---	Report µg/L	Quarterly	Grab
Benzo(a)anthracene	---	Report µg/L	Quarterly	Grab
Benzo(a)pyrene	---	Report µg/L	Quarterly	Grab
Benzo(b)fluoranthene	---	Report µg/L	Quarterly	Grab
Benzo(k)fluoranthene	---	Report µg/L	Quarterly	Grab

Chrysene	---	Report µg/L	Quarterly	Grab
Dibenzo(a,h)anthracene	---	Report µg/L	Quarterly	Grab
Indeno(1,2,3-cd)pyrene	---	Report µg/L	Quarterly	Grab
Acenaphthene	---	Report µg/L	Quarterly	Grab
Acenaphthylene	---	Report µg/L	Quarterly	Grab
Anthracene	---	Report µg/L	Quarterly	Grab
Benzo(g,h,i)perylene	---	Report µg/L	Quarterly	Grab
Fluoranthene	---	Report µg/L	Quarterly	Grab
Fluorene	---	Report µg/L	Quarterly	Grab
Naphthalene ¹⁰	---	Report µg/L	Quarterly	Grab
Phenanthrene	---	Report µg/L	Quarterly	Grab
Pyrene	---	Report µg/L	Quarterly	Grab
WHOLE EFFLUENT TOXICITY^{15, 16, 17, 18}				
LC ₅₀		≥ 50 %	Quarterly	Grab
Total Residual Chlorine	---	Report mg/L	Quarterly	Grab
Salinity	---	Report g/kg	Quarterly	Grab
pH	---	Report SU	Quarterly	Grab
Total Solids	---	Report mg/L	Quarterly	Grab
Total Suspended Solids	---	Report mg/L	Quarterly	Grab
Ammonia	---	Report mg/L	Quarterly	Grab

Total Organic Carbon	---		Report mg/L	Quarterly	Grab
Cadmium	---		Report µg/L	Quarterly	Grab
Copper	---		Report µg/L	Quarterly	Grab
Lead	---		Report µg/L	Quarterly	Grab
Nickel	---		Report µg/L	Quarterly	Grab
Zinc	---		Report µg/L	Quarterly	Grab
WHOLE EFFLUENT TOXICITY TEST, RECEIVING WATER CHEMICAL ANALYSIS ¹⁸					
Total Residual Chlorine	---		Report mg/L	Quarterly	Grab
Salinity	---		Report g/kg	Quarterly	Grab
pH	---		Report SU	Quarterly	Grab
Total Solids	---		Report mg/L	Quarterly	Grab
Total Suspended Solids	---		Report mg/L	Quarterly	Grab
Ammonia	---		Report mg/L	Quarterly	Grab
Total Organic Carbon	---		Report mg/L	Quarterly	Grab
Cadmium	---		Report µg/L	Quarterly	Grab
Copper	---		Report µg/L	Quarterly	Grab
Lead	---		Report µg/L	Quarterly	Grab
Nickel	---		Report µg/L	Quarterly	Grab
Zinc	---		Report µg/L	Quarterly	Grab

Footnotes:

¹The grab samples for Outfall 001 shall be collected at the discharge point to the Chelsea River during the first qualifying event that occurs for each required measurement frequency, after treatment through the treatment system, free from tidal influence. A qualifying event shall be defined as a discharge that occurs during daylight hours on an outgoing tide at least one hour from both the low and high slack tide. To identify a qualifying event, the permittee may use tide charts to predict the two four-hour intervals of an outgoing tide each day that are one hour from both low and high slack tide. If a measurable discharge does not occur such that sampling cannot be completed during the first qualifying event of the required sampling frequency, the permittee is to sample the next qualifying event. The qualifying event requirement does not apply to sampling for the measurement frequency “when discharging”. Changes in sampling location must be approved in writing by the U.S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (MassDEP). Sampling of discharges from the Terminal must yield data representative of the discharge under authority of Section 308(a) in accordance with 40 Code of Federal Regulations (C.F.R.) §122.41(j), §122.44(i), and §122.48.

²Sampling frequency of when discharging is defined as the sampling of any measurable discharge event, reported for each calendar month. Sampling frequency of monthly is defined as the sampling of one discharge event in each calendar month. Sampling frequency of quarterly is defined as the sampling of one discharge event in each quarter. Quarters are defined as the interval of time between the months of: January through March, inclusive; April through June, inclusive; July through September, inclusive; and October through December, inclusive. The results of sampling for any parameter above its required frequency must also be reported to EPA, if it is conducted in accordance with EPA approved methods consistent with the provisions of 40 C.F.R. §122.41(1)(4)(ii). Quarterly sampling shall be performed concurrently with the monthly monitoring event. If no discharge occurs during the measurement frequencies defined above, samples shall be collected during the next qualifying event and the Permittee must report a No Data Indicator Code (e.g., “C” for “No Discharge”) found in Attachment E of *NPDES Permit Program Instructions for the Discharge Monitoring Report Forms (DMRs)*, available on the EPA Region 1 web site at <http://www.epa.gov/region1/enforcement/water/dmr.html>.

³All samples shall be grab samples taken within 15 minutes of the initiation of a discharge during a qualifying event from the outfall where practicable, but in no case later than within the first hour of discharge from the outfall. All samples shall be tested in accordance with the procedures in 40 C.F.R. §136, unless specified elsewhere in the permit. The practical quantitation limit (PQL) for each analyte must be recorded. The PQL is the lowest concentration that can be reliably measured within specified limits of precision and accuracy for a specific laboratory analytical method during routine laboratory operating conditions. When an analyte is not detected above the PQL, the Permittee must report using the data qualifier signifying less than the PQL for that analyte (i.e. <0.1 µg/L, if the PQL for an analyte is 0.1 µg/L). If no discharge occurs during a monitoring period, the Permittee shall follow the No Data Indicator Code guidelines as noted above.

- ⁴For Flow Rate, the maximum daily value represents the maximum instantaneous flow rate measured by the Terminal as passing through the stormwater treatment system for each day that a discharge occurs during the reported period. The maximum instantaneous flow rate, which is to be reported in units of gallons per minute (GPM), shall be an estimate based on the summation of the pump curve value(s) for all pumps in operation which control the rate of flow through the stormwater treatment system when discharge is occurring. The Permittee shall at no time exceed the design flow rate of the treatment system.
- ⁵For Total Flow, the value reported represents the sum of the recorded discharge volume for each day that effluent is discharged during that month, using a totalizer or similar device. Total Flow shall be reported in the units of millions of gallons per month (Mgal/Mo). The Permittee shall also report the total number of days during the reporting period discharges from the outfall occurred (i.e., a measurable volume of effluent passes through the totalizer or similar device), noted on the discharge monitoring report (DMR) form under "Event Total" parameter. The required meter shall be operational no later than 180 days following the effective date of the permit. Following the effective date of the permit and until the required meter becomes operational, but no more than 180 days following the effective date of the permit, the Permittee may report Total Flow as an estimate based on the estimated flow rate and the total hours of pump operation.
- ⁶Requirement for State Certification.
- ⁷The pH of the effluent shall be in the range of 6.5 to 8.5 standard units and not more than 0.2 standard units outside of the natural background range. There shall be no change from natural background conditions that would impair any use assigned to the class of the receiving water. The Permittee may collect and submit as an attachment to the Terminal's DMR, rainwater samples collected from the Terminal in the event the permittee believes an effluent pH violation is attributable to the pH of the rainwater.
- ⁸The minimum level (ML) for analysis for the Volatile Organic Compound (VOC) benzene shall be no greater than 2 µg/L. The ML is not the minimum level of detection, but rather the lowest level at which the test equipment produces a recognizable signal and acceptable calibration point for an analyte, representative of the lowest concentration at which an analyte can be measured with a known level of confidence. Analysis must be completed using an EPA approved method in 40 C.F.R. §136, Table IC – Non-Pesticide Organic Compounds.
- ⁹The ML for analysis for the Polycyclic Aromatic Hydrocarbons (PAHs) shall be no greater than the following: 0.1 µg/L for benzo(a)pyrene and 5 µg/L for naphthalene. The ML for benzo(a)pyrene, 0.1 µg/L, shall represent the compliance level for that compound. Analysis must be completed using an EPA approved method in 40 C.F.R. §136, Table IC – Non-Pesticide Organic Compounds.
- ¹⁰The Permittee shall sample and analyze for naphthalene using analytical methods for semi-volatile organic compounds and volatile organic compounds. MassDEP methods may not be used.

- ¹¹The ML for analysis for total recoverable lead shall be no greater than 0.2 µg/L. Lead analysis conducted for the wet chemistry portion of the WET test may also be submitted to satisfy the monthly sampling requirements for this parameter.
- ¹²Analysis must be completed for ethanol using a PQL for analysis equal to 400 µg/L or less.
- ¹³The Permittee shall conduct a pollutant scan quarterly for Outfall 001 for the first three years following the effective date of the permit, for the following compounds: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, acenaphthene, acenaphthylene, anthracene, benzo(g,h,i)perylene, fluoranthene, fluorene, naphthalene, phenanthrene, pyrene, benzene, toluene, ethylbenzene, total xylenes, total recoverable chromium, total recoverable iron, total cyanide, total phenol, tert-butyl alcohol, ammonia, and fecal coliform. The ML for analysis shall be no greater than the following: 0.1 µg/L for Group I PAHs, 5 µg/L for Group II PAHs, 2 µg/L for benzene, ethylbenzene, toluene and total xylenes, 1 µg/L for total recoverable chromium, 50 µg/L for total recoverable iron, 5 µg/L for total cyanide and total phenol, and 10 µg/L for tert-butyl alcohol. PAH and VOC analyses conducted for the pollutant scan may also be used to satisfy the monthly sampling requirements for those parameters as long as the timing of sampling for the remaining parameters in Part I.A.1. coincides with the quarterly sampling of selected pollutants. After three years following the effective date of the permit and 12 samples, the sampling frequency for the pollutant scan shall be reduced to 1/year. The 1/year sample for Outfall 001 shall be collected in April. Sampling shall be performed concurrently with the monthly monitoring event. After three years following the effective date of the permit and 12 samples, the Permittee may request in writing, with supporting rationale, elimination of monitoring requirements for total recoverable chromium, total recoverable iron, total cyanide, total phenol, tert-butyl alcohol, ammonia, and fecal coliform.
- ¹⁴The Permittee shall conduct a pollutant scan quarterly for the receiving water for the first three years following the effective date of the permit, for the following compounds: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, acenaphthene, acenaphthylene, anthracene, benzo(g,h,i)perylene, fluoranthene, fluorene, naphthalene, phenanthrene, pyrene, benzene, toluene, ethylbenzene, and total xylenes. The ML for analysis shall be no greater than the following: 0.1 µg/L for Group I PAHs, 5 µg/L for Group II PAHs, and 2 µg/L for benzene, ethylbenzene, toluene and total xylenes. The receiving water sample for the pollutant scan shall be collected from the Chelsea River at a point immediately outside of Outfall 001's zone of influence at a reasonably accessible location. After three years following the effective date of the permit and 12 samples, the sampling frequency for the pollutant scan shall be reduced to 1/year. The 1/year sample shall be collected in April. Sampling shall be performed concurrently with the monthly monitoring event.
- ¹⁵The Permittee shall conduct acute toxicity tests quarterly for the first three years following the effective date of the permit. The Permittee shall test the Mysid Shrimp, *Americanysis bahia*, and the Inland Silverside, *Menidia beryllina*. Toxicity test samples shall be collected for Outfall 001 during September. The test results shall be submitted by the last day of the month following the completion of the test. The tests must be performed in accordance with test procedures and protocols specified in Attachment A of this

permit. These samples, taken in accordance with the WET testing requirements, may be used to satisfy other sampling requirements specified in the table above. After three years following the effective date of the permit and 12 samples, the sampling frequency for WET testing shall be reduced to 1/year unless the Permittee requests, and subsequently receives written permission to eliminate WET testing. The 1/year sample for Outfall 001 shall be collected in September. Sampling shall be performed concurrently with the monthly monitoring event. After three years following the effective date of the permit and 12 samples, the Permittee may request in writing, with supporting rationale, elimination of monitoring requirements for whole effluent toxicity.

¹⁶The LC₅₀ (Lethal Concentration 50 Percent) is the concentration of effluent which causes mortality to 50% of the test organisms.

¹⁷The dilution water sample for the WET test shall be collected from the Chelsea River at a point immediately outside of Outfall 001's zone of influence at a reasonably accessible location. If the toxicity test using receiving water as diluent shows the receiving water to be toxic or unreliable, the Permittee shall either follow procedures outlined in Attachment A – Marine Acute Toxicity Test Procedure and Protocol) Section IV., DILUTION WATER in order to obtain an individual approval for use of an alternate dilution water, or the Permittee shall follow the Self-Implementing Alternative Dilution Water Guidance which may be used to obtain automatic approval of an alternate dilution water, including the appropriate species for use with that water. This guidance is found in Attachment G of *NPDES Program Instructions for the Discharge Monitoring Report Forms (DMRs)*, which may be found on the EPA Region 1 web site at <http://www.epa.gov/Region1/enforcementandassistance/dmr.html>. If this guidance is revoked, the Permittee shall revert to obtaining individual approval as outlined in Attachment A. Any modification or revocation to this guidance will be transmitted to the Permittee. However, at any time, the Permittee may choose to contact EPA Region 1 directly using the approach outlined in Attachment A. For each Whole Effluent Toxicity (WET) test, the Permittee shall report the concentrations of the parameters listed above in DMRs submitted to EPA and MassDEP. Even where alternate dilution water has been agreed upon, the results of the receiving water control (0% effluent) analyses must be reported.

¹⁸In conjunction with each WET test, the Permittee shall report the concentrations of total residual chlorine, salinity, pH, total solids, total suspended solids, ammonia, total organic carbon, total recoverable cadmium, total recoverable copper, total recoverable lead, total recoverable nickel, and total recoverable zinc found in the 100% effluent and receiving water control (0% effluent) samples in DMRs submitted to EPA and MassDEP, noted above as Whole Effluent Toxicity and Whole Effluent Toxicity Test, Receiving Water Chemical Analysis, respectively. The ML for analysis shall be no greater than the following: 0.2 µg/L for total recoverable cadmium, total recoverable lead, and total recoverable nickel, 0.5 µg/L for total recoverable copper, and 5 µg/L for total recoverable zinc.

2. During the period beginning on the effective date and lasting through expiration, the Permittee is authorized to discharge treated groundwater through internal waste stream **Outfall Serial Number 002** to the Chelsea River via Outfall 001. Such discharge shall be limited and monitored by the Permittee as specified below:

Effluent Characteristic		Discharge Limitation		Monitoring Requirements ¹	
Parameter	Average Monthly	Maximum Daily	Measurement Frequency ²	Sample Type ³	
FLOW RATE ⁴	---	30 GPM	When Discharging	Estimate	
TOTAL FLOW ⁵	---	Report Mgal/Mo	When Discharging	Meter	
pH RANGE ^{6,7}	6.5 – 8.5 SU		Monthly	Grab	
VOLATILE ORGANIC COMPOUNDS (VOCs) ⁸					
Benzene	---	5 µg/L	Monthly	Grab	
Total BTEX	---	100 µg/L	Monthly	Grab	
POLYCYCLIC AROMATIC HYDROCARBONS (PAHs) ⁹					
Group I PAHs	---	0.1 µg/L	Monthly	Grab	
Sum of Group I PAHs	---	10 µg/L	Monthly	Grab	
Sum of Group II PAHs	---	100 µg/L	Monthly	Grab	
Naphthalene ¹⁰	---	20 µg/L	Monthly	Grab	
TOTAL PETROLEUM HYDROCARBONS	---	5 mg/L	Monthly	Grab	
CYANIDE ¹¹	---	Report µg/L	Monthly	Grab	
METHYL TERT-BUTYL ETHER	---	20 µg/L	Monthly	Grab	

Footnotes:

¹The effluent samples for Outfall 002 shall be collected at the discharge point to the stormwater collection system after treatment through the groundwater treatment system, prior to mixing with any other waste stream. Changes in sampling location must be approved in writing by EPA and MassDEP. Sampling of discharges from Outfall 002 must yield data representative of the remediation waste stream and not the more dilute stormwater with which it is being mixed consistent with 40 C.F.R. §122.45(h).

²See Part I.A.2., Footnote 2, Page 7.

³See Part I.A.2., Footnote 3, Page 7.

⁴For Flow Rate, the maximum daily value represents the maximum instantaneous flow rate measured by the Terminal as passing through the groundwater treatment system for each day that a discharge occurs during the reported period. The maximum instantaneous flow rate, which is to be reported in units of GPM, shall be an estimate based on the summation of the pump curve value(s) for all pumps in operation which control the rate of flow through the treatment system when discharge is occurring. The Permittee shall at no time exceed the design flow rate of the treatment system.

⁵For Total Flow, the value reported represents the sum of the recorded discharge volume for each day that effluent is discharged during that month, measured after treatment using a totalizer or similar device. Total Flow shall be reported in the units of Mgal/Mo. The Permittee shall at no time exceed the design flow rate of the treatment system. The provision for flow meter installation and interim reporting in Part I.A.1., Footnote 5 applies.

⁶See Part I.A.1., Footnote 6, Page 8.

⁷See Part I.A.1., Footnote 7, Page 8. The rainwater sampling provision does not apply.

⁸See Part I.A.1., Footnote 8, Page 8. BTEX consists of benzene, toluene, ethylbenzene and total xylenes.

⁹See Part I.A.1., Footnote 9, Page 8. Group I PAHs consist of the following seven compounds: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene. The effluent limitation of 0.1 µg/L applies to each individual Group I PAH compound. Group II PAHs consist of the following nine compounds: acenaphthene, acenaphthylene, anthracene, benzo(g,h,i)perylene, fluoranthene, fluorene, naphthalene, phenanthrene, and pyrene.

¹⁰See Part I.A.1., Footnote 10, Page 8.

¹¹The ML for analysis shall be no greater than 5 µg/L for total cyanide.

U.S. Environmental Protection Agency
Industrial Permits Section (OEP06-1)
5 Post Office Square - Suite 100
Boston, MA 02109-3912

- iii. Duplicate signed copies of DMRs (if opting out of NetDMR), and all other reports or notifications required above, shall be submitted to the State at the following address:

Massachusetts Department of Environmental Protection
Bureau of Waste Prevention
Northeast Regional Office
205B Lowell Street
Wilmington, Massachusetts 01887

- iv. And, WET Test reports ONLY, to the State at the following address:

Massachusetts Department of Environmental Protection
Surface Water Discharge Permit Program
8 New Bond Street
Worcester, Massachusetts 01606

- d. Any verbal reports, if required in Parts I. and/or II. of this permit, shall be made to both EPA Region 1 and to MassDEP.

G. STATE PERMIT CONDITIONS

1. This authorization to discharge includes two separate and independent permit authorizations. The two permit authorizations are (i) a federal National Pollutant Discharge Elimination System permit issued by the U.S. Environmental Protection Agency (EPA) pursuant to the Federal Clean Water Act, 33 U.S.C. §§1251 et seq.; and (ii) an identical state surface water discharge permit issued by the Commissioner of the Massachusetts Department of Environmental Protection (MassDEP) pursuant to the Massachusetts Clean Waters Act, M.G.L. c. 21, §§26-53, and 314 C.M.R. 3.00. All of the requirements contained in this authorization, as well as the standard conditions contained in 314 C.M.R. 3.19, are hereby incorporated by reference into this state surface water discharge permit.
2. This authorization also incorporates the state water quality certification issued by MassDEP under §401(a) of the Federal Clean Water Act, 40 C.F.R. 124.53, M.G.L. c. 21, §27 and 314 C.M.R. 3.07. All of the requirements (if any) contained in MassDEP's water quality certification for the permit are hereby incorporated by reference into this state surface water discharge permit as special conditions pursuant to 314 C.M.R. 3.11.
3. Each Agency shall have the independent right to enforce the terms and conditions of this permit. Any modification, suspension or revocation of this permit shall be effective only with respect to the Agency taking such action, and shall not affect the validity or status of this permit as issued by the other Agency, unless and until each Agency has concurred in writing with such modification, suspension or revocation. In the event any portion of this permit is declared, invalid, illegal or otherwise issued in violation of State law such permit shall remain

in full force and effect under Federal law as an NPDES permit issued by the U.S. Environmental Protection Agency. In the event this permit is declared invalid, illegal or otherwise issued in violation of Federal law, this permit shall remain in full force and effect under State law as a permit issued by the Commonwealth of Massachusetts.

PART I.A. (continued)

3. The discharge shall not cause a violation of the Massachusetts water quality standards of the receiving water.
4. The effluent shall not impart taste, odor, turbidity, toxicity, radioactivity, or other properties which cause those waters to be unsuitable for the designated uses and characteristics ascribed to their use.
5. The effluent shall not cause objectionable discoloration of the receiving waters.
6. The effluent shall contain neither a visible oil sheen, foam, nor floating or settleable solids at any time.
7. The effluent shall not contain materials in concentrations or in combinations which would impair the uses designated by the classification of the receiving water or which would cause or contribute to alterations that adversely affect the physical or chemical nature of the bottom.
8. The effluent must not lower the quality of any classified body of water below such classification, or lower the existing quality of any body of water if the existing quality is higher than the classification.
9. The Permittee shall report immediately the appearance of any size sheen attributable to the discharge from the Terminal to the appropriate U.S. Coast Guard Officer in accordance with Section 311 of the Clean Water Act (CWA). This requirement is in addition to any reporting requirements contained in the permit.
10. The Permittee shall inspect, operate, and maintain the stormwater and groundwater treatment systems at the Terminal to ensure that the Effluent Limitations and permit conditions are met. The Permittee shall ensure that all components of the Terminal's Stormwater Pollution Prevention Plan (SWPPP), including those Best Management Practices (BMPs) which specifically address the operation and maintenance of the oil/water separator (OWS), pumps and other components of the stormwater collection and stormwater and groundwater treatment systems, are complied with.
11. The Permittee shall not discharge any toxic pollutant or material including, but not limited to, chemicals (e.g., surfactants, disinfectant agents, detergents, emulsifiers), chemical additives, or bioremedial agents, including microbes, which was not reported in the permit application. Pollutants which are not limited by this permit, but which have been specifically disclosed in the permit application, may be discharged up to the frequency and level disclosed in the application, provided that such discharge does not violate Section 307 or 311 of the CWA or applicable state water quality standards.
12. The Permittee shall notify EPA and MassDEP at the addresses in Part I.F. when it proposes to add or replace any chemicals, chemical additives, or bioremedial agents that have the potential to come into contact with stormwater or enter the collection and treatment system.
13. The Permittee shall notify EPA and MassDEP in writing to the addresses listed in Part I.F. within 10 days of becoming aware of any changes, planned or otherwise, in the operations at the Terminal that may have an effect on the permitted discharge.
14. The Permittee shall attach a copy of the laboratory case narrative to each DMR submitted to EPA and MassDEP for each reporting period. The laboratory case narrative shall include a copy of the laboratory data sheets for each analysis (identifying the test method, the analytical results, and the detection limits for each analyte) and provide a brief discussion of whether all appropriate QA/QC procedures were met and were within acceptable limits.
15. Written notification and approval by EPA and the MassDEP shall be required, should the Permittee propose changes to the stormwater collection or stormwater and/or groundwater

treatment systems, which have the potential to cause the maximum design flow rate through any component of the stormwater and/or groundwater system to be exceeded.

16. Hydrostatic test water shall be monitored as described below and treated through the stormwater treatment system prior to being discharged through Outfall 001 to the Chelsea River, and is subject to the Effluent Limitations in Part I.A.1., above.
 - a. The flow of hydrostatic test water into the stormwater treatment system shall be controlled to prevent it from exceeding the maximum design flow rate of the system (i.e., 600 GPM).
 - b. The Permittee shall take a minimum of three representative samples of the hydrostatic test water:
 - i. For Tanks, the Permittee shall take:
 - 1) one grab sample of the influent (fill source) water during the first 10% of the estimated fill segment time at the intake if the fill source is not municipal water supply; and
 - 2) three grab samples of the effluent (at the discharge point for the treatment system), one sample during the first 10% of discharge, one sample at the approximate midpoint of discharge, and one sample during the last 10% of discharge after treatment.
 - ii. For Pipelines, the Permittee shall take:
 - 1) one grab sample of the influent (fill source) water during the first 10% of the estimated fill segment time at the intake if the fill source is not municipal water supply; and
 - 2) three grab samples of the effluent (at the discharge point for the treatment system), one sample during the first 10% of discharge, one sample at the approximate midpoint of discharge, and one sample during the last 10% of discharge after treatment.
 - c. The grab sample required in Part I.A.16.b.i. and ii. shall be analyzed as noted below. The hydrostatic test water shall only be discharged if, after appropriate management and treatment, all permit conditions shall be met. If at any time the analyses at any point in the hydrostatic testing process demonstrate that the discharge water quality is not consistent with the effluent limitations and requirements established in this permit, the Permittee shall immediately halt the transfer of hydrostatic test water and take steps to remedy the situation. The influent, when required, and effluent samples shall each be analyzed for the parameters indicated below:
 - i. Total Flow;
 - ii. Flow Rate;
 - iii. Total Suspended Solids (TSS);
 - iv. Oil & Grease (O&G);
 - v. pH;
 - vi. Chemical Oxygen Demand (COD);
 - vii. Dissolved Oxygen (DO);
 - viii. Total Surfactants;
 - ix. VOCs (benzene, toluene, ethylbenzene, and total xylenes);
 - x. PAHs (Group I and II PAHs listed in Part I.A.1., Pollutant Scan, Effluent, benzo(a)anthracene through pyrene); Metals (total recoverable iron, total

- recoverable chromium, and total recoverable metals listed in Part I.A.1., Whole Effluent Toxicity, cadmium through zinc);
- xi. Ethanol, if tank or line has been used to store and/or convey ethanol and/or petroleum products containing ethanol within the previous year; and
 - xii. Total Residual Chlorine, if potable water or a similar source of water which is likely to contain residual chlorine concentrations is used for hydrostatic testing.
- d. The hydrostatic test waters released from the tank(s) and/or pipelines and treated through the stormwater treatment system shall satisfy all conditions of this permit, including meeting all discharge limitations, analytical method requirements and detection limits. The samples required in Part I.A.16.b.i.2) and ii.2) may be used to satisfy the requirements in Part I.A.1. for the parameters required in both parts for the monitoring period in which hydrostatic testing occurs, as long as the timing of sampling for the remaining parameters in Part I.A.1. coincides with the sampling of hydrostatic test water effluent.
- e. The Permittee shall submit a letter/report to EPA and the MassDEP, summarizing the results of the hydrostatic test within 30 days of completion of the test. This report shall contain:
- i. The date(s) during which the hydrostatic testing occurred;
 - ii. The volume of hydrostatic test water discharged;
 - iii. A copy of the laboratory data sheets for each analysis, providing the test method, the detection limits for each analyte, and a brief discussion of whether all appropriate QA/QC procedures were met and were within acceptable limits; and
 - iii. A brief discussion of the overall test results and how they relate to the Effluent Limitations in this permit.
- f. EPA shall reserve the right to re-open the permit, in accordance with 40 C.F.R. §122.62(a)(2), to examine hydrostatic test water discharges in the event that sampling results indicate that the standards for the assigned classification of the Chelsea River might not be attained.
17. All existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe (40 C.F.R. §122.42):
- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - i. 100 micrograms per liter ($\mu\text{g/L}$);
 - ii. 200 $\mu\text{g/L}$ for acrolein and acrylonitrile; 500 $\mu\text{g/L}$ for 2,4-dinitrophenol; and one milligram per liter (mg/L) for antimony;
 - iii. Five times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 C.F.R. §122.21(g)(7); or
 - iv. Any other notification level established by the Director in accordance with 40 C.F.R. §122.44(f) and Massachusetts regulations.
 - b. That any activity has occurred or will occur which would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - i. 500 micrograms per liter ($\mu\text{g/L}$);
 - ii. One milligram per liter (mg/L) for antimony;

- iii. 10 times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 C.F.R. §122.21(g)(7); or
 - iv. Any other notification level established by the Director in accordance with 40 C.F.R. §122.44(f) and Massachusetts regulations.
- c. That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the permit application.

18. Numerical Effluent Limitations for Toxicants

- a. EPA or MassDEP may use the results of the chemical analyses conducted pursuant to this permit, as well as national water quality criteria developed pursuant to Section 304(a)(1) of the CWA, state water quality criteria, and any other appropriate information or data, to develop numerical effluent limitations for any pollutants, including, but not limited to, those pollutants listed in Appendix D of 40 C.F.R. §122.

19. Toxics Control

- a. The Permittee shall not discharge any pollutant or combination of pollutants in toxic amounts.
- b. Any toxic components of the effluent shall not result in any demonstrable harm to aquatic life or violate any state or federal water quality standard which has been or may be promulgated. Upon promulgation of any such standard, this permit may be revised or amended in accordance with such standards.

B. ADDITIONAL ALLOWABLE DISCHARGES AND UNAUTHORIZED DISCHARGES

1. This permit authorizes the Permittee to discharge only in accordance with the terms and conditions of this permit and only from the outfalls listed in Part I.A.1., and Part I.A.2. of this permit. Discharges of wastewater from any other point sources which are not authorized by this permit or other NPDES permits shall be reported in accordance with Part D.1.e.(1) of the Standard Conditions of this permit (twenty-four hour reporting).
2. The Permittee is authorized to discharge only the effluent types listed in Parts I.A.1., and Part I.A.2. with the exception of the following discharges allowable under this permit, provided these discharges meet all effluent limitations in the permit:
 - a. Discharges from fire-fighting activities.
 - b. Fire hydrant flushings.
 - c. Potable water (e.g., water line flushings) unless associated with hydrostatic testing.
 - d. Uncontaminated condensate from air conditioners, coolers, and other compressors and from the outside storage of refrigerated gases or liquids.
 - e. Irrigation drainage.
 - f. Landscape watering provided all pesticides, herbicides, and fertilizer have been applied in accordance with the approved labeling.
 - g. Pavement wash waters where no detergents are used and no spills or leaks of toxic or hazardous materials have occurred or could occur.
 - h. Routine external building washdown that does not use detergents.
 - i. Uncontaminated groundwater.
 - j. Foundation or footing drains where flows are not contaminated with process materials.

- k. Incidental windblown mist from boilers and/or cooling towers that collects on rooftops or adjacent portions of the Terminal, but not intentional discharges from these structures (e.g., blowdown or drains).
3. The following discharges are expressly prohibited:
- a. There shall be no discharge of tank bottom water and/or bilge water alone or in combination with stormwater discharge or other wastewater.
 - b. There shall be no discharge of any sludge and/or bottom deposits from any storage tank(s), basin(s), and/or diked area(s) to the receiving waters. Examples of storage tanks and/or basins include, but are not limited to: primary catch basins, oil/water separators, petroleum product storage tanks, baffled storage tanks collecting spills, and tank truck loading rack sumps.
 - c. Discharge of additives, including, but not limited to: glutaraldehyde, ethylene glycol, butoxyethanol, alkylacrylate nitro styrene polymer, coco alkylamine, 1,2,3 and 4-trimethylbenzene, 1,3,5-trimethylbenzene and methyl isobutyl ketone.
 - d. Any effluent containing fire protection foam, either in concentrate form or as foam diluted with water.
 - e. The bypass of the stormwater treatment system of stormwater runoff, hydrostatic test water, or any discharge following accidental release of reportable quantities of petroleum products is prohibited except where necessary to avoid loss of life, personal injury, or severe property damage. Each bypass shall be sampled for all the effluent characteristics identified in Part I.A.1. of this permit (i.e. monthly and quarterly) and the results reported to EPA within 45 days of the initiation of the bypass. These bypass reporting requirements are in addition to those already identified in 40 C.F.R. §122.41(m) and Part II.B.4. of the Standard Conditions of this permit.
 - f. Runoff resulting from accidental spill or release, excepting conditions that meet the requirements defined in Part II., the Standard Conditions.

C. NON-NUMERIC TECHNOLOGY-BASED EFFLUENT LIMITATIONS AND ADDITIONAL REQUIREMENTS

1. Control measures (including BMPs) shall be selected, designed, installed, and implemented at the Terminal to minimize the discharge of pollutants in stormwater to waters of the United States. At a minimum, these BMPs shall be consistent with the control measures described in the current EPA Multi-Sector General Permit (MSGP) (effective May 27, 2009). Specifically, BMPs must be selected and implemented to satisfy the following non-numeric technology-based effluent limitations:
 - a. Minimization of exposure of manufacturing, processing, and material storage areas to stormwater discharges;
 - b. Good housekeeping and/or control measures designed to maintain areas that are potential sources of pollutants, including, but not limited to, contaminated soil and groundwater, and petroleum product blending and dispensing appurtenances;
 - c. Preventative maintenance programs to avoid leaks, spills, and other releases of pollutants in stormwater discharged to receiving waters;
 - d. Spill prevention and response procedures to ensure effective response to spills and leaks if or when they occur including proper procedures for cleanup water segregation;

- e. Erosion and sediment controls designed to stabilize exposed areas and contain runoff using structural and/or non-structural control measures to minimize onsite erosion and sedimentation, and the resulting discharge of pollutants;
 - f. Runoff and run-on management practices to divert, infiltrate, reuse, contain, or otherwise reduce stormwater runoff;
 - g. Proper protocols for hydrostatic testing;
 - h. Proper handling procedures for tank bottom water;
 - i. Proper handling procedures for salt or materials containing chlorides that are used for snow and ice control;
 - j. Appropriate application practices for any herbicide used to control nuisance vegetation;
 - k. Proper handling procedures for ethanol storage and response procedures for releases of ethanol or materials that are used for ethanol spill or fire control. This must include specific provisions for the treatment of ethanol, should release occur, taking into account the analytical challenges for monitoring this compound and the limited effectiveness of an OWS and/or granular activated carbon in treating this compound; and
 - l. Sector specific non-numeric technology-based effluent limitations and/or BMPs included in Sector AD – Non-Classified Facilities in the current MSGP (effective May 27, 2009).
2. The selection, design, installation, and implementation of control measures must be in accordance with good engineering practices and manufacturer's specifications. The Permittee must include sector-specific BMPs included in Sector AD – Non-Classified Facilities in the current MSGP (effective May 27, 2009). When selecting and designing control measures (including BMPs), the Permittee must address design considerations consistent with Part 2.1.1. of the current MSGP (effective May 27, 2009).
 3. The Permittee shall implement a discharge practices BMP that minimizes the extent to which discharges from the Terminal occur under worst-case conditions in the receiving water, meets the requirements of a qualifying event as specified in Part I.A.1., and limits the runoff, run-on and re-entrainment of pollutants. This BMP must include, to the maximum extent practicable:
 - a. A detailed process for the initiation of discharge which identifies the conditions which meet the requirements of a qualifying event (i.e., outgoing tide, daylight hours), and the methods for avoiding worst-case conditions (i.e., approximately one hour before and after slack tides), and conditions under which discharges should not occur (i.e., visible sheen observed, receiving water low flow conditions and/or site-specific factors);
 - b. An assessment of the site-specific factors that increase the potential to contribute pollutants to stormwater (e.g., recent spills, contaminated soil or groundwater, flooding or otherwise elevated water table, Terminal construction and/or maintenance);
 - c. The examination of alternate procedures or improvements to current procedures that increase the efficiency of pollutant removal prior to the wastewater discharge to surface waters, reduce the potential to contribute pollutants to stormwater by incorporating practices including, but not limited to, 2/year sweeping of paved surfaces, and yield data representative of discharges from the Terminal and the receiving water required in Part I.A.1.;

- d. Coordination of sample timing with other bulk petroleum storage facilities that discharge to the Chelsea River; and
 - e. To the extent the Permittee determines any portion of this BMP is impracticable, the SWPPP must provide an evaluation and explanation to support this determination.
4. The Permittee shall implement a spill control BMP which prevents, to the maximum extent achievable, discharges of accidentally released petroleum products to the Chelsea River through Outfall 001. This program may cross-reference any applicable component of the Terminal's Spill Prevention Control and Countermeasure Plan, where appropriate, and shall include, at a minimum:
 - a. The specific response actions taken as a result of a spill of reportable quantities at the Terminal;
 - b. The process for notifying EPA, MassDEP, the U.S. Coast Guard, and/or the City of Boston, as required; and
 - c. A list of significant spills (i.e., reportable quantities) and significant leaks of toxic or hazardous pollutants that occurred at the Terminal as of the effective date of this Permit to the present and is maintained to include up-to-date information. This list shall be provided to EPA and/or MassDEP upon request.
5. The Permittee shall implement a stormwater system BMP that provides confirmation of the integrity of stormwater system components and assesses the level of infiltration of contaminated groundwater into stormwater or components that convey stormwater. This must include, to the maximum degree practicable:
 - a. Identification of stormwater system components potentially located below the annual high groundwater table; and
 - b. Confirmation of stormwater system integrity provided with the first annual SWPPP certification following implementation of this BMP; data gathered through appropriate measures that confirms the level of groundwater infiltration, if any, must be documented in the SWPPP and should include, as appropriate:
 - i. Visual or video inspection of the readily accessible portions of the stormwater system installed below grade;
 - ii. Direct measurement of the flow rate, direction and pollutant concentrations for the pollutants listed in Part I.A.1., Pollutant Scan, Effluent, at five separate existing groundwater monitoring points representative of groundwater conditions at the Terminal, including known areas of contamination;
 - iii. Direct measurement of the flow rate and pollutant concentrations for the pollutants listed in Part I.A.1., Pollutant Scan, Effluent, at a minimum of five separate accumulation points within the stormwater system that are likely susceptible to groundwater infiltration including points located in known areas of contamination collected during dry weather absent of tidal influence; and
 - iv. Direct measurement of the flow rate and pollutant concentrations for the pollutants listed in Part I.A.1., Pollutant Scan, Effluent, of stormwater runoff into the stormwater system at a minimum of five separate accumulation points within the stormwater system that are likely attributable to overland flow of precipitation collected during wet weather absent of tidal influence.
6. The Permittee shall conduct facility inspections. All areas with industrial materials or activities exposed to stormwater and all structural control used to comply with effluent limits

in this permit shall be inspected, at least once per quarter, by qualified personnel with one or more members of the stormwater pollution prevention team. Inspections shall begin during the first full calendar quarter after the effective date of this permit. EPA considers quarters as follows: January to March; April to June; July to September; and October to December. Each inspection must include a visual assessment of stormwater samples (from the outfall), which shall be collected within the first 15 minutes of discharge, stored in a clean, clear glass or plastic container, and examined in a well-lit area for the following water quality characteristics: color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of pollution.

7. The Permittee shall take corrective action(s) as required below.
 - b. If any of the following conditions occur, the Permittee must review and revise the selection, design, installation, and implementation of control measures (including BMPs) to ensure that the condition is eliminated and will not be repeated in the future:
 - i. an unauthorized release or discharge or a release of a reportable quantity of pollutants as described in 40 C.F.R. §302;
 - ii. a discharge violates any permit condition, including a numeric effluent limit;
 - iii. a determination by the Permittee or EPA that the control measures (including BMPs) appear to be ineffective in achieving the general objectives of controlling pollutants in discharges or are not stringent enough for the discharge to meet applicable water quality standards;
 - iv. an inspection or evaluation of the Terminal by an EPA official, or local, State, or Tribal entity, determines that modifications to the control measures are necessary to meet the non-numeric effluent limits in this permit; or
 - v. a finding by the Permittee during a quarterly inspection that control measures are not being properly operated and maintained.
 - c. If any of the following conditions occur, the Permittee must review the selection, design, installation, and implementation of control measures (including BMPs) to determine if modifications are necessary to meet the effluent limits in this permit:
 - i. a change in design, construction, operation, or maintenance, materials storage, or activities at the Terminal that significantly changes the nature of pollutants discharged in stormwater from the Terminal, or significantly increases the quantity of pollutants discharged; or
 - ii. new data identifies the integrity of the stormwater system and level of groundwater infiltration into the stormwater system.
 - d. If the Permittee determines that changes are necessary, any modifications to control measures (including BMPs) must be made before the next discharge if possible, or as soon as practicable following that discharge.

D. STORMWATER POLLUTION PREVENTION PLAN

1. The Permittee shall develop, implement and maintain a SWPPP designed to reduce or prevent the discharge of pollutants to waters of the United States. The SWPPP shall be a written document that is consistent with the terms of the permit and the current MSGP (effective May 27, 2009). The SWPPP must identify and describe the control measures (including BMPs) employed by the Terminal for all structural and/or operational controls used to control discharges from Outfall 001.

2. The SWPPP shall be updated and certified by the Permittee within 30 days of the effective date of this permit. The Permittee shall certify that the SWPPP has been prepared, that it meets the requirements of this permit, and that it reduces the pollutants in the discharge to the extent practicable. The SWPPP and certification shall be signed in accordance with the requirements identified in 40 C.F.R. §122.22. The Permittee shall, if practicable, post a copy of the Terminal's SWPPP in portable document format to the Permittee's publicly-accessible website. The location of this document (i.e., a valid, direct hyperlink) must be provided to EPA and MassDEP with the Permittee's certification. A copy of the SWPPP and certification shall be maintained at the Terminal and made available to EPA, MassDEP and/or the City of Boston upon request.
3. The SWPPP shall be prepared in accordance with good engineering practices and shall be consistent with the general provisions for SWPPPs included in the current MSGP (effective May 27, 2009). In the current MSGP, the general SWPPP provisions are included in Part 5. and Part 8.AD., and are specified, in part, above. Specifically, the SWPPP shall document the selection, design, and installation, and implementation of control measures and contain the elements listed below:
 - a. A pollution prevention team with collective and individual responsibilities for developing, implementing, maintaining, revising and ensuring compliance with the SWPPP;
 - b. A site description which includes the activities at the Terminal; a general location map showing the Terminal, receiving waters, and outfall locations; and a site map showing the extent of significant structures and impervious surfaces, directions of stormwater flows, and locations of all existing structural control measures, stormwater conveyances, pollutant sources (identified in Part I.D.3.c. below), stormwater monitoring points, stormwater inlets and outlets, and industrial activities exposed to precipitation such as storage, disposal, and material handling;
 - c. A summary of all pollutant sources which includes a list of activities exposed to stormwater, the pollutants associated with these activities, a description of where spills have occurred or could occur, a description of non-stormwater discharges, and a summary of any existing stormwater or non-stormwater discharge sampling data;
 - d. A description of all stormwater controls, both structural and non-structural;
 - e. A schedule and procedure for implementation and maintenance of the control measures, BMPs, quarterly inspections and corrective actions described in Part I.C. above; and
 - f. Sector specific SWPPP provisions included in Sector AD – Non-Classified Facilities in the current MSGP (effective May 27, 2009).
4. The Permittee shall amend and update the SWPPP within 14 days for any changes at the Terminal that result in a significant effect on the potential for the discharge of pollutants to the waters of the United States or that affect the SWPPP. Such changes may include, but are not limited to those listed in Part I.C.7. Any amended, modified, or new versions of the SWPPP shall be re-certified and signed by the Permittee in accordance with the requirements identified in Part I.D.2. above.
5. The SWPPP shall document the control measures (including BMPs) implemented or to be implemented at the Terminal to meet the non-numeric technology-based effluent limitations in Part I.C., and the information specified below for inspections, and corrective action(s).

- a. The Permittee shall document the following information for each inspection and maintain the records along with the SWPPP:
 - i. The date and time of the inspection and at which any samples were collected;
 - ii. The name(s) and signature(s) of the inspector(s)/sample collector(s);
 - iii. If applicable, why it was not possible to take samples within the first 15 minutes;
 - iv. Weather information and a description of any discharges occurring at the time of the inspection;
 - v. Results of observations of discharges, including any observed discharges of pollutants and the probable sources of those pollutants;
 - vi. Any control measures and/or treatment system components needing maintenance, repairs or replacement; and
 - vii. Any additional control measures needed to comply with the permit requirements.
 - b. For corrective actions, the Permittee shall document conditions included in Part I.C.7.a. and b. within 24 hours of identifying such conditions. The Permittee shall document any corrective action(s) to be taken, or if no corrective action is needed, the basis for that determination, within 14 days of identifying such conditions. The Permittee shall document the following information, at a minimum:
 - i. Identification of the condition triggering the need for corrective action review;
 - ii. Description of the problem identified; and
 - iii. Date the problem was identified.
 - iv. Summary of corrective action taken or to be taken (or, where you determine that corrective action is not necessary, the basis for this determination);
 - v. Notice of whether SWPPP modifications are required as a result of this discovery or corrective action;
 - vi. Date corrective action initiated; and
 - vii. Date corrective action completed or expected to be completed.
6. The Permittee shall certify at least annually that the Terminal is in compliance with the SWPPP requirement. If the Terminal is not in compliance with any aspect of the SWPPP requirement, the annual certification shall state the non-compliance and the remedies which are being undertaken. Such annual certifications also shall be signed in accordance with the requirements identified in Part. I.D.2. above.
 7. The Permittee shall certify, at least annually, that the previous year's inspections and maintenance activities were conducted, results recorded, records maintained, and that the Terminal is in compliance with this permit. Such annual certifications also shall be signed in accordance with the requirements identified in Part. I.D.2. above. If the Terminal is not in compliance with any aspect of this permit, the annual certification shall state the non-compliance and the remedies which are being undertaken. The Permittee shall document in the SWPPP any violation of numeric or non-numeric effluent limitations with a date and description of the corrective actions taken.
 8. The Permittee shall keep a copy of the current SWPPP and all SWPPP certifications (the initial certification, recertification, and annual certifications) signed during the effective period of this permit at the Terminal and shall make it available for inspection by EPA and/or MassDEP.

9. The SWPPP must be consistent with the terms of this permit, similar plans, and requirements of Section 311 of the CWA.

E. REOPENER CLAUSE

1. This permit may be modified, or revoked and reissued in accordance with 40 C.F.R. §122.62. The reason for modification or revocation may include, but is not limited to:
 - a. Material and substantial alterations or additions to the Terminal or activity have occurred.
 - b. New information is received which was not available at the time of permit issuance and that would have justified the application of different permit conditions at the time of issuance.
 - c. An applicable effluent standard or limitation is issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the CWA, which:
 - i. Contains different conditions or is otherwise more stringent than any effluent limitation in this permit; or
 - ii. Controls any pollutant not limited by this permit.
2. If the permit is modified or reissued, it shall be revised to reflect all currently applicable requirements of the CWA.

. MONITORING AND REPORTING

1. For a period of six months from the effective date of the permit, the Permittee may either submit monitoring data and other reports to EPA in hard copy form or report electronically using NetDMR, a web-based tool that allows permittees to electronically submit DMRs and other required reports via a secure internet connection. Beginning no later than six months after the effective date of the permit, the Permittee shall begin reporting using NetDMR, unless the Terminal is able to demonstrate a reasonable basis that precludes the use of NetDMR for submitting DMRs and reports. Specific requirements regarding submittal of data and reports in hard copy form and for submittal using NetDMR are described below:
 - a. Submittal of Reports Using NetDMR:
 - i. NetDMR is accessed from: <http://www.epa.gov/netdmr>. Within six months of the effective date of this permit, the Permittee shall begin submitting DMRs and reports required under this permit electronically to EPA using NetDMR, unless the Terminal is able to demonstrate a reasonable basis, such as technical or administrative infeasibility, that precludes the use of NetDMR for submitting DMRs and reports (“opt-out request”). DMRs shall be submitted electronically to EPA no later than the 1st day of the month following the completed reporting period;
 - ii. All reports required under the permit shall be submitted to EPA as an electronic attachment to the DMR. A permittee submitting reports using NetDMR is no longer required to submit hard copies of DMRs or other reports to EPA, with the exception of a duplicate copy of the hydrostatic test summary letter/report noted below, and no longer required to submit hard copies of DMRs to MassDEP. However, permittees shall continue to send hard copies of reports

other than DMRs (including Hydrostatic Test Summary Letter/Report, and Toxicity Test Results) to MassDEP until further notice from MassDEP; and

iii. The Permittee shall, if practicable, post a copy of the Terminal's DMR data in portable document format to the Permittee's publicly-accessible website in conjunction with submission of DMRs via NetDMR. The location of these documents (i.e., a valid, direct hyperlink) must be consistent with the location of the Terminal's publicly-accessible SWPPP, specified in Part I.D.

b. Submittal of NetDMR Opt-Out Requests:

Opt-out requests must be submitted in writing to EPA for written approval at least 60 days prior to the date a Terminal would be required under this permit to begin using NetDMR. This demonstration shall be valid for six months from the date of EPA approval and shall thereupon expire. At such time, DMRs and reports shall be submitted electronically to EPA unless the Permittee submits a renewed opt-out request and such request is approved by EPA. All opt-out requests should be sent to the following addresses:

Attn: NetDMR Coordinator

U.S. Environmental Protection Agency, Water Technical Unit
5 Post Office Square, Suite 100 (OES04-1)
Boston, MA 02109-3912

And

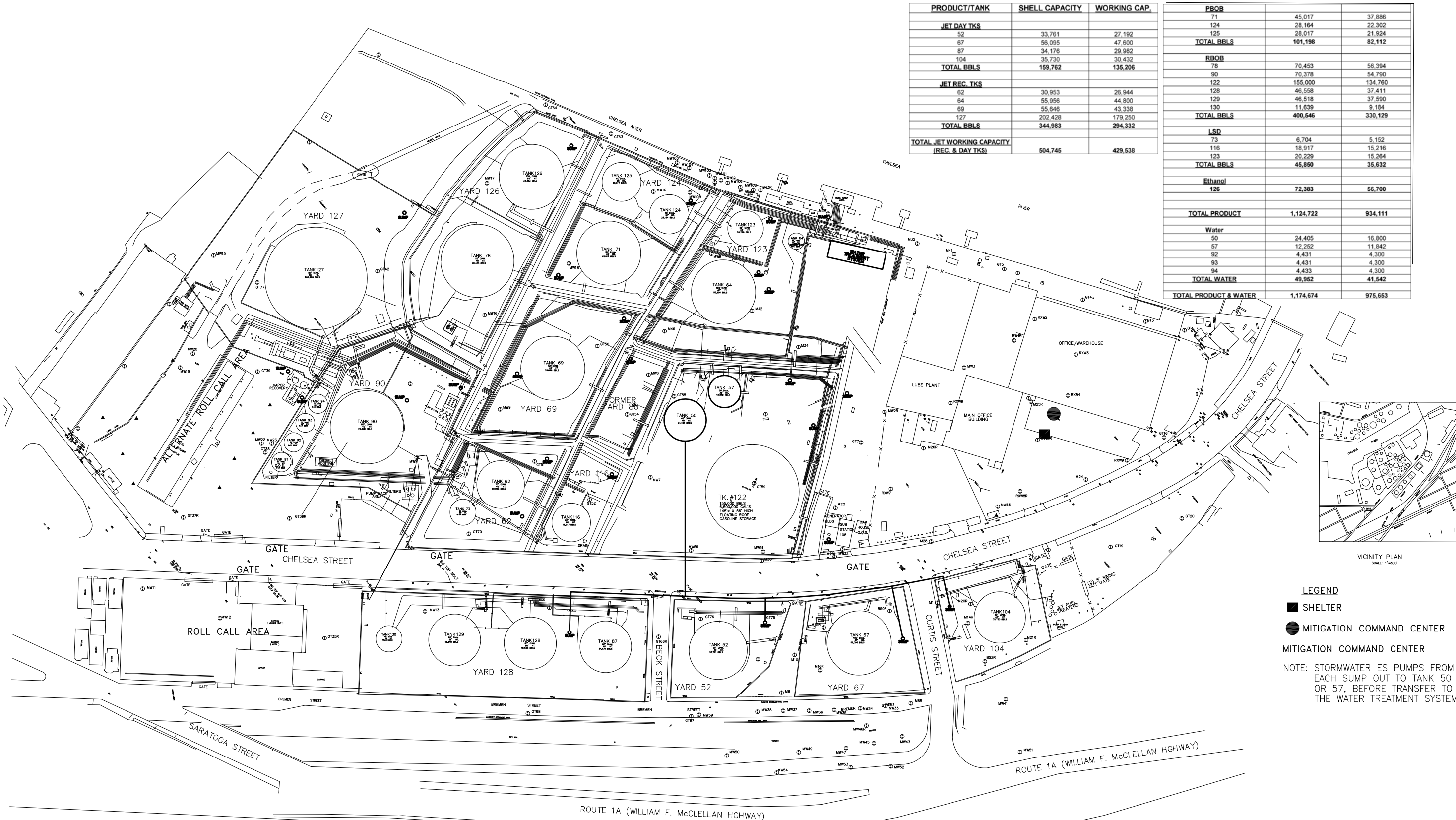
Massachusetts Department of Environmental Protection
Surface Water Discharge Permit Program
1 Winter Street, 5th Floor
Boston, Massachusetts 02108

c. Submittal of Reports in Hard Copy Form:

- i. Monitoring results shall be summarized for each calendar month and reported on separate hard copy DMRs postmarked no later than the 15th day of the month following the completed reporting period. All reports required under this permit shall be submitted as an attachment to the DMRs, with the exception of a duplicate copy of the hydrostatic test summary letter/report noted below. Signed and dated originals of the DMRs, and all other reports or notifications DMRs (if opting out of NetDMR), required herein or in Part II shall be submitted to the Director at the following address:

U.S. Environmental Protection Agency
Water Technical Unit (OES04-SMR)
5 Post Office Square - Suite 100
Boston, MA 02109-3912

- ii. A duplicate signed copy of each hydrostatic test summary letter report required in Part I.A.16.e., shall be submitted to EPA at the following address:



PRODUCT/TANK	SHELL CAPACITY	WORKING CAP.
JET DAY TKS		
52	33,761	27,192
67	56,095	47,600
87	34,176	29,982
104	35,730	30,432
TOTAL BBLs	169,762	135,206
JET REC. TKS		
62	30,953	26,944
64	55,956	44,800
69	55,646	43,338
127	202,428	179,250
TOTAL BBLs	344,983	294,332
TOTAL JET WORKING CAPACITY (REC. & DAY TKS)	504,745	429,538

PBOB		
71	45,017	37,886
124	28,164	22,302
125	28,017	21,924
TOTAL BBLs	101,198	82,112
RBOB		
78	70,453	56,394
90	70,378	54,790
122	155,000	134,760
128	46,558	37,411
129	46,518	37,590
130	11,639	9,184
TOTAL BBLs	400,546	330,129
LSD		
73	6,704	5,152
116	18,917	15,216
123	20,229	15,264
TOTAL BBLs	45,850	35,632
Ethanol		
126	72,383	56,700
TOTAL PRODUCT	1,124,722	934,111
Water		
50	24,405	16,800
57	12,252	11,842
92	4,431	4,300
93	4,431	4,300
94	4,433	4,300
TOTAL WATER	49,952	41,542
TOTAL PRODUCT & WATER	1,174,674	975,653

LEGEND

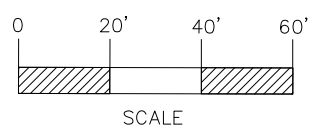
- SHELTER
- MITIGATION COMMAND CENTER

MITIGATION COMMAND CENTER

NOTE: STORMWATER ES PUMPS FROM EACH SUMP OUT TO TANK 50 OR 57, BEFORE TRANSFER TO THE WATER TREATMENT SYSTEM.

REV.	DATE	APP#	DESCRIPTION	APPROVAL
2	09-18-2011		HIGHLIGHTED SUMP DRAINAGE INFORMATION	BKA CE
1	09-08-2011		SXL TITLE BLOCK	BKA CE

ENGINEERING RECORD	
DRAWN BY	BKA
CHECKED BY	
APPROVED BY	
DATE	09/08/11
SCALE	1" = 20'-0"



East Boston Terminal
STORMWATER FLOW

OLD DRAWING NO.	ebos-ev-0008	DWG. NO.	T_EBOS_C207001	REV. NO.	2
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