Notice of Intent

# 244-284 A Street

Submitted to:
**Boston Conservation Commission**
1 City Hall Square, Room 709
Boston, MA 02201

Submitted by:
**Channelside Acquisitions, LLC**
c/o Related Beal
177 Milk Street
Boston, MA 02109

Prepared by:
**Epsilon Associates, Inc.**
3 Mill & Main Place, Suite 250
Maynard, MA 01754

In Association with:
**Nitsch Engineering**

Epsilon ASSOCIATES INC.

**September 22, 2021**

PRINCIPALS

Theodore A Barten, PE
Margaret B Briggs
Dale T Raczynski, PE
Cindy Schlessinger
Lester B Smith, Jr
Robert D O'Neal, CCM, INCE
Michael D Howard, PWS
Douglas J Kelleher
AJ Jablonowski, PE
Stephen H Slocomb, PE
David E Hewett, LEED AP
Dwight R Dunk, LPD
David C Klinch, PWS, PMP
Maria B Hartnett
Richard M Lampeter, INCE
Geoff Starsiak, LEED AP BD+C
Marc Bergeron, PWS, CWS

ASSOCIATES

Alyssa Jacobs, PWS
Holly Carlson Johnston
Brian Lever
Dorothy K. Buckoski, PE

3 Mill & Main Place, Suite 250
Maynard, MA 01754
www.epsilonassociates.com

978 897 7100
FAX 978 897 0099

September 22, 2021

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

**Subject: Notice of Intent Application, 244-284 A Street, Boston, Massachusetts**

Dear Commissioners:

On behalf of the Channelside Acquisitions, LLC (Proponent), Epsilon Associates, Inc. (Epsilon) is pleased to submit this Notice of Intent (NOI) application to the Boston Conservation Commission (Commission). This NOI has been prepared in accordance with the Massachusetts Wetland Protection Act (MGL c.131 s.40) and implementing Regulations (310 CMR 10.00 *et seq*) and the Boston Wetlands Protection Ordinance (Ordinance) and implementing regulations.

The Proponent intends to replace and relocate subsurface utilities at 244-284 A Street in Boston, Massachusetts (the "Property"), located adjacent to the Fort Point Channel. The proposed utility replacement anticipates the planned redevelopment of the Property and is immediately necessary to accommodate service tie-ins and logistical encroachments for the on-going redevelopment by other parties at the abutting site.

Construction activities will involve work in Land Subject to Coastal Storm Flowage, the 100-foot Buffer Zone to Coastal Bank, and Waterfront Area under the Ordinance.

The activities described in this NOI have been designed to comply with the applicable General Performance Standards for each referenced wetland resource area.

This NOI is being submitted for the Commission's review at the regularly scheduled **October 6, 2021** public hearing. If you have any questions regarding this NOI please do not hesitate to contact me at 978-461-6241 or via email at erexford@epsilonassociates.com.

Sincerely,
EPSILON ASSOCIATES, INC.

Erik Rexford
Senior Consultant

**Cc:** DEP NERO
Olivia Sherry, Channelside Acquisitions, LLC

# Notice of Intent

## Massachusetts Wetlands Protection Act (M.G.L. c. 131 §.40)
## Boston Wetlands Ordinance (Chapter 7-1.4)

# 244-284 A Street
# Boston, Massachusetts

*Submitted to:*
**Boston Conservation Commission**

*Submitted by:*
**Channelside Acquisitions, LLC**

*Prepared by:*
**Epsilon Associates, Inc.**

*In Association With:*
**Nitsch Engineering**

September 22, 2021
rev. October 6, 2021

## Table of Contents

# TABLE OF CONTENTS



# LIST OF ATTACHMENTS

# LIST OF FIGURES IN ATTACHMENT B

**Boston NOI Form**

City of Boston Environment

**NOTICE OF INTENT APPLICATION FORM**
Boston Wetlands Ordinance
City of Boston Code, Ordinances, Chapter 7-1.4

Boston File Number

MassDEP File Number

## A. GENERAL INFORMATION

1. Project Location

| a. Street Address | b. City/Town | c. Zip Code |
|---|---|---|
| 244-284 A Street | Boston | 02210 |

| f. Assessors Map/Plat Number | g. Parcel /Lot Number |
|---|---|
| | 0601165010 |

2. Applicant

| a. First Name | b. Last Name | c. Company |
|---|---|---|
| | | Channelside Acquisitions, LLC |

d. Mailing Address: c/o Related Beal, 177 Milk Street

| e. City/Town | f. State | g. Zip Code |
|---|---|---|
| Boston | Massachusetts | 02109 |

| h. Phone Number | i. Fax Number | j. Email address |
|---|---|---|
| 617.399.9599 | | osherry@related.com |

3. Property Owner

| a. First Name | b. Last Name | c. Company |
|---|---|---|
| | | Channelside Acquisitions, LLC |

d. Mailing Address: c/o Related Beal, 177 Milk Street

| e. City/Town | f. State | g. Zip Code |
|---|---|---|
| Boston | Massachusetts | 20109 |

| h. Phone Number | i. Fax Number | j. Email address |
|---|---|---|
| 617.399.9599 | | osherry@related.com |

❑ Check if more than one owner

(If there is more than one property owner, please attach a list of these property owners to this form.)

4. Representative (if any)

| a. First Name | b. Last Name | c. Company |
|---|---|---|
| Erik | Rexford | Epsilon Associates, Inc. |

d. Mailing Address: 3 Mill & Main Place, Suite 250

| e. City/Town | f. State | g. Zip Code |
|---|---|---|
| Maynard | Massachusetts | 01754 |

| h. Phone Number | i. Fax Number | j. Email address |
|---|---|---|
| 978-461-6241 | | erexford@epsilonassociates.com |

5. Is any portion of the proposed project jurisdictional under the Massachusetts Wetlands Protection Act M.G.L. c. 131 §40?

☒ Yes ☐ No

If yes, please file the WPA Form 3 - Notice of Intent with this form

6. General Information

Replacement and reconfiguration of subsurface utilities. See Attachment A - Project Narrative

7. Project Type Checklist

a. ☐ Single Family Home
b. ☐ Residential Subdivision
c. ☐ Limited Project Driveway Crossing
d. ☐ Commercial/Industrial
e. ☐ Dock/Pier
f. ☒ Utilities
g. ☐ Coastal Engineering Structure
h. ☐ Agriculture – cranberries, forestry
i. ☐ Transportation
j. ☐ Other

8. Property recorded at the Registry of Deeds

| | |
|---|---|
| Suffolk<br>a. County | 61114<br>b. Page Number |
| 146<br>c. Book | <br>d. Certificate # (if registered land) |

9. Total Fee Paid

| | | |
|---|---|---|
| $2,562.50<br>a. Total Fee Paid | $512.50<br>b. State Fee Paid | $2,050.00<br>c. City Fee Paid |

**B. BUFFER ZONE & RESOURCE AREA IMPACTS**

Buffer Zone Only - Is the project located only in the Buffer Zone of a resource area protected by the Boston Wetlands Ordinance?

☐ Yes ☒ No

1. Coastal Resource Areas

| Resource Area | Resource Area Size | Proposed Alteration* | Proposed Migitation |
|---|---|---|---|
| ❑ *Coastal Flood Resilience Zone* | *Square feet* | *Square feet* | *Square feet* |
| ☒ *25-foot Waterfront Area* | 6,548 *Square feet* | 1,049 (Temporary) *Square feet* | *Square feet* |
| ❑ *100-foot Salt Marsh Area* | *Square feet* | *Square feet* | *Square feet* |
| ❑ *Riverfront Area* | *Square feet* | *Square feet* | *Square feet* |

2. Inland Resource Areas

| Resource Area | Resource Area Size | Proposed Alteration* | Proposed Migitation |
|---|---|---|---|
| ❑ *Inland Flood Resilience Zone* | *Square feet* | *Square feet* | *Square feet* |
| ❑ *Isolated Wetlands* | *Square feet* | *Square feet* | *Square feet* |
| ❑ *Vernal Pool* | *Square feet* | *Square feet* | *Square feet* |
| ❑ *Vernal Pool Habitat (vernal pool + 100 ft. upland area)* | *Square feet* | *Square feet* | *Square feet* |
| ❑ *25-foot Waterfront Area* | *Square feet* | *Square feet* | *Square feet* |
| ❑ *Riverfront Area* | *Square feet* | *Square feet* | *Square feet* |

## C. OTHER APPLICABLE STANDARDS & REQUIREMENTS

1. What other permits, variances, or approvals are required for the proposed activity described herein and what is the status of such permits, variances, or approvals?

Boston Water & Sewer Commission, Site Plan Review - Approval Pending

Boston Transportation Department, Construction Management Plan - Approval Pending

Massachusetts Department of Transportation, Access Agreement - Submission Pending

Boston Inspectional Services Department, Short-Form Permit - Submission Pending

2. 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 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://www.mass.gov/dfwele/dfw/nhesp/nhregmap.htm.

❑ Yes ☒ No

If *yes*, the project is subject to Massachusetts Endangered Species Act (MESA) review (321 CMR 10.18).

**A. Submit Supplemental Information for Endangered Species Review**

☐ Percentage/acreage of property to be altered:

(1) within wetland Resource Area _____ percentage/acreage

(2) outside Resource Area _____ percentage/acreage

☐ Assessor's Map or right-of-way plan of site

3. Is any portion of the proposed project within an Area of Critical Environmental Concern?

❑ Yes ☒ No

If yes, provide the name of the ACEC: _____

4. Is the proposed project subject to provisions of the Massachusetts Stormwater Management Standards?

❑ *Yes. Attach a copy of the Stormwater Checklist & Stormwater Report as required.*
- ❑ *Applying for a Low Impact Development (LID) site design credits*
- ☒ *A portion of the site constitutes redevelopment*
- ❑ *Proprietary BMPs are included in the Stormwater Management System*

❑ *No. Check below & include a narrative as to why the project is exempt*
- ❑ *Single-family house*
- ❑ *Emergency road repair*
- ❑ *Small Residential Subdivision (less than or equal to 4 single family houses or less than or equal to 4 units in a multifamily housing projects) with no discharge to Critical Areas*

5. Is the proposed project subject to Boston Water and Sewer Commission Review?

☒ Yes ❑ No

## D. 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 Protection Ordinance.

Signature of Applicant — September 22, 2021 (Date)

Signature of Property Owner (if different) — Date

Signature of Representative (if any) — September 22, 2021 (Date)

**WPA Form 3 & NOI Wetland Fee Transmittal Form**

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

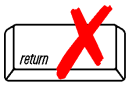
Provided by MassDEP:

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):

244-284 A Street — a. Street Address
Boston — b. City/Town
02210 — c. Zip Code

Latitude and Longitude:
42°20'52.88"N — d. Latitude
71° 3'6.17"W — e. Longitude

N/A — f. Assessors Map/Plat Number
0601165010 — g. Parcel /Lot Number

2. Applicant:

a. First Name
b. Last Name
Channelside Acquisitions, LLC — c. Organization
c/o Related Beal, 177 Milk Street — d. Street Address
Boston — e. City/Town
MA — f. State
02109 — g. Zip Code
617.399.9599 — h. Phone Number
i. Fax Number
osherry@related.com — j. Email Address

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

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

4. Representative (if any):

Erik — a. First Name
Rexford — b. Last Name
Epsilon Associates Inc — c. Company
3 Mill and Main Place — d. Street Address
Maynard — e. City/Town
MA — f. State
01754 — g. Zip Code
(978) 461-6241 — h. Phone Number
i. Fax Number
erexford@epsilonassociates.com — j. Email address

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

$2,562.50 — a. Total Fee Paid
$512.50 — b. State Fee Paid
$2,050.00 — c. City/Town Fee Paid

**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:

MassDEP File Number

Document Transaction Number

Boston
City/Town

## A. General Information (continued)

6. General Project Description:

Subsurface Utilties (refer to Attachment A - Project Narrative)

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:

| a. County | b. Certificate # (if registered land) |
|---|---|
| Suffolk | |
| c. Book | d. Page Number |
| 61114 | 146 |

## 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**
Bureau of Resource Protection - Wetlands

# WPA Form 3 – Notice of Intent

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

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Boston
City/Town

## 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. ☐ Bank | 1. linear feet | 2. linear feet |
| b. ☐ Bordering Vegetated Wetland | 1. square feet | 2. square feet |
| c. ☐ Land Under Waterbodies and Waterways | 1. square feet<br>3. cubic yards dredged | 2. square feet |

| Resource Area | Size of Proposed Alteration | Proposed Replacement (if any) |
|---|---|---|
| d. ☐ Bordering Land Subject to Flooding | 1. square feet | 2. square feet |
| | 3. cubic feet of flood storage lost | 4. cubic feet replaced |
| e. ☐ Isolated Land Subject to Flooding | 1. square feet | |
| | 2. cubic feet of flood storage lost | 3. cubic feet replaced |
| f. ☐ Riverfront Area | 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: _____ square feet

4. Proposed alteration of the Riverfront Area:

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.

**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:

MassDEP File Number

Document Transaction Number

Boston
City/Town

## B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

Check all that apply below. Attach narrative and 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.

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

| Resource Area | Size of Proposed Alteration | Proposed Replacement (if any) |
|---|---|---|
| a. ☐ Designated Port Areas | Indicate size under Land Under the Ocean, below | |
| b. ☐ Land Under the Ocean | 1. square feet<br>2. cubic yards dredged | |
| c. ☐ Barrier Beach | Indicate size under Coastal Beaches and/or Coastal Dunes below | |
| d. ☐ Coastal Beaches | 1. square feet | 2. cubic yards beach nourishment |
| e. ☐ Coastal Dunes | 1. square feet | 2. cubic yards dune nourishment |

| Resource Area | Size of Proposed Alteration | Proposed Replacement (if any) |
|---|---|---|
| f. ☐ Coastal Banks | 1. linear feet | |
| g. ☐ Rocky Intertidal Shores | 1. square feet | |
| h. ☐ Salt Marshes | 1. square feet | 2. sq ft restoration, rehab., creation |
| i. ☐ Land Under Salt Ponds | 1. square feet<br>2. cubic yards dredged | |
| j. ☐ Land Containing Shellfish | 1. square feet | |
| k. ☐ Fish Runs | Indicate size under Coastal Banks, inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above<br>1. cubic yards dredged | |
| l. ☒ Land Subject to Coastal Storm Flowage | 27,457<br>1. square feet | |

4. ☐ Restoration/Enhancement

If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the square footage that has been entered in Section B.2.b or B.3.h above, please enter the additional amount here.

a. square feet of BVW

b. square feet of Salt Marsh

5. ☐ Project Involves Stream Crossings

a. number of new stream crossings

b. number of replacement stream crossings

**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:

MassDEP File Number

Document Transaction Number

Boston
City/Town

## 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

1. 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**

   2021 (MassGIS)
   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*

      1. ☐ Percentage/acreage of property to be altered:

         (a) within wetland Resource Area _____ percentage/acreage

         (b) outside Resource Area _____ percentage/acreage

      2. ☐ Assessor's Map or right-of-way plan of site

2. ☐ 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.

**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:
MassDEP File Number
Document Transaction Number
Boston
City/Town

## 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.

**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:

MassDEP File Number

Document Transaction Number

Boston
City/Town

## 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**
Bureau of Resource Protection - Wetlands

# WPA Form 3 – Notice of Intent

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

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Boston
City/Town

## 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.

Site Utility Enabling Plans
a. Plan Title

Nitsch Engineering
b. Prepared By

Christopher Hodney, P.E.
c. Signed and Stamped by

September 3, 2021
d. Final Revision Date

1" = 20'
e. Scale

Construction Management Plan
f. Additional Plan or Document Title

September 22, 2021
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:

44758 & 44759
2. Municipal Check Number

September 22, 2021
3. Check date

44757
4. State Check Number

September 22, 2021
5. Check date

Epsilon Associates, 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:

MassDEP File Number

Document Transaction Number

Boston
City/Town

## 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.

1. Signature of Applicant

September 22, 2021
2. Date

3. Signature of Property Owner (if different)

4. Date

5. Signature of Representative (if any)

September 22, 2021
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.

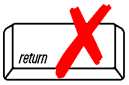
The original and copies must be sent simultaneously. Failure by the applicant to send copies in a timely manner may result in dismissal of the Notice of Intent.

**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:

| | |
|---|---|
| 244-284 A Street Boston | Boston |
| a. Street Address | b. City/Town |
| N/A | $512.50 |
| c. Check number | d. Fee amount |

2. Applicant Mailing Address:

| | | |
|---|---|---|
| Olivia | | Sherry |
| a. First Name | | b. Last Name |

Channelside Acquisitions, LLC
c. Organization

c/o Related Beal, 177 Milk Street
d. Mailing Address

| | | |
|---|---|---|
| Boston | MA | 02109 |
| e. City/Town | f. State | g. Zip Code |

| | | |
|---|---|---|
| 617.399.9599 | | osherry@related.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

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

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.

**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

## B. Fees (continued)

| Step 1/Type of Activity | Step 2/Number of Activities | Step 3/Individual Activity Fee | Step 4/Subtotal Activity Fee |
|---|---|---|---|
| Cat 3(a) - Site Preparation | 1 | $1,050 | $1,050 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**Step 5/Total Project Fee:**

**Step 6/Fee Payments:**

| | |
|---|---|
| Total Project Fee: | $1,050<br>a. Total Fee from Step 5 |
| State share of filing Fee: | $512.50<br>b. 1/2 Total Fee **less $**12.50 |
| City/Town share of filling Fee: | N/A<br>(Boston Fee: $2,050) |

## 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.)

**Attachment A**

Project Narrative

## 1.0 Introduction

On behalf of the Channelside Acquisitions, LLC (Proponent), Epsilon Associates, Inc. (Epsilon) is pleased to submit this Notice of Intent (NOI) to the Boston Conservation Commission (the "Commission"). This NOI has been prepared in accordance with the Massachusetts Wetland Protection Act (MGL c.131 s.40) (the "Act") and implementing Regulations (310 CMR 10.00) (Regulations) and the Boston Wetlands Protection Ordinance (Ordinance) and implementing regulations.

As described in the following sections, the Proponent intends to relocate and replace subsurface utilities at their property at 244-284 A Street in Boston, Massachusetts (the "Property"), located adjacent to the Fort Point Channel. The Proponent is seeking to obtain the necessary approvals for the proposed activities by November 2021 with work anticipated to begin that month. The proposed utility replacement anticipates the planned redevelopment[1] of the Property and is immediately necessary to accommodate service tie-ins and logistical encroachments for the redevelopment at the abutting 15 Necco Street site. The duration of construction activities is estimated at six months.

For purposes of this NOI, the proposed subsurface utilities will establish an interim condition while the Property remains in service as a surface parking lot and until such time that demolition of the parking lot for the planned redevelopment commences. The interim condition addresses key improvements to existing Boston Water and Sewer Commission (BWSC) stormwater infrastructure located within an easement on the Property by replacing an existing tide gate serving an outfall to the Fort Point Channel with two, modern two-chamber tide gates and by installation of appropriately sized drain lines that reduce the stormwater system's capacity restrictions within the Property. Reconfiguration of the stormwater utility is also an important first step in advancing a planned district-wide sea level rise resiliency solution to be constructed on the Property during the planned redevelopment.

In addition to accommodating the interim condition, the relocation of water, sewer, and electric utilities described in this NOI will provide the necessary modern infrastructure to serve the Property and abutting parcels. The interim condition is not anticipated to adversely impact resource areas both as they currently exist and as they are reasonably expected to exist based on the best available data on the projected impacts of climate change.

The subsurface utilities described in this NOI have been designed to operate in conjunction with substantial additional infrastructure that will be the subject of a separate Notice of Intent submission to the Commission. The planned redevelopment includes a series of improvements

[1] The planned redevelopment of the Property is currently undergoing MEPA review (EEA #16250) and review by the Boston Planning and Development Agency under Article 80B, Large Project Review, of the Boston Zoning Code. Upon completion of those review processes, the Proponent anticipates a Notice of Intent for the planned redevelopment will be submitted to the Commission.

to the Property that address, among other things, stormwater management systems and mitigation measures in accordance with the performance standards of the Act, improvements to the Property's resilience with regard to climate change, and substantial new publicly accessible open space and associated amenities. The planned redevelopment integrates climate resilience and adaptation strategies to protect the Property and adjacent properties for the entire design life of the redevelopment.

The activities described in this NOI have been designed to comply with the applicable performance standards for each referenced wetland resource area.

## 2.0 Existing Conditions

### *2.1 Site Description*

The Property is located is generally bound by Necco Street to the northeast, A Street to the southeast, Binford Street to the southwest, and the Fort Point Channel to the northwest. See Attachment B, Figure 1 - *USGS Locus Map* and Figure 2 – *Aerial Locus*. The Property is currently used as surface parking and has been largely vacant or used for surface parking for more than 40 years. The Massachusetts Department of Transportation's Fort Point Tunnel crosses below the Property in an approximate east-west direction.

Nearly all of the Property is paved and used for surface parking. Where the Property abuts the Fort Point Channel, it has been improved to accommodate public pedestrian access that connects to Harborwalk segments on the abutting properties (See Attachment C – Site Photography).

No portion of the Property is located within areas mapped as Priority Habitat of Rare Species and 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/MassGIS, August 2021).

As further described in Section 2.0 and shown on Attachment B, Figure 3 - *Wetlands*, the proposed utility installation activities will involve work in Land Subject to Coastal Storm Flowage (LSCSF), the 100-foot Buffer Zone to Coastal Bank, and the Waterfront Area (Ordinance only).

### *2.2 Land Subject to Coastal Storm Flowage*

LSCSF 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. Under the Ordinance at Chapter 7-1.4 (b), LSCSF is the land within the estimated maximum lateral extent of flood water which will result from the statistical 1% annual chance storm.

According to the applicable Federal Emergency Management Agency - Flood Insurance Rate Map (FEMA-FIRM) map for the City of Boston, Community Panel No. 25025C0081J, dated March 16, 2016, the entire Property is located within mapped Zone AE (See Attachment B, Figure 4). The FEMA FIRM identifies the floodplain elevation as 10.0 feet North American Vertical Datum (NAVD 88 [16.46 feet Boston City Base]) across the entire Property, which is essentially flat.

### *2.3 Coastal Bank*

The Fort Point Channel directly abuts the Property and is contained by a vertical block granite seawall and, along a portion of the shoreline, by a riprap bank. The seawall and riprap bank are considered human-made coastal bank as defined under the Regulations (310 CMR 10.04). The 100-foot buffer zone of this resource area extends across portions of the Property, including a portion of the work area closest to the Fort Point Channel. Coastal Bank and its buffer zone are depicted on Attachment B – Figure 3.

Given the construction of coastal bank at this location, it is not functioning as a sediment source for any downstream coastal dunes or beaches. As an armored landform, the bank is stable and non-eroding, and functions chiefly to prevent storm damage and provide flood control as a vertical buffer to storm waters.

### *2.4 Waterfront Area*

Relative to the Coastal Bank described in Section 2.3, a portion of the Coastal Bank buffer zone extending 25 feet horizontally from the edge of the Coastal Bank is considered Waterfront Area under the Ordinance. The extent of Waterfront Area is shown on Attachment B - Figure 3.

## 3.0 Project Description

The proposed subsurface utility work includes the following:

- Portions of the existing stormwater drainage network serving the Property's parking lot will be reconfigured into a singular, modern collection system located along the perimeter of the parking lot. As a component of the stormwater utility work, at the request of BWSC, the Proponent will replace an existing in-line tide gate with two, modern two-chamber tide gates. The replacement tide gates have been designed to improve the function of the stormwater system and will be more readily accessible and serviceable by BWSC. An analysis of the reconfigured stormwater systems pre- and post-installation hydraulic capacities is provided in Attachment F. The portion of the reconfigured stormwater system also includes installation of a foundation support system required to prevent drain line settlement due to pipe sizing and soil conditions. In the interim condition, existing catch basins and drain lines serving the parking lot will be connected to the reconfigured stormwater system until such time that demolition of the parking lot for the planned redevelopment commences.

The proposed reconfiguration is considered a modification of the existing BWSC system, and as such, is not subject to certain requirements established by the Massachusetts Stormwater Standards as they pertain to development or redevelopment projects. As part of this proposed utility work, there will be no new discharges to the Fort Point Channel and the proposed system represents an improvement over existing conditions with regard to backflow prevention and system capacity.

Reconfiguration of the stormwater system will occur in two phases. As shown on Sheet 5 of Attachment G, during Phase 1 the tide gates will be installed and stormwater pipes extending to the north and south of the chambers will be installed. Additional detail of the stormwater system to be installed during Phase 1 is depicted on Sheet C-201E and Sheet C-202E of Attachment H. Detail drawings of the tide gates are shown on Sheet C-301E of Attachment H. Phase 1 work will occur within the Waterfront Area, buffer zone to Coastal Bank, and LSCSF.

The Phase 1 work area will close portions of Harborwalk and the parking lot to pedestrian and vehicular access for approximately three months. Public access accommodations and a temporary Harborwalk route during the Phase 1 closure are described in Section 5.1. At the conclusion of the Phase 1 work, Harborwalk will be reopened in its existing configuration and condition. The temporary Harborwalk route is shown on Sheet 5 of Attachment G.

During Phase 2, the work area will be relocated to the east of Harborwalk, allowing Harborwalk to reopen. The work area will also be expanded to include an additional portion of the parking lot, which will be closed to pedestrian and vehicular access. Phase 2 work includes the installation of stormwater pipe and appurtenances along the northern boundary of the Property where it will reconnect to the existing system in Necco Street. Phase 2 work is shown on Sheet C-200E and Sheet C-202E of Attachment H. Phase 2 work will occur within the buffer zone to Coastal Bank and LSCSF.

Following completion of the Phase 1 and Phase 2 stormwater work, the Phase 2 work area will remain in place while the following work is conducted:

- As shown on Sheet C-200E of Attachment H, electrical service to the Property will be relocated and contained within a modern Eversource electrical duct bank extending to the Property from A Street via Binford Street. Installation of the duct bank on the Property will occur exclusively within LSCSF. The segment of duct bank within the Binford Street right-of-way, will be installed by others.

- As shown on shown on Sheet C-200E of Attachment H, sewer service to the Property from Necco Street will be replaced. This work will occur exclusively within LSCSF.

- As shown on shown on Sheet C-200E of Attachment H, water line service from Necco Street to the Property, feeding two fire hydrants located in the parking lot, will be replaced. This work will occur exclusively within LSCSF.

Portions of the parking lot will remain closed to pedestrian and vehicular traffic while electrical, water, and sewer services are reconfigured. Upon completion of this work, these portions of the parking lot will be restored to existing conditions. Replacement of electrical, sewer, and water utilities will occur within and LSCSF.

In general, the reconfiguration of the utility systems entails the excavation of materials, including soil, certain existing and/or abandoned utilities, pavements, curbs and all other materials and obstructions as necessary to install new utilities and interim surface treatments. All materials encountered during excavation will be handled in a manner that ensures the protection of human health, safety, public welfare and the environment and that complies with applicable federal, state and local laws and regulations. Any excavated materials not required or unsuitable for backfill on the Property will be removed for disposal in accordance with applicable federal, state and local laws and regulations. As noted above, ground improvement, in the form of rigid inclusions, will be installed beneath the alignment of the proposed stormwater utility between approximately STA 10+00 to STA 12+41 (18" diameter RCP drain line to be installed south of the tide gates), STA 0+00 to 4+52 (48" to 66" diameter RCP drain line to be installed north and east of the tide gates), and beneath proposed sewer manhole structures SMH #100 (located at the end of Necco Court) and SMH #101 (located in the parking lot), to limit post-construction, long-term settlement of the supported utility.

Prior to installation of the utilities, excavations will be prepared with suitable bedding material and footing pads will be installed at ground improvement locations. Once utilities have been installed, excavations will be backfilled with suitable materials brought to the Property from approved borrow sources. Excavations will be graded to the appropriate surface elevation and ground cover will be restored to existing condition.

### *3.1 Minimization and Mitigation Measures*

Best Management Practices (BMPs) will be implemented during all phases of utility installation to manage stormwater runoff and prevent erosion. Construction-period stormwater runoff and erosion controls will be in place prior to construction activities in a given area. Catch basin inserts surrounded by silt socks will be installed to protect existing catch basins in the parking lot. Silt socks will also be used in certain locations as needed during construction to demarcate the limit of work.

Erosion and stormwater control for the proposed work will be consistent with the U.S. Environmental Protection Agency's National Pollutant Discharge Elimination System Construction General Permit. A Storm Water Pollution Prevention Plan (SWPPP) will be developed for the Construction General Permit Notice of Intent to be filed for the proposed subsurface utility work. The SWPPP will include a construction personnel contact list, a description of proposed work, stormwater controls and spill prevention measures, and inspection practices to be implemented for the management of construction-related storm water discharges including any necessary

dewatering activities. The SWPPP will identify the areas where erosion and sediment controls are required and the types of erosion and sediment controls to be used (e.g., silt fence, haybales, coir logs, construction entrance/exit, silt sack) to reduce the potential for offsite erosion.

## 4.0 Compliance with Regulatory Performance Standards

The Regulations specify performance standards for projects located within or adjacent to wetland resource areas and restrict the types of activities that can be permitted within these areas. The proposed utility replacement and reconfiguration work will occur within LSCSF and the buffer zone of a human-made coastal bank. There are currently no performance standards under the Act for work that occurs within LSCSF. As this area relates to the Ordinance, the proposed subsurface utility work will not result in permanent alteration of vegetation within LSCSC and will not have an adverse effect on the Property's ability to provide storm damage prevention and flood control. LSCSF at the Property is of little, if any, significance to the protection of wildlife and wildlife habitat.

### *4.1 Coastal Bank*

The performance standards associated with Coastal Bank are excerpted below from the Massachusetts Wetlands Protection Act Regulations (310 CMR 10.00).

*WHEN A COASTAL BANK IS DETERMINED TO BE SIGNIFICANT TO STORM DAMAGE PREVENTION OR FLOOD CONTROL BECAUSE IT IS A VERTICAL BUFFER TO STORM WATERS, 310 CMR 10.30(6) through (8) SHALL APPLY:*

*(6) Any project on such a coastal bank or within 100 feet landward of the top of such coastal bank shall have no adverse effects on the stability of the coastal bank.*

The coastal bank present at the Property, a granite block seawall and riprap slope, is an armored landform that is stable and non-eroding. The proposed utility reconfiguration and replacement activities will not adversely impact the physical stability of the coastal bank.

*(7) Bulkheads, revetments, seawalls, groins or other coastal engineering structures may be permitted on such a coastal bank except when such bank is significant to storm damage prevention or flood control because it supplies sediment to coastal beaches, coastal dunes, and barrier beaches.*

No coastal engineering structures are proposed.

*(8) Notwithstanding the provisions of 310 CMR 10.30(3) through (7), 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.*

The proposed utility reconfiguration and replacement activities will not adversely affect any specified habitat of rare vertebrate or invertebrate species.

## 5.0 Compliance with Boston Wetlands Protection Ordinance

This section describes compliance with the performance standards for Waterfront Area described in the Ordinance. No further performance standards have been identified for resource areas in the Ordinance at the time this NOI was submitted.

### *5.1 Waterfront Area*

According to Section 7-1.4(b) of the Ordinance: "*The Commission therefore may require that any person filing an application (hereinafter, the Applicant) restore or maintain a strip of continuous, undisturbed or restored vegetative cover or waterfront public access throughout the Waterfront Area, unless the Commission determines, based on adequate evidence, that the area or part of it may be altered without harm to the values of the resource areas protected by the Ordinance. Such disturbed areas must be minimized to the greatest extent possible.*"

In the existing condition, the Waterfront Area is comprised primarily of the publicly accessible segment of Harborwalk along the Fort Point Channel. A metal rail fence and a vegetated strip of ground cover, separating the adjacent surface parking lot from the Haborwalk, is also located within the Waterfront Area.

Landward of Harborwalk, a small area of the Phase 1 stormwater limit of work is within the Waterfront Area. Given the proximity of the work area to Harborwalk during Phase 1, Harborwalk and the entirety of the Waterfront Area will be closed to public access for approximately six months to ensure public safety. This work is planned to occur during late fall and winter (November to March, pending approvals) when the closure will cause less disruption to pedestrian traffic along the Harborwalk. The Proponent will continue to coordinate the proposed activities to further minimize the duration of the closure.

For the duration of the Harborwalk closure, the Proponent will provide a temporary alternate Harborwalk route and pedestrian wayfinding signage so that the public has a well-defined and safe path around the closure area. The alternate route was selected to minimize its length relative to the closure area and to ensure that the alternate route remains as close to the Fort Point Channel as feasible. Details of the alternate route and proposed wayfinding signage are shown on Sheet 5 of Attachment G. In addition to wayfinding signage, the Proponent will install adequate lighting, security cameras, fencing and other barriers to ensure pedestrian safety.

At the conclusion of the Phase 1, Harborwalk will be reopened in its existing configuration. Any portion of the Waterfront Area impacted by the proposed work will be restored to the existing condition.

The Proponent will provide notification of the Harborwalk closure and availability of the alternate Harborwalk as far in advance of the planned closure as feasible. Informational bulletins will be posted on the fencing along the Property's Harborwalk and the Proponent will make every reasonable effort to communicate information about the closure to neighborhood organizations and interested stakeholders.

### *5.2 Buffer Zone*

In reviewing activities within the Buffer Zone, according to Section 7-1.4(g)vii of the Ordinance, *"the Commission shall presume the buffer zone is important to the protection of other resource areas because activities undertaken in close proximity have a reasonable probability of adverse impact, either immediately, as a consequence of construction, or over time, as a consequence of daily operation or existence of the activities. These adverse impacts from construction and use can include, without limitation, erosion, siltation, loss of groundwater recharge, poor water quality, loss of wildlife habitat, degradation of wetland plant habitat, alteration of hydrology, and proliferation of invasive plants."*

In this instance, the buffer zone has been significantly altered to accommodate existing parking and public access. Apart from de minimis areas of landscaped ground cover, the entire buffer zone is maintained as impervious surface. Immediate, temporary impacts associated with the proposed work, which could include erosion, siltation, and contamination resulting from ground disturbance activities, will be mitigated and minimized during all phases of construction through the implementation of BMPs to manage stormwater runoff and to prevent erosion and the discharge of pollutants. Given the influence of the Fort Point Channel on groundwater within the limits of work, any dewatering necessary to facilitate the proposed work within the buffer zone is not anticipated to affect groundwater recharge or alter subsurface hydrology. Existing stormwater infrastructure serving the parking lot will remain functional during the construction phase. Construction activities will not result in the loss of wildlife habitat or wetland plant habitat.

Once work is complete, it is not anticipated that the relocated subsurface utilities and/or continued use of the Property for parking and public access within the buffer zone will result in additional impacts to either the buffer zone or other resource areas. Upon completion of the proposed work, excavations will be graded to the appropriate surface elevation and ground cover will be restored to existing condition thereby minimizing erosion and siltation, and vegetated ground cover will be maintained to prevent the proliferation of invasive species. Relocation of subsurface utilities within the buffer zone is not anticipated to affect subsurface hydrology. There will be no increase in impervious surface and ground water recharge will not be affected by the proposed work. The stormwater management system will be maintained to ensure surface water discharges to the system will not result in water quality impacts. Wildlife habitat and wetland plant habit are not anticipated to be affected by the existing uses at the Property.

## 6.0 Climate Resilience

The Property is anticipated to be impacted by increasing temperature, increasing rainfall, and increasing storm intensity resulting from climate change. The Property is particularly vulnerable due to the adjacent Fort Point Channel and the Property's existing elevation. Although the work proposed in this NOI does not directly integrate climate resilience and adaptation measures, the subsurface utilities, primarily the stormwater system, have been designed to facilitate, in a timely manner, the planned flood resilience, adaptation, and mitigation solutions developed in coordination with the City of Boston. It is expected that a Notice of Intent for the planned

redevelopment will be filed with the Commission once the MEPA and Art. 80 review concludes, and that Notice of Intent will include detailed descriptions of all climate resilience measures incorporated into the planned redevelopment.

### *6.1 Coastal Flooding*

Low-lying coastal areas can be impacted by storm surge from infrequent storm events (e.g., nor'easters) as well as by astronomical tidal events, also referred to as "king tides." Currently, upland areas surrounding Fort Point Channel are known to flood on occasion, both from astronomical high tides and coastal storm events. A compounding factor for coastal flooding is sea level rise (SLR), a significant effect of climate change, which increases the mean sea level and likelihood of flooding during coastal storm events and king tides.

The likelihood of the Property being flooded in the near- (by 2030), medium- (by 2050), and long-term (2070) time horizon is increasing, as storm events have been increasing in magnitude and frequency due to warming temperatures. According to the Boston Planning and Development Agency (BPDA) Sea Level Rise Flood Hazard Area (SLR-FHA) Map, with a potential of 40-inches of SLR by 2070, the sea level rise base flood elevation (SLR-BFE) for the Property is 19.5' Boston City Base (BCB).

The Proponent is committed to the current City, State, and Federal requirements to mitigate for coastal storm risk and sea level rise. Coastal flood risk due to present day and future storms is planned to be mitigated through a combination of elevation, floodproofing and flood defense. To that end, the planned redevelopment will result in an elevated finished grade of most of the Property and will include a section of the district-wide flood defense system (i.e., the "Berm") proposed by the City of Boston for the Fort Point Channel area. The planned redevelopment includes a fully integrated solution that encapsulates the Berm concept by providing flood protection, and expands upon the berm concept by expanding publicly accessible open space, a key goal of the district-wide flood defense system. Once completed, the district-wide flood defense system will provide significant coastal flood risk reduction for a large portion of the South Boston community. The replacement and relocation of subsurface utilities at the Property, namely the BWSC stormwater utility, is an important first step in advancing the development of the Berm. Additional measures to mitigate the effects of coastal flooding are beyond the scope of work for the proposed utility replacement and reconfiguration and are not feasible for the proposed interim condition.

As noted above, it is expected that a Notice of Intent for the redevelopment project will be filed with the Commission once MEPA and Art. 80 review conclude, and that Notice of Intent will provide detailed descriptions of all climate resilience measures incorporated into the planned redevelopment.

### *6.2 Stormwater*

From 1958 to 2010, there was a 70% increase in the amount of precipitation that fell on the days with the heaviest precipitation (*Climate Ready Boston*). With climate change, this trend is expected to continue, with more frequent, higher intensity rainfall events. In consideration of increased precipitation, *Climate Ready Boston* recommends considering a 10% increase in the 10-year rainfall event for the 2060s.

For the purposes of this NOI, the proposed stormwater utility has been designed in consideration of those future precipitation conditions and to function with increased capacity under both the interim condition and the condition proposed under the planned redevelopment.

The planned redevelopment will introduce a significant amount of open space. In addition to the stormwater collection and infiltration systems, the planned open space will provide additional soft scape areas for stormwater infiltration, and several other means to manage stormwater onsite. These measures are planned to include a combination of: permeable pavers and expanded planting soil volumes along planned sidewalks and portions of the planned park plazas to encourage infiltration, water storage and tree growth; rain gardens along park edges to increase storage during major storm events; and planting locations 'downstream' of plazas and sidewalks to reduce and filter runoff before entering the storm system. The redevelopment project will result in a substantial decrease in impervious area onsite and will retain, at a minimum, the first 1.25 inches of stormwater over site impervious areas. As a result, stormwater rates and volumes that flow to the BWSC storm drainage system will be reduced. Additional measures to manage stormwater on the Property are beyond the scope of work for the proposed utility replacement and reconfiguration and are not feasible for the proposed interim condition.

As noted above, it is expected that a Notice of Intent for the redevelopment project will be filed with the Commission once MEPA and Art. 80 review conclude, and that Notice of Intent will provide detailed descriptions of all climate resilience measures incorporated into the planned redevelopment.

### *6.3 Extreme Heat*

Extreme heat is a chronic hazard that is expected to worsen in Boston over time. Both average temperatures as well as the frequency, duration, and intensity of extended periods of severe heat are projected to increase. Average summer temperatures in Boston are projected to rise from 69 degrees Fahrenheit to as high as 76 degrees by 2050 and 84 degrees by 2100. Additionally, by 2030, as many as 40 days per year may experience a heat wave of over 90 degrees, with as many as 90 days per year by 2070 (including up to 33 days over 100 degrees), assuming a business-as-usual carbon emissions scenario (*Climate Ready Boston*).

As described in Section 1.0, upon completion of the subsurface utility work, the Property will be returned to service as a surface parking lot and measures to mitigate the effects of extreme heat are not feasible for the proposed interim condition. However, the redevelopment project includes, among other mitigative measures, significant new green space, landscaping treatments,

and high reflective paving materials to assist with the reduction in heat island effect. As noted above, it is expected that a Notice of Intent for the redevelopment project will be filed with the Commission once MEPA and Art. 80 review conclude, and that Notice of Intent will provide detailed descriptions of all climate resilience measures incorporated into the planned redevelopment.

## 7.0 Conclusion

As described in detail above, the proposed subsurface utility work will have de minimis impact to wetland resources. All impacts will be limited to the construction-period and BMPs will be in place to minimize those impacts. Construction methods have been designed to minimize construction-related environmental impacts associated with erosion, sedimentation, stormwater runoff, and construction debris.

The information contained in this NOI and the accompanying site plans describes the site, proposed work, and the effect of said work on the interests identified in the Act and Regulations as well as the Ordinance. The Applicant therefore respectfully requests that the Boston Conservation Commission issue an Order of Conditions approving the subsurface utility work with appropriate conditions to protect those interests identified in M.G.L. c. 131 §40 and Chapter 7-1.4.

**Attachment B**

Figures

G:\Projects2\MA\Boston\5402\MXD\USGS_Locus_Map_20191121.mxd

Data Source: Bureau of Geographic Information (MassGIS), Commonwealth of Massachusetts, Executive Office of Technology and Security Services


**244-284 A Street Boston, Massachusetts**

Epsilon Associates Inc.

**Figure 1**
*USGS Locus Map*

G:\Projects2\MA\Boston\5402\MXD\2_Aerial_20210922.mxd

Data Source: Bureau of Geographic Information (MassGIS), Commonwealth of Massachusetts, Executive Office of Technology and Security Services


**244-284 A Street Boston, Massachusetts**

Epsilon Associates Inc.

**Figure 2**

*Aerial Locus*

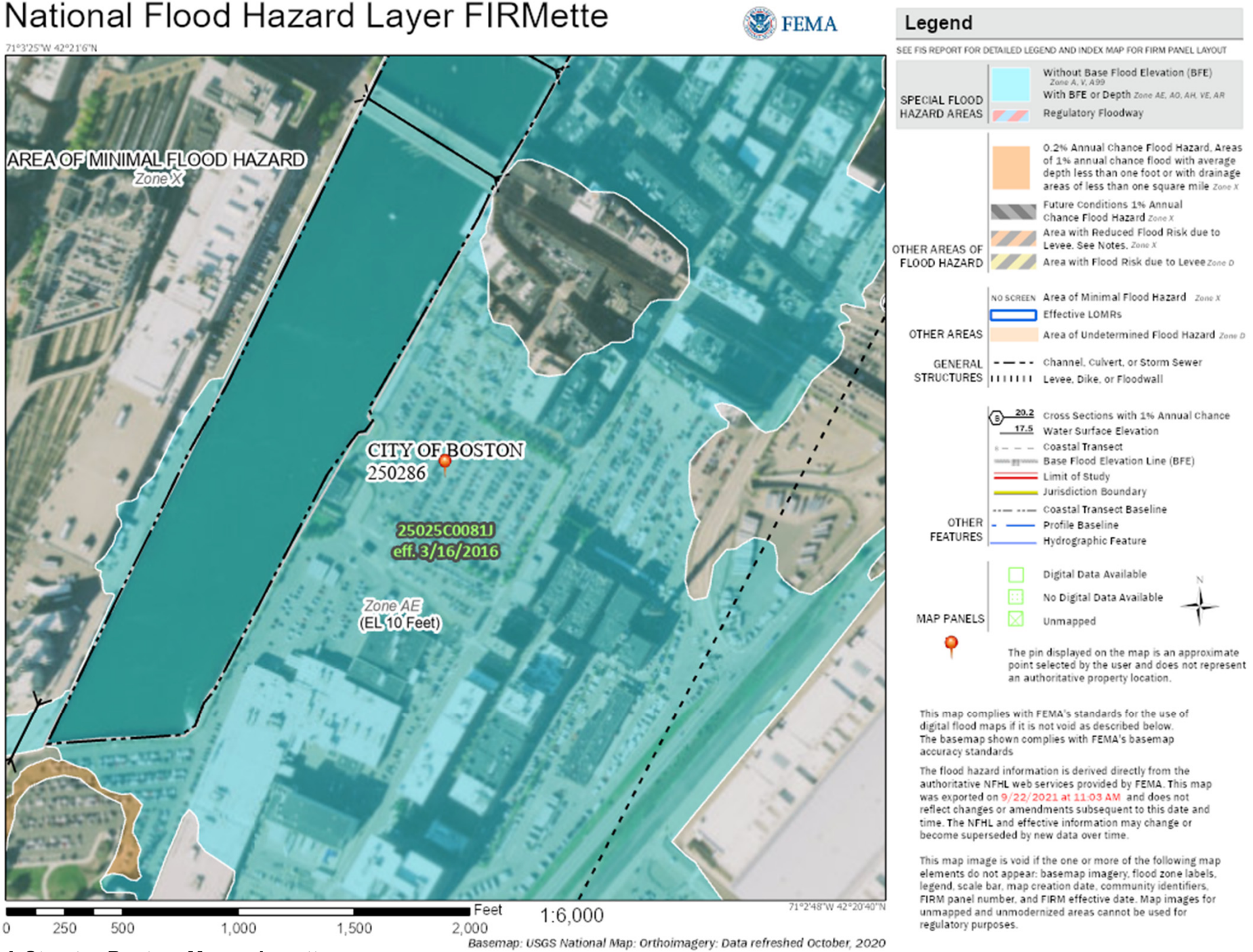
G:\Projects2\MA\Boston\5402\MXD\3_Wetlands_20210922.mxd

Data Source: Bureau of Geographic Information (MassGIS), Commonwealth of Massachusetts, Executive Office of Technology and Security Services


**244-284 A Street Boston, Massachusetts**

Epsilon Associates Inc.

**Figure 3**
*Wetlands*




**244 A Street Boston, Massachusetts**

Epsilon ASSOCIATES INC.

**Figure 4**

***FEMA FIRMette***

**Attachment C**

Site Photographs

**244-284 A Street  Boston, Massachusetts**

Epsilon ASSOCIATES INC.

**Site Photos**

*Aerial – Looking East*

**244-284 A Street  Boston, Massachusetts**

Epsilon ASSOCIATES INC.

**Site Photos**

*Waterfront Area/Harborwalk – Looking Northeast*

**244-284 A Street Boston, Massachusetts**

Epsilon ASSOCIATES INC.

**Site Photos**

*Parking Lot – Looking North*

**Attachment D**

Abutter Notification Information

# AFFIDAVIT OF SERVICE
# FOR ABUTTER NOTIFICATION

**Under the Massachusetts Wetlands Protection Act**
**and Boston Wetlands Ordinance**

I, Erik Rexford, hereby certify under pains and penalties of perjury that that at least one week prior to the public hearing, I gave notice to abutters in compliance with the second paragraph of Massachusetts General Laws Chapter 131, section 40, and the DEP Guide to Abutter Notification dated April 8, 1994, in connection with the following matter:

A Notice of Intent was filed under the Massachusetts Wetlands Protection Act and/or the Boston Wetlands Ordinance by Channelside Acquisitions, LLC c/o Related Beal for subsurface utility replacement and reconfiguration located at 244-284 A Street.

The Abutter Notification For, the list of abutters to whom it was given, and their addresses are attached to this Affidavit of Service.

Erik Rexford Digitally signed by Erik Rexford Date: 2021.09.16 07:42:59 -04'00'

Name

9/22/2021

Date

# BABEL NOTICE

English:

**IMPORTANT!** This document or application contains **important information** about your rights, responsibilities and/or benefits. It is crucial that you understand the information in this document and/or application, and we will provide the information in your preferred language at no cost to you. If you need them, please contact us at cc@boston.gov or 617-635-3850.

Spanish:

**¡IMPORTANTE!** Este documento o solicitud contiene **información importante** sobre sus derechos, responsabilidades y/o beneficios. Es fundamental que usted entienda la información contenida en este documento y/o solicitud, y le proporcionaremos la información en su idioma preferido sin costo alguno para usted. Si los necesita, póngase en contacto con nosotros en el correo electrónico cc@boston.gov o llamando al 617-635-3850.

Haitian Creole:

**AVI ENPÒTAN!** Dokiman oubyen aplikasyon sa genyen **enfòmasyon ki enpòtan** konsènan dwa, responsablite, ak/oswa benefis ou yo. Li enpòtan ke ou konprann enfòmasyon ki nan dokiman ak/oubyen aplikasyon sa, e n ap bay enfòmasyon an nan lang ou prefere a, san ou pa peye anyen. Si w bezwen yo, tanpri kontakte nou nan cc@boston.gov oswa 617-635-3850.

Traditional Chinese:

**非常重要！**這份文件或是申請表格包含關於您的權利，責任，和／或福利的重要信息。請您務必完全理解這份文件或申請表格的全部信息，這對我們來說十分重要。我們會免費給您提供翻譯服務。如果您有需要請聯系我們的郵箱 cc@boston.gov 電話# 617-635-3850..

Vietnamese:

**QUAN TRỌNG!** Tài liệu hoặc đơn yêu cầu này chứa **thông tin quan trọng** về các quyền, trách nhiệm và/hoặc lợi ích của bạn. Việc bạn hiểu rõ thông tin trong tài liệu và/hoặc đơn yêu cầu này rất quan trọng, và chúng tôi sẽ cung cấp thông tin bằng ngôn ngữ bạn muốn mà không tính phí. Nếu quý vị cần những dịch vụ này, vui lòng liên lạc với chúng tôi theo địa chỉ cc@boston.gov hoặc số điện thoại 617-635-3850.

Simplified Chinese:

**非常重要！**这份文件或是申请表格包含关于您的权利，责任，和／或福利的重要信息。请您务必完全理解这份文件或申请表格的全部信息，这对我们来说十分重要。我们会免费给您提供翻译服务。如果您有需要请联系我们的邮箱 cc@boston.gov 电话# 617-635-3850.

CITY of BOSTON

Cape Verdean Creole:

**INPURTANTI**! Es dukumentu ó aplikason ten **informason inpurtanti** sobri bu direitus, rasponsabilidadis i/ó benefísius. Ê krusial ki bu intendi informason na es dukumentu i/ó aplikason ó nu ta da informason na língua di bu preferênsia sen ninhun kustu pa bó. Si bu prisiza del, kontata-nu na cc@boston.gov ó 617-635-3850.

Arabic:

**مهم!** يحتوي هذا المستند أو التطبيق على معلومات مهمة حول حقوقك ومسؤولياتك أو فوائدك. من الأهمية أن تفهم المعلومات الواردة في هذا المستند أو التطبيق. سوف نقدم المعلومات بلغتك المفضلة دون أي تكلفة عليك. إذا كنت في حاجة إليها، يرجى الاتصال بنا على cc@boston.gov أو 617-635-3850.

Russian:

**ВАЖНО!** В этом документе или заявлении содержится **важная информация** о ваших правах, обязанностях и/или льготах. Для нас очень важно, чтобы вы понимали приведенную в этом документе и/или заявлении информацию, и мы готовы бесплатно предоставить вам информацию на предпочитаемом вами языке. Если Вам они нужны, просьба связаться с нами по адресу электронной почты cc@boston.gov, либо по телефону 617-635-3850.

Portuguese:

**IMPORTANTE!** Este documento ou aplicativo contém **Informações importantes** sobre os seus direitos, responsabilidades e/ou benefícios. É importante que você compreenda as informações contidas neste documento e/ou aplicativo, e nós iremos fornecer as informações em seu idioma de preferência sem nenhum custo para você. Se precisar deles, fale conosco: cc@boston.gov ou 617-635-3850.

French:

**IMPORTANT !** Ce document ou cette demande contient des **informations importantes** concernant vos droits, responsabilités et/ou avantages. Il est essentiel que vous compreniez les informations contenues dans ce document et/ou cette demande, que nous pouvons vous communiquer gratuitement dans la langue de votre choix. Si vous en avez besoin, veuillez nous contacter à cc@boston.gov ou au 617-635-3850.


CITY of BOSTON

**NOTIFICATION TO ABUTTERS**
**BOSTON CONSERVATION COMMISSION**

In accordance with the Massachusetts Wetlands Protection Act, Massachusetts General Laws Chapter 131, Section 40, and the Boston Wetlands Ordinance, you are hereby notified as an abutter to a project filed with the Boston Conservation Commission.

A. Channelside Acquisitions, LLC c/o Related Beal has filed a Notice of Intent with the Boston Conservation Commission seeking permission to alter an Area Subject to Protection under the Wetlands Protection Act (General Laws Chapter 131, section 40) and Boston Wetlands Ordinance.

B. The address of the lot where the activity is proposed is 244-284 A Street.

C. The project involves replacement and reconfiguration of subsurface utilities.

D. Copies of the Notice of Intent may be obtained by contacting the Boston Conservation Commission at **CC@boston.gov**.

E. Copies of the Notice of Intent may be obtained from Epsilon Associates, Inc. by contacting them at erexford@epsilonassociates.com between the hours of 9:00 am and 5:00 pm, Monday through Friday.

F. In accordance with the Commonwealth of Massachusetts Executive Order Suspending Certain Provisions of the Open Meeting Law, the public hearing will take place **virtually** at https://zoom.us/j/6864582044. If you are unable to access the internet, you can call 1-929-205-6099, enter Meeting ID 686 458 2044 # and use # as your participant ID.

G. Information regarding the date and time of the public hearing may be obtained from the **Boston Conservation Commission** by emailing **CC@boston.gov** or calling **(617) 635-3850** between the hours of **9 AM to 5 PM, Monday through Friday.**

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 on www.boston.gov/public-notices and in Boston City Hall not less than forty-eight (48) hours in advance. If you would like to provide comments, you may attend the public hearing or send written comments to CC@boston.gov or Boston City Hall, Environment Department, Room 709, 1 City Hall Square, Boston, MA 02201

NOTE: If you would like to provide comments, you may attend the public hearing or send written comments to CC@boston.gov or Boston City Hall, Environment Department, Room 709, 1 City Hall Square, Boston, MA 02201

NOTE: You also may contact the Boston Conservation Commission or the Department of Environmental Protection Northeast Regional Office for more information about this application or the Wetlands Protection Act. To contact DEP, call: the Northeast Region: (978) 694-3200.

NOTE: If you plan to attend the public hearing and are in need of interpretation, please notify staff at CC@boston.gov by 12 PM the day before the hearing.

City of Boston
Environment

City of Boston
Mayor Kim Janey

**波士顿保护委员会对毗邻业主的通知**

根据《马萨诸塞州湿地保护法》、《马萨诸塞一般法》第 131 章第 40 节和《波士顿湿地条例》，特此向您（作为向波士顿保护委员会备案的一个项目的毗邻业主）发出通知。

A. Channelside Acquisitions, LLC c/o Related Beal 已根据《湿地保护法》（一般法第 131 章第 40 节）和《波士顿湿地条例》向波士顿保护委员会提交了一份 Notice of Intent（意向通知），寻求受保护区域变更许可。

B. 拟开展活动的地块地址为 244-284 A Street 。

C. 项目涉及地下公用设施的更换和重新配置。

D. 可通过联系波士顿保护委员会 (CC@boston.gov) 获得 Notice of Intent（意向通知）的副本：**CC@boston.gov**。

E. 可在周一至周五 上午 9:00 至下午 5:00 之间从 Epsilon Associates, Inc. 或通过电子邮件 erexford@epsilonassociates.com 与其联系，获得 Notice of Intent（意向通知）的副本。

F. 根据"马萨诸塞州暂停公开会议法某些条款的行政命令"(Commonwealth of Massachusetts Executive Order Suspending Certain Provisions of the Open Meeting Law)，公开听证会将**以虚拟方式**在 https://zoom.us/j/6864582044 举行。如果您无法访问互联网，您可以拨打 1-929-205-6099，录入会议 ID 686 458 2044 #，并将 # 用作您的参加者 ID。

G. 有关公众听证会日期和时间的信息，可在**周一至周五上午 9 点至下午 5 点**之间，通过电子邮件 **CC@boston.gov** 或致电 **(617) 635-3850** 向 **Boston Conservation Commission**（波士顿环境保护委员会）索取。

注意：公开听证会的通知，其中包括其日期、时间和地点，将至少提前五 (5) 天在 **Boston Herald**（波士顿先驱报）上公布。

注意：听证会的通知，其中包括日期、时间和地点，将至少提前四十八 (48) 小时在 www.boston.gov/public-notices 和波士顿市政厅公布 (Boston City Hall)。如果您想提供意见，您可以参加公开听证会，或将您的书面意见发给 CC@boston.gov或 Boston City Hall, Environment Department, Room 709, 1 City Hall Square, Boston, MA 02201

注意：如果您想提供意见，您可以参加公开听证会，或将您的书面意见发给 CC@boston.gov或 Boston City Hall, Environment Department, Room 709, 1 City Hall Square, Boston, MA 02201

注意：您也可以联系波士顿保护委员会或环境保护部 (DEP) 东北地区办公室，了解更多关于本申请或《湿地保护法案》的信息。要联系 DEP，请致电：东北地区 (Northeast Region)：(978) 694-3200。

注意：如果您计划参加公开听证会并需要口译，请在听证会前一天中午 12 点前通知 CC@boston.gov 的工作人员。

# 波士頓保護委員會對毗鄰業主的通知

依據《麻塞諸塞州溼地保護法》、《麻塞諸塞一般法》第 131 章第 40 節和《波士頓溼地條例》，特此向您（作為向波士頓保護委員會備案的一個專案的毗鄰業主）發出通知。

A. Channelside Acquisitions, LLC c/o Related Beal　已依據《溼地保護法》（一般法第 131 章第 40 節）和《波士頓溼地條例》向波士頓保護委員會提交了一份 Notice of Intent（意向通知），尋求受保護區域變更許可。

B. 擬從事活動的地塊地址為 244-284 A Street　　。

C. 專案涉及地下公用設施的更換和重新配置。

D. 可透過聯絡波士頓保護委員會 (CC@boston.gov) 獲得 Notice of Intent（意向通知）的複本：CC@boston.gov。

E. 可在週一至週五 上午 9:00 至下午 5:00 之間從 Epsilon Associates, Inc. 或透過電郵 erexford@epsilonassociates.com 與其聯絡，獲得 Notice of Intent（意向通知）的複本。

F. 依據「麻塞諸塞州暫停公開會議法某些條款的行政命令」(Commonwealth of Massachusetts Executive Order Suspending Certain Provisions of the Open Meeting Law)，公開聽證會將**以虛擬方式**在 https://zoom.us/j/6864582044 舉行。如果您無法訪問網際網絡，您可以撥打 1-929-205-6099，輸入會議 ID 686 458 2044 #，並將 # 用作您的參加者 ID。

G. 有關公眾聽證會日期和時間的資訊，可在**週一至週五上午 9 點至下午 5 點**之間，透過電郵 CC@boston.gov 或致電 **(617) 635-3850** 向 **Boston Conservation Commission**（波士頓環境保護委員會）索取。

注意：公開聽證會的通知，其中包括其日期、時間和地點，將至少提前五 (5) 天在 **Boston Herald**（波士頓先驅報）上公佈。

注意：聽證會的通知，其中包括日期、時間和地點，將至少提前四十八 (48) 小時在 www.boston.gov/public-notices 和波士頓市政廳公佈 (Boston City Hall)。如果您想提供意見，您可以參加公開聽證會，或將您的書面意見發給 CC@boston.gov或 Boston City Hall, Environment Department, Room 709, 1 City Hall Square, Boston, MA 02201

注意：如果您想提供意見，您可以參加公開聽證會，或將您的書面意見發給 CC@boston.gov或 Boston City Hall, Environment Department, Room 709, 1 City Hall Square, Boston, MA 02201

注意：您也可以聯絡波士頓保護委員會或環境保護部 (DEP) 東北地區辦公室，了解更多關於本申請或《溼地保護法案》的資訊。要聯絡 DEP，請致電：東北地區 (Northeast Region)：(978) 694-3200。

注意：如果您計劃參加公開聽證會並需要口譯，請在聽證會前一天中午 12 點前通知 CC@boston.gov 的工作人員。

| OWNER | ADDRESSEE | MAIL_ADDRESS | MAIL_CS | STATE | MAIL_ZIPCODE |
|---|---|---|---|---|---|
| 10-20 CHANNEL CENTER | C/O JLL MGMT OFFICE ATT: GM | 20 CHANNEL CENTER ST | BOSTON | MA | 02210 |
| 2014 BRUCE R RYCKLIK TRUST | | 7 CAPTAIN FORBUSH LANE | ACTON | MA | 01720 |
| 21 WORMWOOD STREET UNIT 403 REA | C/O PETER H MARCUS | 21 WORMWOOD ST #403 | BOSTON | MA | 02210 |
| 25 CHANNEL CENTER #401 REALTY LLC | | 62 RUST WAY | COHASSET | MA | |
| 25 CHANNEL CENTER LLC | | 17 CAROLINE ST | WELLESLEY | MA | 02481 |
| 300 A STREET LLC | TWO SEAPORT LANE | C/O AEW CAPITAL MANAGEMENT I | BOSTON | MA | 02210 |
| 40 CHANNEL CENTER STREET BOSTON L | 3 POST OFFICE SQUARE 4TH FLOOR | C/O AKELIUS REAL ESTATE MANAG | BOSTON | MA | 02109 |
| 63 MELCHER STREET LLC | | 44 SCHOOL ST, UNIT 325 | BOSTON | MA | 02108 |
| ACHTMANN ERIC | | 25 CHANNEL CENTER ST, UNIT 804 | BOSTON | MA | 02210 |
| ADVANI TUSHAR | | 250 HAMMOND POND PW #610 N( | NEWTON | MA | 02467 |
| ALTER TRACY | | 35 CHANNEL CENTER ST #408 | BOSTON | MA | 02210 |
| AMBALAVANAN SIVA | | 11126 ASHBURY MEADOWS DR | DAYTON | OH | 45458 |
| ANNE BAILEY BERMAN 2011 | C/O ANNE BAILEY BERMAN | 164 POINT OF PINES AVE | CENTERVIL | MA | 02632 |
| ARE-MA REGION NO 71 HOLDING LLC | 2425 E CAMELBACK RD SUITE 200 | C/O NATIONAL SAFE HARBOR EXCH | PHOENIX | AZ | 85016 |
| ARE-MA REGION NO. 68 LLC | | PO BOX 847 | CARLSBAD | CA | 92018 |
| ARE-MA REGION NO. 72 LLC | | 26 NORTH EUCLID AVENUE | PASADENA | CA | 91101 |
| BARBA RYAN | C/O RYAM BARBA | 21 WORMWOOD ST #504 | BOSTON | MA | 02210 |
| BEAN MATTHEW | | 63 MELCHER ST, UNIT 305 | SOUTH BO | MA | 02127 |
| BECK KIMBERLY A | | 151 REDDINGTON STREET | SWAMPSC | MA | 01907 |
| BERG DARCI L | | 21 WORMWOOD ST #608 | BOSTON | MA | 02210 |
| BERGER DEBRA E | | 21 WORMWOOD ST #505 | BOSTON | MA | 02210 |
| BETTINELLI STEPHEN | | 35 CHANNEL CENTER ST #508 | BOSTON | MA | 02210 |
| BINDER ALISON | | 61 BOOTH HILL RD | SCITUATE | MA | 02066 |
| BLANCHARD NICOLE | | 63 MELCHER ST, UNIT 309 | SOUTH BO | MA | 02127 |
| BLOTNER MARK | | 1989 COMMONWEALTH AVE #S22 | BOSTON | MA | 02215 |
| BOBEK SCOTT A | | 35 CHANNEL CENTER ST #501 | BOSTON | MA | 02210 |
| BONACETO PAUL J | | 21 WORMWOOD ST #523 | BOSTON | MA | 02210 |
| BOULANGER JASON D | | 63 MELCHER ST, UNIT 206 | SOUTH BO | MA | 02127 |
| BREDA CHRISTIAN L | | 63 MELCHER ST, UNIT 303 | SOUTH BO | MA | 02127 |
| BRENNAN PATRICK JAMES | | 35 CHANNEL CENTER, UNIT 410 | BOSTON | MA | 02210 |
| BUCKLEY CHARLES | | 21 WORMWOOD ST #616 | BOSTON | MA | 02210 |
| BURLING GROUP LLC | | 5404 BURLING RD | BETHESDA | MD | 20814 |
| CACCAVARO RONALD | | 25 CHANNEL CENTER ST UNIT 812 | SOUTH BO | MA | 02210 |
| CAIN SEAN P | | 21 WORMWOOD ST #411 | BOSTON | MA | 02210 |
| CAMILLO JOSEPH A JR | | 40 PEBBLE BROOK DR | MIDDLEBO | MA | 02346 |

| | | | | | |
|---|---|---|---|---|---|
| CARLSON RICHARD L | | 25 CHANNEL CENTER ST #PH-105 | BOSTON | MA | 02210 |
| CAROLINE Y CHUN LIVING TRUST | C/O CAROLINE CHUN-MCCARTY | 109 CEDAR LANE | WESTWOO | MA | 02090 |
| CARROLL WAYNE J | | 21 WORMWOOD ST #416 | BOSTON | MA | 02210 |
| CATHERINE A JASON REVOCABLE TRUST | C/O CATHERINE A JASON | 35 CHANNEL CENTER ST #407 | BOSTON | MA | 02210 |
| CCC PH 202 LLC | | 72 SHARP ST, UNIT PH 202 | BOSTON | MA | 02210 |
| CHANNEL CENTER OWNERS | C/O PROPERTIES LLC | 10 CHANNEL CENTER ST #510 | BOSTON | MA | 02210 |
| CHANNEL DESIGN GROUP LLC | C/O PETER G POST | 44 MASSASOIT STREET | NORTHAM | MA | 01060 |
| CHENEVERT SHERRI | | 25 CHANNEL CENTER ST #206 | BOSTON | MA | 02210 |
| CHHAJTA ARTI | | 21 WORMWOOD ST, UNIT 521 | BOSTON | MA | 02210 |
| COMBE KAREN R | | 21 WORMWOOD ST #202 | BOSTON | MA | 02210 |
| COOPER JAMES | | 21 WORMWOOD ST #320 | BOSTON | MA | 02210 |
| COPE MEGAN L | | 63 MELCHER ST, UNIT 502 | SOUTH BO | MA | 02127 |
| CORREIA AMANDIO V | | 25 CHANNEL CENTER ST #610 | BOSTON | MA | 02210 |
| CORSETTI GIANLUCA | C/O AMY L COOK | 1520 COLUMBIA RD #2 | SOUTH BO | MA | 02127 |
| DE FRAGACHAN PIMENTEL | MARIA E PIMENTEL DE FRAGACHAN | 25 CHANNEL CENTER ST #611 | BOSTON | MA | 02210 |
| DE LAS MERCEDES FARRANDMARIA | C/O MARIA DE LAS MERCEDES FARRAN | 35 CHANNEL CENTER ST #411 | BOSTON | MA | 02210 |
| DE LAS MERCEDES FARRANDO | MARIA DE LAS MERCEDES FARRANDO | 25 CHANNEL CENTER ST #602 | BOSTON | MA | 02210 |
| DEE ROCELYN S | | 35 CHANNEL CENTER ST #507 | BOSTON | MA | 02210 |
| DEERY JANE | | 25 CHANNEL CENTER ST #205 | BOSTON | MA | 02210 |
| DEKERMANJI ANTHONY | | 25 CHANNEL CENTER ST #202 | BOSTON | MA | 02210 |
| DESANTAREN MANUEL | | 21 WORMWOOD ST #308 | BOSTON | MA | 02210 |
| DIEP THUYEN LE | | 42-44 EUSTON RD | BRIGHTON | MA | 02135 |
| DIORIO TAMMY J | | 21 WORMWOOD ST #313 | BOSTON | MA | 02210 |
| DIPIERTO CHARLES J | | 35 CHANNEL CENTER ST #305 | BOSTON | MA | 02210 |
| DISIPIO JOSEPH | | 21 WORMWOOD ST, UNIT 619 | BOSTON | MA | 02210 |
| DRESCHER THEODORE O | C/O HYDE PROPERTIES | 840 SUMMER ST #101 | BOSTON | MA | 02127 |
| E, F AND C LLC | | 355 CONGRESS ST | BOSTON | MA | 02210 |
| EATON SHANNON | | 25 CHANNEL CENTER #1103 | BOSTON | MA | 02210 |
| EDWARDS NICHOLAS | | 21 WORMWOOD ST #515 | BOSTON | MA | 02210 |
| FATTA NICHOLAS B | | 35 CHANNEL CENTER ST #209 | BOSTON | MA | 02210 |
| FATTA SIGNATURE PROPERTIES LLC | 5 PALFREY RD | CAROL FATTA | GLOUCEST | MA | 01930 |
| FEAGLEY LESLIE ANNE | | 21 WORMWOOD ST #305 | BOSTON | MA | 02210 |
| FERREL GEORGE T | | 21 WORMWOOD ST #224 | BOSTON | MA | 02210 |
| FINKS JEANNE | | 21 WORMWOOD ST #309 | BOSTON | MA | 02210 |
| FINNEGAN JAMES J | | 25 CHANNEL CENTER ST, UNIT 204 | BOSTON | MA | 02210 |
| FITZGERALD WAGNER MARGARET E | C/O RODERICK J WAGNER | 21 WORMWOOD ST #513 | BOSTON | MA | 02210 |

| | | | | | |
|---|---|---|---|---|---|
| FLANAGAN BRENDAN | | 25 CHANNEL CENTER ST # 806 | BOSTON | MA | 02110 |
| FLATIRONS REALTY TRUST | 25 CHANNEL CENTER ST # PH104 | C/O MICHAEL STACK | BOSTON | MA | 02210 |
| FLORESCU HELENE | | 35 CHANNEL CENTER ST #406 | BOSTON | MA | 02210 |
| FME INVESTMENT LLC | | 37 BASKIN RD | LEXINGTON | MA | 02421 |
| FORT POINT HOLDINGS LLC | | 35 CHANNEL CENTER ST #402 | BOSTON | MA | 02210 |
| FORT POINT PLACE | | 21 WORMWOOD ST | BOSTON | MA | 02110 |
| FOWLER JASON M | | 21 WORMWOOD ST #218 | BOSTON | MA | 02210 |
| FRANCHINI INDRANI | | 63 MELCHER ST, UNIT 507 | SOUTH BO | MA | 02127 |
| FREIDIN RALPH B | | 25 CHANNEL CENTER ST #1102 | BOSTON | MA | 02210 |
| FREND PATRICK J | | 25 CHANNEL CENTER ST #203 | BOSTON | MA | 02210 |
| FRESH TURF LLC | | 7 CERINA RD | JAMAICA P | MA | 02130 |
| GALICIA JULIETTE M | | 25 CHANNEL CENTER UNIT 207 | BOSTON | MA | 02210 |
| GAVIN MOLLY | | 21 WORMWOOD ST #301 | BOSTON | MA | 02210 |
| GIESE MARK H | | 35 CHANNEL CENTER ST #204 | BOSTON | MA | 02210 |
| GILLETTE COMPANY | C/O D WALLS/PROCTER & GAMBLE | PO BOX 599 ATTN: TAX DIVISION | CINCINNAT | OH | 45201 |
| GILLETTE MANUFACTURING USA INC | C/O D WALLS/PROCTER & GAMLBE | PO BOX 599 ATTN: TAX DIVISION | CINCINNAT | OH | 45201 |
| GISNESS WILLIAM | | 35 CHANNEL CENTER ST #202 | BOSTON | MA | 02210 |
| GLYNN NANCY BUTLER | | 21 WORMWOOD ST #512 | BOSTON | MA | 02210 |
| GOOKIN PATRICK | | 35 CHANNEL CENTER ST #511 | BOSTON | MA | 02210 |
| GOULD BENJAMIN E | | 21 WORMWOOD ST, UNIT 223 | BOSTON | MA | 02210 |
| GRAHAM-MARTINEZ FAMILY TRUST | C/O PHILIP B GRAHAM | 25 CHANNEL CENTER ST #PH-201 | BOSTON | MA | 02210 |
| GRAY JOHN | | 2 WESTCOTT DRIVE | HOPKINTO | MA | 01748 |
| GREEN EDWARD R | | 21 WORMWOOD ST #524 | BOSTON | MA | 02210 |
| GREER RICHARD K TS | C/O SAGARINOS | 106 SOUTH ST | BOSTON | MA | 02111 |
| GUMKOWSKI JOHN | | 21 WORMWOOD ST, UNIT 517 | BOSTON | MA | 02210 |
| HAN CHIEH-TING | | 25 CHANNEL CENTER ST #606 | BOSTON | MA | 02210 |
| HANGARTER JEAN | | 21 WORMWOOD ST #410 | BOSTON | MA | 02210 |
| HANLEY DEAN F | | 25 CHANNEL CENTER, UNIT 810 | BOSTON | MA | 02210 |
| HANOIAN PETER G | | 21 WORMWOOD ST #522 | BOSTON | MA | 02210 |
| HARRINGTON RICHARD J | | 25 CHANNEL CENTER ST #406 | BOSTON | MA | 02210 |
| HASHIMOTO LARA | | 25 CHANNEL CENTER ST, UNIT 210 | BOSTON | MA | 02210 |
| HAVERN ROBERT A III | C/O MAUREEN C HAVERN | 25 CHANNEL CTR ST UNIT 201 | BOSTON | MA | 02210 |
| HAYES S RHIANNON | | 21 WORMWOOD ST #225 | BOSTON | MA | 02210 |
| HEFFERNEN KATHLEEN | | 25 CHANNEL CENTER ST #408 | BOSTON | MA | 02210 |
| HEMINGWAY KATHLEEN M | | 25 CHANNEL CENTER ST #612 | BOSTON | MA | 02210 |
| HENNESSEY PATRICIA A TS | | 21 WORMWOOD ST # 425 | BOSTON | MA | 02210 |

| | | | | | |
|---|---|---|---|---|---|
| HERDER GREG DEN | | 21 WORMWOOD ST #324 | BOSTON | MA | 02210 |
| HIMMEL KENNETH C | | 25 CHANNEL CENTER ST #PH-107 | BOSTON | MA | 02210 |
| HING DOREEN | | 21 WORMWOOD ST #603 | BOSTON | MA | 02210 |
| HOFFMAN JUSTIN | | 63 MELCHER ST, UNIT 407 | SOUTH BO | MA | 02127 |
| HOLLINGER STEVEN | | 21 WORMWOOD ST #215 | BOSTON | MA | 02210 |
| HYMEL LIN JOSEPH | | 63 MELCHER ST, UNIT 307 | SOUTH BO | MA | 02127 |
| IODICE MICHAEL F III | C/O MICHAEL F IODICE III | 21 WORMWOOD ST #312 | BOSTON | MA | 02210 |
| IONITA MIHAELA | | 25 CHANNEL CENTER ST #PH-101 | BOSTON | MA | 02210 |
| JACKSON ADAM | | 35 CHANNEL CENTER ST #308 | BOSTON | MA | 02210 |
| JAH REALTY LLC | | 91 LAGRANGE ST | CHESTNUT | MA | 02467 |
| JAMES R BERRY TRUST | | 25 CHANNEL CENTER UNIT 1105 | BOSTON | MA | 02210 |
| JENNESS LLC | | 70 FEDERAL ST STE 301 | BOSTON | MA | 02110 |
| JSIP 63 MELCHER LLC | | 63 MELCHER ST 101 | SOUTH BO | MA | 02127 |
| JSIP 63 MELCHER LLC | C/O BO WANG | 127 BLAKE ST | NEWTON | MA | 02460 |
| JSIP 63 MELCHER LLC | 100 HIGH STREET SUITE 2500 | C/O JONES STREET INVESTMENT PA | BOSTON | MA | 02210 |
| KAM JENNIFER | | 21 WORMWOOD ST #419 | BOSTON | MA | 02210 |
| KANE JOSEPH | | 25 CHANNEL CENTER ST #PH-106 | BOSTON | MA | 02210 |
| KATZ DAVID M | | 21 WORMWOOD ST # 507 | BOSTON | MA | 02210 |
| KAUFFMAN LEE B | | 25 CHANNEL CENTER ST #609 | BOSTON | MA | 02210 |
| KEIM CRAIG P | | 21 WORMWOOD ST #216 | BOSTON | MA | 02210 |
| KELLY B MOSS REVOCABLE TRUST | C/O KELLY B MOSS | 21 WORMWOOD STREET UNIT 303 | BOSTON | MA | 02210 |
| KESARIS ZOI | | 172 PURITAN DR | QUINCY | MA | 02169 |
| KESHIAN AMANDA | | 25 CHANNEL CENTER ST #212 | BOSTON | MA | 02210 |
| KLEIN JAMIE A | | 35 CHANNEL CENTER ST #210 | BOSTON | MA | 02210 |
| KOTELLY CHRISTOPHER A | | 25 CHANNEL CENTER ST #604 | BOSTON | MA | 02210 |
| KOURIS GEORGE | | 25 CHANNEL CENTER ST #809 | BOSTON | MA | 02210 |
| KRAMER ERIC | | 25 CHANNEL CENTER ST #803 | BOSTON | MA | 02210 |
| KRASINSKI MICHAEL | | 21 WORMWOOD ST #220 | BOSTON | MA | 02210 |
| KRAUSS EVA | | 21 WORMWOOD ST #213 | BOSTON | MA | 02210 |
| KUBIAK RAYMOND J | | 25 CHANNEL CENTER ST #1008 | BOSTON | MA | 02210 |
| LAFOND BRIAN | | 21 WORMWOOD ST, UNIT 310 | BOSTON | MA | 02210 |
| LANGONE MICHAEL J | | 35 CHANNEL CENTER ST #504 | BOSTON | MA | 02210 |
| LAUREN BAKER-HART 2017 TRUST | C/O JAY C HART | 25 CHANNEL CENTER ST # 608 | BOSTON | MA | 02210 |
| LE BOURG MICHEL | C/O ANNE HUANG | 145 GROVE ST | BROOKLIN | MA | 02467 |
| LEE JEE HYUNG | | 21 WORMWOOD ST #317 | BOSTON | MA | 02210 |
| LEESER NANCY G | C/O NANCY LEESER | 25 CHANNEL CENTER ST #PH-203 | BOSTON | MA | 02210 |

| | | | | | |
|---|---|---|---|---|---|
| LEFKOWITZ JOINT REVOCABLE TRUST | | 21 WORMWOOD ST, UNIT 602 | BOSTON | MA | 02210 |
| LEIBBRANDT EVA | | 63 MELCHER ST, UNIT 207 | SOUTH BO | MA | 02127 |
| LEUNG RYAN | | 63 MELCHER ST, UNIT 405 | SOUTH BO | MA | 02127 |
| LEVINE RICHARD E | C/O RICHARD T LEVINE | 21 WORMWOOD ST # 520 | BOSTON | MA | 02210 |
| LI MINGZHE | | 63 MELCHER ST, UNIT 208 | SOUTH BO | MA | 02127 |
| LIBERATOS KARIN M | | 21 WORMWOOD ST#510 | BOSTON | MA | 02210 |
| LISNOW MARK | | 21 WORMWOOD ST #401 | BOSTON | MA | 02210 |
| LOPES GARY | | 25 CHANNEL CENTER ST, UNIT # PH | BOSTON | MA | |
| LUO CHRISTOPHER D | | 63 MELCHER ST, UNIT 302 | SOUTH BO | MA | 02127 |
| LUXURY BRANDS INC | | 5 BATCHELDER RD | SEABROOK | NH | 03874 |
| MAAS JULIA S | | 63 MELCHER ST, UNIT 306 | SOUTH BO | MA | 02127 |
| MACKIE DAVID C | | 25 CHANNEL CENTER ST #1106 | BOSTON | MA | 02210 |
| MACNAUGHT COLIN A | | 21 WORMWOOD ST #424 | BOSTON | MA | 02210 |
| MADHU SURESH | | 35 CHANNEL CENTER ST #405 | BOSTON | MA | 02210 |
| MALCHODI JOY A | | 25 CHANNEL CENTER ST #407 | BOSTON | MA | 02210 |
| MALDONADO LUIS M III | C/O DIANA L MALDONADO | 33 HORACE RD | BELMONT | MA | 02478 |
| MALOOF ROBERT | | 21 WORMWOOD ST #212 | BOSTON | MA | 02210 |
| MALTON CRAIG | | 21 WORMWOOD ST #404 | BOSTON | MA | 02210 |
| MARGARET F STRAKOSCH REVOCABLE TRUST | | 21 WORMWOOD ST, UNIT 201 | BOSTON | MA | 02210 |
| MARGARET VARGO REVOCABLE TRUST | C/O DENNIS L VARGO | 21 WORMWOOD ST #623 | BOSTON | MA | 02210 |
| MARSH ROBERT T | | 21 WORMWOOD ST, UNIT 412 | BOSTON | MA | 02210 |
| MARTHA A MAZZONE REVOCABLE TRUS | C/O MARTHA MAZZONE | 21 WORMWOOD ST #514 | BOSTON | MA | 02210 |
| MARY AGOSTINELLI TRUST | | 18 WHITMAR RD | MARSTONS | MA | 02648 |
| MARY KAY LEONARD TRUST | | 25 CHANNEL CENTER ST #403 | BOSTON | MA | 02210 |
| MASSDEVELOPMENT/NECCO | MASS DEVELOPMENT FINANCE AGNCY | 99 HIGH ST 11TH FLOOR | BOSTON | MA | 02110 |
| MAUMY-FLORESCU HELENE | | 35 CHANNEL CENTER ST #506 | BOSTON | MA | 02210 |
| MAVRIDES MARCIA | | 21 WORMWOOD ST, UNIT 502 | BOSTON | MA | 02210 |
| MAVRIDES-RODGERS JULIA | | 21 WORMWOOD ST #210 | BOSTON | MA | 02210 |
| MCGEE JOAN | | 35 CHANNEL CENTER ST #304 | BOSTON | MA | 02210 |
| MCGLONE DORSEY E | | 21 WORMWOOD ST #409 | BOSTON | MA | 02210 |
| MCKIE DEBORAH A TS | C/O DEBORAH MCKIE TS | 21 WORMWOOD ST #208 | BOSTON | MA | 02210 |
| MEHTA RUSTOM F | | 25 CHANNEL CENTER ST #409 | BOSTON | MA | 02210 |
| MEISTER WILLIAM M | | 25 CHANNEL CENTER ST #1005 | BOSTON | MA | 02210 |
| MEROLA JAMES L TS | | 25 CHANNEL CENTER ST #411 | BOSTON | MA | 02210 |
| MIGLIOSI JOSEPH C | C/O JOSEPH MIGLIOSI | 21 WORMWOOD ST #311 | BOSTON | MA | 02210 |
| MILLER EDWARD H | | 25 CHANNEL CENTER ST, UNIT 110 | BOSTON | MA | 02210 |

| | | | | | |
|---|---|---|---|---|---|
| MLANIE RAY LIVING TRUST | | 35 CHANNEL CENTER ST, UNIT 205 | BOSTON | MA | 02210 |
| MOON YOUNGME | | 25 CHANNEL CENTER ST PH-102 | BOSTON | MA | 02210 |
| MORGAN SOPHIE | | 21 WORMWOOD ST #516 | BOSTON | MA | 02210 |
| MORRIS DEANNE KUMUDU WEERATUNGA | | 63 MELCHER ST, UNIT 505 | SOUTH BO | MA | 02127 |
| MORRIS JAMES T | | 21 WORMWOOD ST #413 | BOSTON | MA | 02210 |
| MOTAMEDI MOHAMMED | | 21 WORMWOOD ST #407 | BOSTON | MA | 02210 |
| MUGHISUDDIN TARIK | | 35 CHANNEL CENTER ST #201 | BOSTON | MA | 02210 |
| MURPHY JOHN ALEC | | 21 WORMWOOD ST #420 | BOSTON | MA | 02210 |
| MUSTE CATHY ANN | | 63 MELCHER ST, UNIT 506 | SOUTH BO | MA | 02127 |
| NADER ANDREW JOHN | | 50 COUNTRYSIDE LN | MILTON | MA | 02186 |
| NGUYEN TRINH | | 35 CHANNEL CENTER ST #203 | BOSTON | MA | 02210 |
| NIEDERMAN RICHARD | | 8 PETER COOPER RD #7B | NEW YORK | NY | 10010 |
| NORMAN ALLISON | | 21 WORMWOOD ST, UNIT 304 | BOSTON | MA | 02210 |
| OBRIEN KRISTIN | | 21 WORMWOOD ST #319 | BOSTON | MA | 02210 |
| OCONNOR THOMAS C | | 21 WORMWOOD ST #206 | BOSTON | MA | 02210 |
| OKEEFFE ALISSA A | C/O ALISSA A OKEEFFEE | 21 WORMWOOD ST #418 | BOSTON | MA | 02210 |
| PALLOTTA GERARD | | 25 CHANNEL CENTER ST, UNIT 404 | BOSTON | MA | 02210 |
| PAN MIAOMIAO | | 25 CHANNEL CENTER ST, UNIT 601 | BOSTON | MA | 02210 |
| PANZICA DANIELLE | | 21 WORMWOOD ST #402 | BOSTON | MA | 02210 |
| PARK WILLIAM | | 25 CHANNEL CENTER ST, UNIT 607 | BOSTON | MA | 02210 |
| PASHOU CHRISTINA | | 21 WORMWOOD ST #423 | BOSTON | MA | 02210 |
| PEAK CANDICE | | 35 CHANNEL CENTER ST #208 | BOSTON | MA | 02210 |
| PESELMAN RINA B | | 25 CHANNEL CTR ST #808 | BOSTON | MA | 02210 |
| PETERSON BRUCE | | 21 WORMWOOD ST UNIT#209 | BOSTON | MA | 02210 |
| PETRONZIO ANNA | | 21 WORMWOOD ST #607 | BOSTON | MA | 02210 |
| PHITAYAKORN ANGEL | 21 WORMWOOD ST, UNIT 314 | C/O ROY PHITAYAKORN | SOUTH BO | MA | 02210 |
| PIPER TING | | 63 MELCHER ST, UNIT 308 | SOUTH BO | MA | 02127 |
| PRASAD SHUBHAM | | 63 MELCHER ST, UNIT 301 | SOUTH BO | MA | 02127 |
| PURCELL KERRY | | 25 CHANNEL CENTER ST #402 | BOSTON | MA | 02210 |
| QUIRK THOMAS V | | 25 CHANNEL CENTER ST #208 | BOSTON | MA | 02210 |
| RANGEL SHAWN J | | 55 SHAW RD | CHESTNUT | MA | 02467 |
| RBCS ACQUISITIONS LLC | 177 MILK ST | C/O RELATED BEAL LLC | BOSTON | MA | 02109 |
| REILLY MICHAEL F | | 35 CHANNEL CENTER ST #207 | BOSTON | MA | 02210 |
| REVOCABLE TRUST OF LOUISE | C/O LOUISE C PUTNAM | 25 CHANNEL CTR #410 | BOSTON | MA | 02210 |
| RHIM MELISSA H | | 21 WORMWOOD ST #322 | BOSTON | MA | 02210 |
| RIBBLER JUDITH S | | 25 CHANNEL CENTER ST #805 | BOSTON | MA | 02210 |

| | | | | | |
|---|---|---|---|---|---|
| RODGERS TODD K | | 25 CHANNEL CENTER ST #405 | BOSTON | MA | 02210 |
| ROMA ANTHONY R | | 35 CHANNEL CENTER ST #404 | BOSTON | MA | 02210 |
| RONAN JUDITH | | 21 WORMWOOD ST #217 | BOSTON | MA | 02210 |
| ROSANA ALEXIS C | | 21 WORMWOOD ST #408 | BOSTON | MA | 02210 |
| ROSENBERG NAOMI | C/O MAOMI ROSENBERG | 25 CHANNEL CENTER ST #802 | BOSTON | MA | 02210 |
| ROSS WALKER CLAY | | 63 MELCHER ST, UNIT 408 | SOUTH BO | MA | 02127 |
| ROTH ZACHARY N | | 21 WORMWOOD ST, UNIT 417 | BOSTON | MA | 02210 |
| RYAN HEBERDEN W | | 21 WORMWOOD ST #615 | BOSTON | MA | 02210 |
| SALEMME ANNE | | 25 CHANNEL CENTER ST #1107 | BOSTON | MA | 02210 |
| SARIN ARADHANA | | 25 CHANNEL CENTER ST, UNIT 110 | BOSTON | MA | 02210 |
| SASSO JOHN R | | 25 CHANNEL CENTER ST #1003 | BOSTON | MA | 02210 |
| SAWZIN CAMERON K | | 35 CHANNEL CENTER ST #409 | BOSTON | MA | 02210 |
| SCHENKEIN DAVID P TS | C/O DAVID P SCHENKEIN TS | 21 WORMWOOD ST #622 | BOSTON | MA | 02210 |
| SILIRIE CATHERINE LEE | | 21 WORMWOOD ST, UNIT 219 | BOSTON | MA | 02210 |
| SIMAO KAREN D | C/O KAREN SIMAO | 21 WORMWOOD ST #621 | BOSTON | MA | 02210 |
| SINGER ROGER M | | PO BOX 2756 | DURANGO | CO | 81302 |
| SKALKOS ANASTASIOS G | | 21 WORMWOOD ST UNIT 318 | BOSTON | MA | 02110 |
| SKALKOS ANASTASIOS G | | 21 WORMWOOD ST UNIT 316 | BOSTON | MA | 02116 |
| SMITH BENJAMIN A | | 63 MELCHER ST, UNIT 504 | SOUTH BO | MA | 02127 |
| SMITH IAN | | 21 WORMWOOD ST #211 | BOSTON | MA | 02210 |
| SMITH RAPHAEL M | | 21 WORMWOOD ST #222 | BOSTON | MA | 02210 |
| SOPKO LAUREN MARY | | 63 MELCHER ST, UNIT 401 | SOUTH BO | MA | 02127 |
| SOUZA JAMES JR | C/O JAMES SOUZA & DENNIS BRADY | 25 CHANNEL CENTER ST #605 | BOSTON | MA | 02210 |
| SPATOLA JOHN | | 63 MELCHER ST, UNIT 403 | SOUTH BO | MA | 02127 |
| SPLAGOUNIAS KONSTANTINOS | | 21 WORMWOOD ST #302 | BOSTON | MA | 02210 |
| STAVROPOULOS GEORGE | | 21 WORMWOOD ST, UNIT 204 | BOSTON | MA | 02210 |
| STERLING SCOTT | | 21 WORMWOOD ST #501 | BOSTON | MA | 02210 |
| STERLING SCOTT | | 21 WORMWOOD ST #506 | BOSTON | MA | 02210 |
| STERLING SCOTT R | | 21 WORMWOOD ST #508 | BOSTON | MA | 02210 |
| STONE ESTA-LEE | | 35 CHANNEL CENTER ST #401 | BOSTON | MA | 02210 |
| STUMPF ASTRID M | | 35 CHANNEL CENTER ST, UNIT 206 | BOSTON | MA | 02210 |
| SUCH DARA L | | 35 CHANNEL CENTER ST #303 | BOSTON | MA | 02210 |
| SUGARMAN DUKE | | 25 CHANNEL CENTER ST #1007 | BOSTON | MA | 02210 |
| SULLIVAN ABAGAIL | | 63 MELCHER ST, UNIT 501 | SOUTH BO | MA | 02127 |
| SULLIVAN JOHN | | 11 EASTMAN AVE | WESTWOO | MA | 02090 |
| SULLIVAN KERRY A | C/O KERRY SULLIVAN | 21 WORMWOOD ST #525 | BOSTON | MA | 02210 |

| | | | | | |
|---|---|---|---|---|---|
| SULLIVAN LORRAINE M | | 21 WORMWOOD ST #518 | BOSTON | MA | 02210 |
| SUN XIXI | | 21 WORMWOOD ST #620 | BOSTON | MA | 02210 |
| SZARY KASIA | | 21 WORMWOOD ST #601 | BOSTON | MA | 02210 |
| THE GILLETTE COMPANY | C/O D WALLS/PROCTER & GAMBLE | PO BOX 599 - ATTN: TAX DIV | CINCINNAT | OH | 45201 |
| THIRTY-5 CHANNEL CTR CONDO | | 35 CHANNEL CENTER ST | BOSTON | MA | 02210 |
| THOMAS ELISA C | | 205 WATER ST, UNIT 3A | BROOKLYN | NY | 11201 |
| THOMSEN ANN C | C/O CHRISTOPHER THOMSEN | 25 CHANNEL CENTER ST #811 | BOSTON | MA | 02210 |
| TOTH MICHELLE A | | 21 WORMWOOD ST #325 | BOSTON | MA | 02210 |
| TRACH WILLIAM J | | 25 CHANNEL CENTER ST, UNIT PH-1 | BOSTON | MA | 02210 |
| TRACY RYAN | | 21 WORMWOOD ST, UNIT 406 | BOSTON | MA | 02210 |
| TRIVEDI ALASH | | 63 MELCHER ST #209 ST | SOUTH BO | MA | 02127 |
| TURNBERRY 3908 LLC | | 35 CHANNEL CENTER ST, UNIT 211 | BOSTON | MA | 02210 |
| TURNBERRY 3908 LLC | | 21 WORMWOOD ST, UNIT 611 | BOSTON | MA | 02210 |
| TWENTY ONE C REALTY TRUST | C/O HANSY BETTER BARRAZA | 1B MEYER ST | BOSTON | MA | 02131 |
| TWENTY-5 CHANNEL CTR CONDO | | 25 CHANNEL CENTER ST | BOSTON | MA | 02210 |
| TWO 49A ST COOPERATIVE CORP | C/O STEPHANIE BERLO, PROP MGR | BARKAN MGT CO- 24 FARNSWORT | BOSTON | MA | 02210 |
| UNITED STATES POSTAL SERVICE | REALTY ASSET MGT HEADQUARTER | 4301 WILSON BLVD SUITE #300 | ARLINGTOI | VA | 22203 |
| UNITED STATES POSTAL SERVICE | | 309 A STREET | SOUTH BO | MA | 02127 |
| WAGNER RODERICK J | | 21 WORMWOOD ST # 511 | BOSTON | MA | 02210 |
| WALDMAN MARYANNE | | 25 CHANNEL CENTER ST #1108 | BOSTON | MA | 02210 |
| WALSH CHRISTOPHER S | | 21 WORMWOOD ST, UNIT 214 | BOSTON | MA | 02210 |
| WAN JING | | 63 MELCHER ST, UNIT 205 | BOSTON | MA | 02210 |
| WAN JING | | 29 PETTIBUSH LN | DUXBURY | MA | 02332 |
| WANG BO | | 63 MELCHER ST, UNIT 202 | SOUTH BO | MA | 02127 |
| WANG JACK Z | | 21 WORMWOOD ST #519 | BOSTON | MA | 02210 |
| WANG YINO | | 29 BLUEBERRY HILL RD | WESTON | MA | 02493 |
| WATKINS MARK B | | 35 CHANNEL CENTER ST, UNIT 505 | BOSTON | MA | 02210 |
| WHITE KRISTIN | | 25 CHANNEL CENTER ST #1001 | BOSTON | MA | 02210 |
| WHITE ROBERT F | | 25 CHANNEL CENTER ST #1002 | BOSTON | MA | 02210 |
| WHITTAKER ELIZABETH | | 21 WORMWOOD ST #614 | BOSTON | MA | 02127 |
| WICE JAMES J | | 35 CHANNEL CENTER ST #309 | BOSTON | MA | 02210 |
| WONG MICHAEL | | 21 WORMWOOD ST #610 | BOSTON | MA | 02210 |
| YEE MICHAEL K | | 21 WORMWOOD ST, UNIT 306 | SOUTH BO | MA | 02210 |
| ZACK TIMOTHY | | 21 WORMWOOD ST, UNIT 604 | BOSTON | MA | 02210 |
| ZARSKI MONIKA | | 21 WORMWOOD ST #606 | BOSTON | MA | 02210 |
| ZEKIS LYNNE M | | 25 CHANNEL CENTER ST #603 | BOSTON | MA | 02210 |

**Attachment E**

Stormwater Checklist (Prepared by Nitsch Engineering)

# STORMWATER REPORT

Complies with Department of Environmental Protection Stormwater Standards
and the City of Boston Wetlands Ordinance

| | |
|---|---|
| **Project Name:** | Channelside Utility Enabling Project |
| **Project Location:** | 249 A Street<br>Boston, MA |
| **Prepared for:** | Related Beal |
| **Nitsch Project #:** | #13374 |
| **Date Prepared:** | September 22, 2021 |

## ATTACHMENTS

Attachments: MassDEP Checklist for Stormwater Report

Illicit Discharge Compliance Statement

Long Term Pollution Prevention and Operations and Maintenance Plan

Figure 1: USGS Locus Map

Figure 2: FEMA FIRM Map

Figure 3: NHESP Map

Figure 4: NRCS Soils Map

| | |
|---|---|
| **Project Summary:** | Nitsch Engineering has prepared this Stormwater Report to support the Notice of Intent (NOI) for the Channelside Utility Enabling Project (the Project). The Project site is located at 249 A Street in South Boston (the Site), as shown in Figure 1 USGS Map.<br><br>The Notice of Intent has been filed with the Boston Conservation Commission because the Project site is located in Land Subject to Coastal Storm Flowage, as shown on the FEMA Flood Insurance Rate Map (FIRM) numbers 25025C0081J, dated March 16, 2016. The site is located within the 1% annual flood zone, otherwise known as the 100-year flood, and classified as Zone AE with a flood elevation of 16.46 Boston City Base (or elevation 10.0 NAVD 88 as shown on the map).<br><br>The Project site is an existing surface parking lot and adjacent roadways that is entirely impervious. The project site abuts the Fort Point Channel to the west, 15 Necco Street and Necco Court to the north, A Street to the east, and Binford Street to the south. There is an existing 48-inch Boston Water and Sewer Commission-owned (BWSC) storm drain that runs under the project site to a BWSC owned outfall at the western edge of the Project site into the Fort Point Channel. There is also an existing BWSC-owned 18-inch storm drain that runs from Binford Street, a public way, through the Site and to the outfall described above.<br><br>The proposed Project scope consists of the following:<br><br>• Abandoning sections of the existing storm drains in place and relocating them around the edges of the project site as enabling work for future development onsite. The existing pipes will be cut and capped at each end and abandoned in place.<br>• Construction of two (2) new vaults with backflow prevention along the new storm drain alignment.<br>• Abandoning in place a section of existing BWSC-owned sanitary sewer and relocating a portion of it within the site to allow a drain manhole to be constructed.<br>• Construction of electrical duct banks from A Street up Necco Street and into the site for temporary power.<br>• Construction of two hydrants within the site for construction water.<br>• Construction of a sanitary sewer main through the site that will serve future development.<br>• Partial rerouting of the sewer main in Necco Street to allow for the enabling storm drain work.<br><br>Trenches will be excavated for the new pipes and structures. After installation the trenches will be backfilled and the surface cover will be replaced in kind.<br><br><u>Erosion Control and Dust Protection During Construction</u><br><br>The Site Contractor will be responsible for stormwater management of the active construction site. A plan to control construction-related impacts, including erosion, sedimentation, and other pollutant sources during construction and land disturbance activities (construction period erosion, sedimentation, and pollution prevention plan) is included in the Construction Documents. Prior to the start of work, erosion control protection devices will be installed in existing public way catch basins. As construction operations continue, the Contractor will control dust, potential site erosion, as detailed in the Stormwater Pollution Prevention Plan |

| | |
|---|---|
| | requirements. No stockpiling will be allowed onsite and street sweeping will be provided as needed during and/or after excavation activities.<br><br>**Statement on Climate Change Resilience**<br><br>The proposed Project improvements consider climate change in multiple ways including sea level rise, heat island effect and plantings, and stormwater runoff impacts. The Project will not impact the Site in these three (3) categories. Note that the future project, which will we permitted separately and later, will significantly improves the Site's response to climate change resilience.<br><br>Sea Level Rise<br><br>The Boston Planning and Development Agency has determined a Sea Level Rise Base Flood Elevation (SLR-BFE) of 19.5 ft (BCB) for the area of improvements and public way. The existing site elevations in the area of enabling improvement are approximately 15.0-16.5 BCB. There are no surface elevation changes with the proposed enabling improvements. The proposed improvements will not deter and negatively impact any future sea level rise improvements and can be modified if elevations in the area need to be raised to meet future resilience measures.<br><br>Increased Heat Waves and Heat Island Effect<br><br>The existing Site is impervious asphalt and cement concrete sidewalk and a small amount of pervious existing grass adjacent to the existing sidewalk. The project will result in no substantial change in surface materials, and so heat island effect at this site will be unaffected.<br><br>Extreme Precipitation Events, Stormwater Runoff, Changing Precipitation Patterns, Changes in Coastal and Stormwater Flooding<br><br>As climate change progresses, storm events will intensify, and the possibility of flooding will increase. The proposed improvements do not modify existing elevations in the public way. The proposed improvements will not deter and negatively impact any future potential adaptations for precipitation, flooding and/or stormwater changes. |

| | |
|---|---|
| **Wetland Resource Areas:** | The Project is located within Land Subject to Coastal Storm Flowage shown on the FEMA FIRM Map. The site is located within the 1% annual flood zone, otherwise known as the 100-year flood, Zone AE with a flood elevation of 16.46 Boston City Base (or elevation 10.0 NAVD 88). A portion of the site is located within the 25-foot Waterfront area and within the 100-foot buffer to the Coastal Bank. |
| **Existing and Proposed Stormwater Drainage Infrastructure:** | The existing project site contains a closed drainage system comprised of deep sump hooded catch basins, manholes, and piping which collects stormwater runoff from the project site and directs it to an existing stormwater treatment system before overflowing to the BWSC-owned outfall structure and into the Fort Point Channel. There are no proposed modifications to the existing closed drainage system as part of the Project.<br><br>Existing drainage infrastructure will be protected and maintained during construction. Erosion and sedimentation control measures, including temporary inlet protection (silt sacks) installed in the existing catch basins adjacent to the proposed work and street sweeping, will be implemented to protect the existing drainage system. At the end of construction, all erosion control measures will be removed. Refer to the attached Long Term Pollution Prevention and Operations and Maintenance Plan for more detail. |
| **NHESP Priority and Estimated Habitat:** | Based on the MassGIS Oliver data viewer 2008 Priority and Estimated Habitat layer created by the NHESP, the Project site is not located within designated Estimated Habitat of Rare Wildlife or Priority Habitat of Rare Species and does not contain any Certified Vernal Pools. Refer to Figure 3 Natural Heritage and Endangered Species Program (NHESP) Map. |
| **NRCS Soils:** | The Soil Classification Summary outlines the Natural Resources Conservation Services (NRCS) designation of the soil series at the Site. The soils are classified as Urban Land, (map unit 603). See Figure 4 for the NRSC Soils Map. |
| **Total Maximum Daily Load (TMDL)** | The Site ultimately discharges into the Boston Inner Harbor, which is subject to a Draft Pathogen Total Maximum Daily Load (TMDL). The Project is a redevelopment project, with minimal surface cover changes and no change in use and is not anticipated to impact the pathogen pollutant load to the Boston Inner Harbor. |

Nitsch Engineering

**Land Cover Table:**

Below is a summary of the proposed land cover changes for the Project in square feet (S.F.). The majority of the land cover affected by the Project is associated with the trenching associated with the new and relocated utilities. A separate chart below indicates the total square footage of excavated area that results in land disturbance.

**Land Cover Table:**

| | Existing (S.F.) | Proposed (S.F.) | Delta (S.F.) |
|---|---|---|---|
| Impervious Area | 27,457 | 27,457 | 0 |
| Pervious Area | 0 | 0 | 0 |
| | | | |
| **Total Project Area** | **27,457** | **27,457** | **-** |

**Stormwater Management During Construction:**

The majority of the Project area is comprised of the area associated with repaving the roadway. Repaving of the roadway requires only repair of existing asphalt roadway by grinding of the top surface of the asphalt does not require excavation or land disturbance. The total land disturbance area, where excavation will be required, and landscaped areas and soils will be disturbed is less than 20,000 square feet. The land disturbance area of the Project (27,457 square feet) is less than 1 acre (43,560 square feet),, therefore, the project is not subject to the NPDES Construction General Permit. However, the Contractor will be responsible for stormwater management of the active construction site as part of the Construction Documents and contract for the project. Proposed erosion control measures include the installation temporary inlet protection in existing catch basins, street sweeping, and not allowing stockpiling of spoils in the resource area. The Contractor will be responsible for maintaining these measures throughout construction and removal at the end of construction.

## MassDEP Stormwater Management Standards

The Project is considered to be a redevelopment under the MassDEP Stormwater Management Standards since it is maintenance and improvement of an existing roadway. All redevelopment projects are required to meet the following Standards only to the maximum extent practicable: Standard 2, Standard 3, and the pretreatment and structural stormwater best management practice requirements of Standards 4, 5, and 6 and improve existing conditions. Standards 1, 8, 9 and 10 will be met as described below.

**Standard 1**

**No New Untreated Discharges:** This Project and will not discharge any new untreated stormwater to any new outfalls or directly to or cause erosion in wetlands or waters of the Commonwealth.

| | |
|---|---|
| **Standard 2** | **Peak Rate Attenuation:** This is a redevelopment project proposing to relocate and install new utilities that run through a public easement through the Site. The Project is anticipated to have no change impervious area and will maintain the site's current drainage approach, , therefore there will be no change or increase from the existing peak runoff rates from the Site to the existing harbor outfall |
| **Standard 3** | **Groundwater Recharge:** The redevelopment project was designed to minimize the increase in impervious area in order to minimize the loss of annual recharge to groundwater to the maximum extent practicable. |
| **Standard 4** | **Water Quality Treatment:** The Project is a redevelopment that is not modifying the surface cover of the existing vehicular paved area. Given the limited project footprint, the proposed stormwater management approach is to maintain the existing topography and drainage system, which currently functions well and appear to meet City requirements, based on available survey information and site visits. A Long Term Pollution Prevention Plan has been included in the Appendix. |
| **Standard 5** | **Water Quality Treatment - Land Uses with Higher Potential Pollutant Loads (LUHPPLs):** Some areas of the Project may contain Land Uses with Higher Potential Pollutant Loads (LUHPPLs) as defined by MassDEP. No changes to surface cover or site drainage are proposed. As a redevelopment project, the project is designed to comply with this standard to the maximum extent practicable. |
| **Standard 6** | **Critical Areas:** The proposed work is not located within any critical areas, therefore, this standard is not applicable. |
| **Standard 7** | **Redevelopments:** The Project includes utility work only, and will not alter the existing surface cover conditions. Therefore, the Projectroject is considered to be a redevelopment under the MassDEP Stormwater Management Standards under Definition 1 and will comply with the Standards to the maximum extent practicable as detailed in Standard 7. |

| | |
|---|---|
| **Standard 8** | **Construction Period Pollution Prevention and Sedimentation Control:** The Site Contractor will be responsible for stormwater management of the active construction site. A plan to control construction-related impacts, including erosion, sedimentation, and other pollutant sources during construction and land disturbance activities (construction period erosion, sedimentation, and pollution prevention plan) is included in the Construction Documents. |
| **Standard 9** | **Operation and Maintenance Plan:** The facility will be operated and maintained as needed by the Proponent. Post-construction maintenance includes sweeping roadways and periodic catch basin cleaning and is detailed in the attached Long Term Pollution Prevention and Operations and Maintenance Plan. |
| **Standard 10** | **Prohibition of Illicit Discharges:** There will be no illicit discharges to the stormwater management system associated with the Project. An Illicit Discharge Compliance Statement is enclosed in The Appendix. |

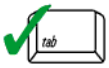
## ATTACHMENTS AND FIGURES

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection - Wetlands Program

# 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 8[2]
- 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.

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection - Wetlands Program

# 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.

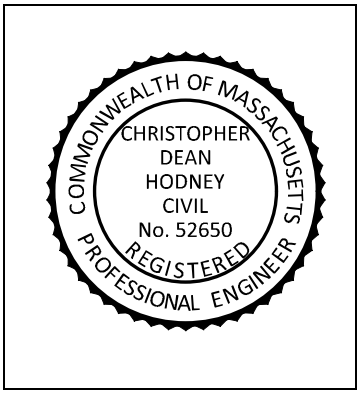
*Note:* Because stormwater requirements vary from project to project, it is possible that a complete Stormwater Report may not include information on some of the subjects specified in the Checklist. If it is determined that a specific item does not apply to the project under review, please note that 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




9/22/21

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): Protection of existing stormwater management system

**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 Field[1]

☐ 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.

Nitsch Engineering

2 Center Plaza, Suite 430
Boston, MA 02108-1928
T: 617-338-0063
F: 617-338-6472
www.nitscheng.com

**STANDARD 10: Illicit Discharge Compliance Statement**

| | |
|---|---|
| Project Name: Channelside Utility Enabling Project | Nitsch Project #: 13374 |
| Location: Boston, MA | |
| Prepared by: Christopher D. Hodney, PE | Sheet No. 1 of 1 |
| Date: September 22, 2021 | |

**Standard 10 states: All illicit discharges to the stormwater management system are prohibited.**

This is to verify:

1. Based on the information available there are no known or suspected illicit discharges to the stormwater management system as defined in the MassDEP Stormwater Handbook.

2. The design of the Project and proposed improvements includes no proposed illicit discharges.

Christopher D. Hodney, PE

9/22/21
Date

# LONG-TERM POLLUTION PREVENTION PLAN AND STORMWATER OPERATION AND MAINTENANCE PLAN

Channelside Utility Enabling Project
249 A Street
Boston, MA

**TABLE OF CONTENTS**

## 1.0 INTRODUCTION

The purpose of this document is to specify the pollution prevention measures and stormwater management system operation and maintenance for the Channelside Utility Enabling Project at 249 A Street in Boston, MA (the Project). The Responsible Party indicated below shall implement the management practices outlined in this document and proactively conduct operations at the project site in an environmentally responsible manner. Compliance with this Manual does not in any way dismiss the responsible party, owner, property manager, or occupants from compliance with other applicable federal, state or local laws.

Owner and Responsible Party for Operations and Maintenance are the Boston Water and Sewer Commission (Stormwater Management System).

This Document has been prepared in compliance with Standards 4 and 9 of the Massachusetts Department of Environmental Protection (MassDEP) Stormwater Management Standards, which state:

Standard 4:
The Long Term Pollution Prevention Plan shall include the proper procedures for the following (as applicable):

- Good housekeeping
- Storing materials and waste products inside or under cover (not applicable)
- Vehicle washing (not applicable)
- Routine inspections of stormwater best management practices
- Spill prevention and response
- Maintenance of lawns, gardens, and other landscaped areas (not applicable)
- Pet waste management (not applicable)
- Operation and management of septic systems (not applicable)
- Proper management of deicing chemicals and snow

Standard 9:
The Long-Term Operation and Maintenance Plan shall at a minimum include:

- Stormwater management system(s) owner(s)
- The party or parties responsible for operation and maintenance, including how future property owners shall be notified of the presence of the stormwater management system and the requirement for operation and maintenance
- The routine and non-routine maintenance tasks to be undertaken after construction is complete and a schedule for implementing those tasks
- A plan that is drawn to scale and shows the location of all stormwater BMPs in each treatment train along with the discharge point
- A description of public safety features
- An estimated operations and maintenance budget

## 2.0 LONG-TERM POLLUTION PREVENTION PLAN

The Responsible Party shall implement the following good housekeeping procedures at the project site to reduce the possibility of accidental releases and to reduce safety hazards.

### 2.1 Spill Prevention and Response

Implement spill response procedures for releases of significant materials such as fuels, oils, or chemical materials onto the ground or other area that could reasonably be expected to discharge to surface or groundwater.

- Immediately contact applicable Federal, State, and local agencies for reportable quantities as required by law.
- Immediately perform applicable containment and cleanup procedures following a spill release.
- Promptly remove and dispose of all material collected during the response in accordance with Federal, State and local requirements. A licensed emergency response contractor may be required to assist in cleanup of releases depending on the amount of the release, and the ability of the Contractor to perform the required response.
- Reportable quantities of chemicals, fuels, or oils are established under the Clean Water Act and enforced through MassDEP

### 2.2 Minimize Soil Erosion

Soil erosion facilitates mechanical transport of nutrients, pathogens, and organic matter to surface water bodies. Repair all areas where erosion is occurring throughout the project area. Stabilize bare soil with riprap, seed, mulch, or vegetation.

### 2.3 Coordination with other Permits and Requirements

Certain conditions of other approvals affecting the long term management of the property shall be considered part of this Long Term Pollution Prevention Plan. The Owner shall become familiar with those documents and comply with the guidelines set forth in those documents.

# 3.0 STORMWATER MANAGEMENT SYSTEM OPERATION AND MAINTENANCE PLAN

## 3.1 Introduction

This Operation and Maintenance Plan (O&M Plan) for the Project is required under Standard 9 of the MassDEP Stormwater Handbook to provide best management practices for implementing maintenance activities for the stormwater management system in a manner that minimizes impacts to wetland resource areas.

The Owner shall implement this O&M Plan and proactively conduct operations at the site in an environmentally responsible manner. Compliance with this O&M Plan does not in any way dismiss the Owner from compliance with other applicable Federal, State or local laws.

Routine maintenance during construction and post-development phases of the project, as defined in the Operation and Maintenance Plan, shall be permitted without amendment to the Order of Conditions. A continuing condition in the Certificate of Compliance shall ensure that maintenance can be performed without triggering further filings under the Wetlands Protection Act.

All stormwater best management practices (BMPs) shall be operated and maintained in accordance with the design plans and the Operation and Maintenance Plan approved by the issuing authority. The Owner shall:

a. Maintain an operation and maintenance log for the last three years, including inspections, repairs, replacement and disposal (for disposal the log shall indicate the type of material and the disposal location). This is a rolling log in which the responsible party records all operation and maintenance activities for the past three years.

b. Make this log available to MassDEP and the Conservation Commission upon request; and

c. Allow members and agents of the MassDEP and the Conservation Commissions to enter and inspect the premises to evaluate and ensure that the Owner complies with the Operation and Maintenance requirements for each BMP.

## 3.2 Stormwater Operation and Maintenance Requirements

Inspect and maintain the stormwater management system as directed below. Repairs to any component of the system shall be made as soon as possible to prevent any potential pollutants (including silt) from entering the resource areas.

<u>Deep Sump and Hooded Catch Basins</u>

Inspect catch basins consistent with the Boston Water and Sewer Commission maintenance schedule. Other inspection and maintenance requirements include:

- Remove organic material, sediment and hydrocarbons whenever the depth of deposits is greater than or equal to one quarter the depth of the sump.
- Clean out catch basins after street sweeping. If any evidence of hydrocarbons is found during inspection, the material immediately remove using absorbent pads or other suitable measures and dispose of legally. Remove other accumulated debris as necessary.
- Transport and disposal of accumulated sediment off-site shall be in accordance with applicable local, state and federal guidelines and regulations.

### 3.3 Street Sweeping

Perform street sweeping according to the City's street sweeping schedule, and whenever there is significant debris present on roads.

### 3.4 Repair of the Stormwater Management System

The stormwater management system shall be maintained. The repair of any component of the system shall be made as soon as possible to prevent any potential pollutants including silt from entering the resource areas or the existing closed drainage system.

### 3.5 Reporting

The Owner shall maintain a record of drainage system inspections and maintenance (per this Plan) and review on a yearly basis.


**Figure 1: USGS Locus Map**
Project Name: Channelside Redevelopment Project
Location: Boston, MA

Data Source: MassGIS
Nitsch Project #13374

Nitsch Engineering

# National Flood Hazard Layer FIRMette

FEMA

71°3'25"W 42°21'6"N


0 250 500 1,000 1,500 2,000 Feet 1:6,000

71°2'47"W 42°20'39"N

*Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020*

## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

**SPECIAL FLOOD HAZARD AREAS**
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

**OTHER AREAS OF FLOOD HAZARD**
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

**OTHER AREAS**
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

**GENERAL STRUCTURES**
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

**OTHER FEATURES**
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

**MAP PANELS**
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 9/21/2021 at 1:57 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

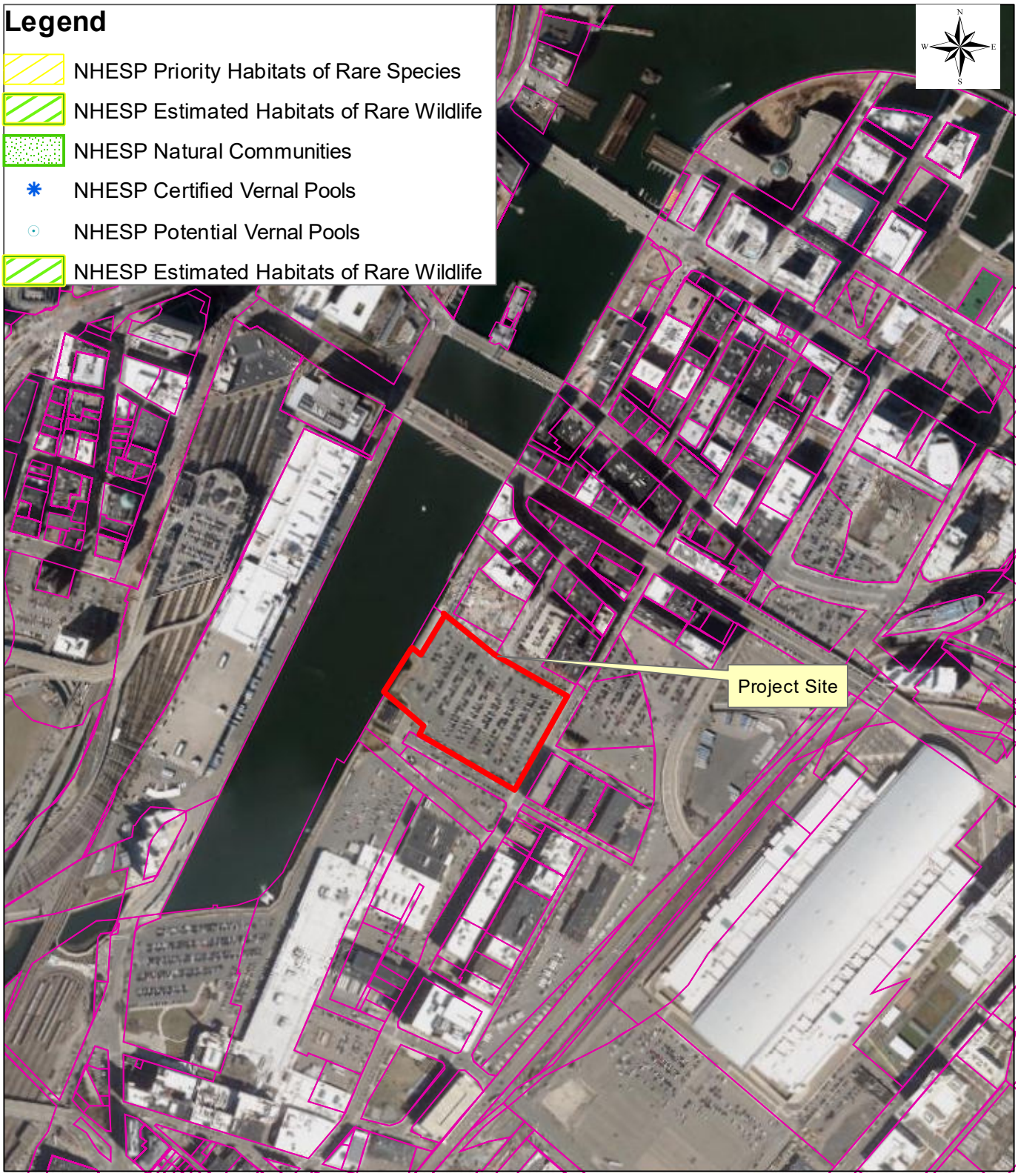



**Figure 3: NHESP Map**

Project Name: Channelside Redevelopment Project

Location: Boston, MA

Data Source: MassGIS

Nitsch Project #13374

Nitsch Engineering

# Figure 4 - NRCS Soil Map

Soil Map—Norfolk and Suffolk Counties, Massachusetts


Map Scale: 1:2,130 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 30 60 120 180

Feet: 0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84

## MAP LEGEND

**Area of Interest (AOI)**

- Area of Interest (AOI)

**Soils**

- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

**Special Point Features**

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

**Water Features**

- Streams and Canals

**Transportation**

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

**Background**

- Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:25,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Norfolk and Suffolk Counties, Massachusetts
Survey Area Data: Version 16, Jun 11, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 13, 2020—Oct 18, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

# Map Unit Legend

| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
|---|---|---|---|
| 1 | Water | 0.1 | 1.2% |
| 603 | Urban land, wet substratum, 0 to 3 percent slopes | 8.7 | 98.8% |
| **Totals for Area of Interest** | | **8.8** | **100.0%** |

**Attachment F**

Hydraulics Analysis (Prepared by Nitsch Engineering)

Nitsch Engineering

2 Center Plaza, Suite 430
Boston, MA 02108-1928
T: 617-338-0063
F: 617-338-6472
www.nitscheng.com

# MEMORANDUM

**TO:** BWSC

**FROM:** Jess Wala, PE

**DATE:** September 2, 2021

**RE:** BWSC SP #20518
244-284 A Street (the Project)
Hydraulics Analysis

The purpose of this memo is to summarize the pre- and post- hydraulic capacities of the pipe network from BWSC Manhole #296 at Necco Street & Private Road to outfall SDO580 to the Fort Point Channel.

This drainage network collects runoff from the upstream watershed and the Channelside project site (approximately 26.6-acres of mostly impervious area). See Figure 1 for the watershed delineation to SDO580, with the Project site highlighted in blue.

The Project site is 6.46 acres. In the existing conditions, the site is 96% impervious. The Project will include new green and pervious spaces, increasing the pervious area to 74% impervious.

## *DRAINAGE NETWORK*

The existing drainage network consists of a 48-inch pipe, which connects to a 54-inch pipe and eventually discharges to SDO580, which has a tide gate flap valve structure at the outlet pipe.

The enabling work will include installing a new manhole on the 48-inch line in Necco Street, running this line perpendicular to Necco Street, turning parallel to the Channel, and connecting into the existing manhole upstream of SDO580.

See the Table 1 for a summary of the existing and proposed drain pipe sizes and slopes.

The pipe network will have an increased capacity in the proposed conditions. In the existing conditions, the controlling pipe capacity is 81.7 cfs within the 54" pipe. In the proposed condition, the constraining pipe capacity upstream of the outfall pipe is 148.5 cfs.

**Table 1: Exist & Proposed Pipe Network**

| Size | Length | Inv In | Inv Out | Slope | Capacity (CFS) |
|---|---|---|---|---|---|
| EXISTING | | | | | |
| 48" | 76' | 7.4 | 3.2 | 5.5% | 313.6 |
| 48" | 192' | 3.3 | 2.2 | 0.6% | 101.0 |
| 54" | 144' | 2.2 | 2.1 | 0.1% | **81.7** |
| 54" | 51' | 2.1 | 1.9 | 0.4% | 114.7 |
| PROPOSED | | | | | |
| 48" (Existing Pipe) | 38' | 7.4 | 5.4 | 5.3% | 306.0 |
| 54" | 106' | 5.3 | 4.6 | 0.7% | **148.5** |
| 54" | 142' | 4.6 | 3.6 | 0.7% | 153.5 |
| 60" | 193 | 3.5 | 2.1 | 0.7% | 206.0 |
| 54" (Existing Pipe) | 51' | 2.1 | 1.9 | 0.4% | 114.7 |

See Table 2 for a summary of the existing and proposed area takeoffs for the Project site and the total watershed.

**Table 2: Existing & Proposed Area Takeoffs (Acres)**

| | Total Area | Impervious Area | Pervious Area |
|---|---|---|---|
| PROJECT SITE | | | |
| Existing | 6.5 | 6.2 (96%) | 0.3 (4%) |
| Proposed | 6.5 | 4.8 (74%) | 1.7 (26%) |
| WATERSHED | | | |
| Existing | 26.6 | 26.3 (99%) | 0.3 (1%) |
| Proposed | 26.6 | 25.3 (94%) | 1.7 (6%) |

***HYDRAULIC ANALYSIS***

Nitsch Engineering used AutoDesk® Storm and Sanitary Analysis Software ("SSA") to estimate storm system inflows by the Rational Method and to evaluate the capacity of the existing and proposed pipe networks, pipe losses, and surcharge conditions.

The model was developed assuming the following conditions:

- 10-year, 5-minute duration peak intensity, equal to 6.95 inches/hour (ATLAS 14).
- Time of Concentration for the watershed: 6.1 minutes
- 2070 SLR of 40-inches, setting the 2070 Mean High Tide at Boston City Base elevation **14.1**, modelled with "flap gate" conditions.
- Increased pipe losses at the new manholes based on connection types and pipe angles.
- Future RIM elevations based on the raised berm along the channel.

The proposed improvements reduce overall surcharge time and flood volume, as a result of:

- Significant reduction in pervious area within the Project site, and as a result an overall reduction in impervious area within the watershed.
- The RIM elevation for most of the structures will be above the hydraulic grade line (10-year storm + 14.1 MHW elev.), as a result of filling the site along the channel to elev. 21.5 as part of the BPDA Resiliency Plans.

See Table 4 for a summary of the surcharge volumes within the site in the 2070 conditions (existing and proposed conditions). See enclosed SSA report for additional information.

**Table 4: Existing & Proposed Surcharge Volumes**

| | Surcharge Volume (ac-in) | Surcharge Volume (cf) | % Reduction |
|---|---|---|---|
| Existing | 1.39 | 5045 | |
| Proposed | 0.57 | 2069 | **59%** |

| From (Inlet) Node | To (Outlet) Node | Length (ft) | Inlet Invert Elevation (ft) | Outlet Invert Elevation (ft) | Average Slope (%) | Pipe Shape | Manning's Roughness | Entrance Losses | Exit/Bend Losses | Additional Losses | Flap Gate | Peak Flow (cfs) | Time of Peak Flow Occurrence (days hh:mm) | Max Flow Velocity (ft/sec) | Design Flow Capacity (cfs) | Max Flow / Design Flow Ratio | Max Flow Depth / Total Depth Ratio | Reported Condition |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EXISTING** | | | | | | | | | | | | | | | | | | |
| EX-BWSC-572 | EX-BWSC-296 | 76.00 | 7.40 | 3.20 | 5.5300 | CIRCULAR | 0.0140 | 0.5000 | 0.5000 | 0.0000 | NO | 133.72 | 0 00:06 | 10.64 | 313.56 | 0.43 | 1.00 | SURCHARGED |
| EX-BWSC-296 | EX-BWSC-295 | 192.00 | 3.30 | 2.20 | 0.5700 | CIRCULAR | 0.0140 | 0.5000 | 0.6000 | 0.0000 | NO | 128.17 | 0 00:06 | 10.20 | 100.96 | 1.27 | 1.00 | SURCHARGED |
| EX-BWSC-295 | EX-BWSC-294 | 144.00 | 2.20 | 2.20 | 0.0000 | CIRCULAR | 0.0140 | 0.5000 | 0.6000 | 0.0000 | NO | 168.31 | 0 00:06 | 10.58 | 81.66 | 2.06 | 1.00 | SURCHARGED |
| EX-BWSC-294 | EX-SDO-580 | 50.70 | 2.40 | 1.90 | 0.9900 | CIRCULAR | 0.0140 | 0.5000 | 0.5000 | 0.0000 | NO | 168.43 | 0 00:06 | 10.59 | 181.34 | 0.93 | 1.00 | SURCHARGED |
| **PROPOSED** | | | | | | | | | | | | | | | | | | |
| PR-BWSC572 | PR-DMH200 | 38.00 | 7.40 | 5.30 | 5.5300 | CIRCULAR | 0.0140 | 0.5000 | 0.5000 | 0.0000 | NO | 135.23 | 0 00:06 | 10.76 | 313.56 | 0.43 | 1.00 | SURCHARGED |
| PR-DMH200 | PR-DMH201 | 105.90 | 5.20 | 4.55 | 0.6100 | CIRCULAR | 0.0140 | 0.5000 | 0.8000 | 0.0000 | NO | 131.68 | 0 00:06 | 8.28 | 143.06 | 0.92 | 1.00 | SURCHARGED |
| PR-DMH201 | PR-DMH202 | 141.60 | 4.45 | 3.65 | 0.5600 | CIRCULAR | 0.0140 | 0.5000 | 0.5000 | 0.0000 | NO | 164.33 | 0 00:06 | 10.33 | 137.25 | 1.20 | 1.00 | SURCHARGED |
| PR-DMH202 | PR-BWSC-294 | 156.00 | 3.55 | 2.70 | 0.5400 | CIRCULAR | 0.0140 | 0.5000 | 0.8000 | 0.0000 | NO | 164.35 | 0 00:06 | 8.37 | 178.51 | 0.92 | 1.00 | SURCHARGED |
| PR-BWSC-294 | PR-SDO-580 | 50.70 | 2.40 | 1.90 | 0.9900 | CIRCULAR | 0.0140 | 0.5000 | 0.5000 | 0.0000 | NO | 164.36 | 0 00:06 | 10.33 | 181.34 | 0.91 | 1.00 | SURCHARGED |

| Element ID | Invert Elevation (ft) | Boundary Type | Flap Gate | Fixed Water Elevation (ft) | Peak Inflow (cfs) | Maximum HGL Elevation Attained (ft) |
|---|---|---|---|---|---|---|
| **EXISTING** | | | | | | |
| EX-SDO-580 | 1.90 | FIXED | YES | 14.12 | 168.43 | 14.12 |
| **PROPOSED** | | | | | | |
| PR-SDO-580 | 1.90 | FIXED | YES | 14.12 | 164.36 | 14.12 |

| Element ID | Invert Elevation (ft) | Ground/Rim (Max) Elevation (ft) | Peak Inflow (cfs) | Peak Lateral Inflow (cfs) | Maximum HGL Elevation Attained (ft) | Minimum Freeboard Attained (ft) | Average HGL Elevation Attained (ft) | Time of Maximum HGL Occurrence (days hh:mm) | Time of Peak Flooding Occurrence (days hh:mm) | Total Flooded Volume (ac-inches) | Total Time Flooded (minutes) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **EXISTING** | | | | | | | | | | | |
| EX-BWSC-294 | 2.00 | 15.12 | 168.31 | 0.00 | 16.30 | 0.00 | 13.75 | 0 00:06 | 0 00:02 | 0.07 | 5.00 |
| EX-BWSC-295 | 2.00 | 14.46 | 169.79 | 44.21 | 19.44 | 0.00 | 13.87 | 0 00:06 | 0 00:03 | 0.47 | 8.00 |
| EX-BWSC-296 | 3.00 | 15.04 | 133.72 | 0.00 | 22.97 | 0.00 | 14.02 | 0 00:06 | 0 00:02 | 0.58 | 8.00 |
| EX-BWSC-572 | 7.30 | 15.80 | 137.05 | 137.05 | 25.27 | 0.00 | 14.18 | 0 00:06 | 0 00:02 | 0.27 | 7.00 |
| **TOTAL FLOODED VOLUME** | | | | | | | | | | 1.39 | |
| **EXISTING** | | | | | | | | | | | |
| PR-BWSC-294 | 2.10 | 21.20 | 164.35 | 0.00 | 16.61 | 4.59 | 13.66 | 0 00:03 | 0 00:00 | 0.00 | 0.00 |
| PR-BWSC572 | 7.30 | 15.80 | 137.05 | 137.05 | 25.09 | 0.00 | 14.09 | 0 00:06 | 0 00:03 | 0.16 | 6.00 |
| PR-DMH200 | 3.50 | 16.70 | 135.23 | 0.00 | 23.03 | 0.00 | 13.97 | 0 00:06 | 0 00:03 | 0.33 | 6.00 |
| PR-DMH201 | 2.50 | 20.00 | 166.39 | 35.64 | 21.17 | 0.00 | 13.88 | 0 00:06 | 0 00:05 | 0.08 | 2.00 |
| PR-DMH202 | 3.30 | 21.20 | 164.33 | 0.00 | 18.35 | 2.85 | 13.76 | 0 00:06 | 0 00:00 | 0.00 | 0.00 |
| **TOTAL FLOODED VOLUME** | | | | | | | | | | 0.57 | |
| % Reduction | | | | | | | | | | 59% | |

| Element ID | Area (acres) | Drainage Node ID | Weighted Runoff Coefficient | Total Runoff (inches) | Peak Runoff (cfs) | Rainfall Intensity (inches/hr) | Time of Concentration (days hh:mm:ss) |
|---|---|---|---|---|---|---|---|
| **EXISTING** | | | | | | | |
| EX-SITE | 6.50 | EX-BWSC-295 | 0.9800 | 0.68 | 44.27 | 6.950 | 0 00:06:00 |
| EXISTING-WATERSHED | 20.15 | EX-BWSC-572 | 0.9800 | 0.68 | 137.24 | 6.950 | 0 00:06:00 |
| **PROPOSED** | | | | | | | |
| PR-SITE | 6.50 | PR-DMH201 | 0.7900 | 0.55 | 35.69 | 6.950 | 0 00:06:00 |
| PR-WATERSHED | 20.15 | PR-BWSC572 | 0.9800 | 0.68 | 137.24 | 6.950 | 0 00:06:00 |

## Storm and Sanitary Analysis Methodology Statement

### The Rational Method for Closed Drainage System Design

The Rational Method is a widely accepted rainfall-runoff model used for estimating peak design flows when modeling closed drainage system hydraulics. It is typically used when analyzing runoff rates from drainage areas to individual catch basins due to its simplicity and advantages on smaller scales over other models. Nitsch Engineering used the Rational Method for the project stormwater calculations to estimate the runoff into catch basins and the closed drainage system.

The general formula for the rational method is:

$$Q = C\,i\,A$$

where

$Q$ = *volumetric rate of runoff, in cubic feet per second*
$C$ = *dimensionless runoff coefficient*
$i$ = *peak rainfall intensity, in inches per hour*
$A$ = *contributing drainage area (subcatchment), in acres*

The volumetric flow rate *Q* at which the runoff reaches a catch basin or other drainage inlet is determined by a number of factors: the slope and flow lengths of the subcatchment area, the soil type, the surface cover and size of the subcatchment area, and the chosen rainfall return period and associated intensity.

### Drainage Areas

A drainage area, or subcatchment, is a portion of land that contributes runoff to a catch basin, inlet or other design point. This design point is the focus of the runoff analysis for that individual subcatchment and is considered to be the outflow point for the subcatchment. Peak rates of runoff are calculated at this point and then used to model the receiving pipe network hydraulics to determine pipe sizes, rates of flow, and velocities.

### The Runoff Coefficient

The dimensionless runoff coefficient *C* is determined from a number of factors which are generally related to the surface cover of each individual subcatchment. Surface cover on a site is defined as impervious or pervious and can take the form of lawn, roof, pavement, brush, woods, etc.

Certain types of cover create more opportunities for water to be absorbed into the ground. A site covered with impermeable surfaces, such as pavement, typically has a runoff coefficient of 0.90. This value implies that almost all of the rain that falls on pavement or other impermeable covers will be converted to runoff. A site covered by permeable surfaces, such as grass or other landscaping, will allow some of the water to be absorbed into the ground and can have coefficients which vary from 0.20-0.40 reflecting the associated reduction of runoff due to absorption. These different cover types within a drainage area are assigned a runoff coefficient and then weighted to determine an overall drainage area runoff coefficient *C* for each subcatchment.

**Flow Length and Time of Concentration**

As rainfall lands on a portion of the drainage area and produces runoff, this runoff must travel to across the surface to the point of discharge, such as a catch basin, before contributing to the closed drainage hydraulic model. To achieve a maximum flow rate from a subcatchment using the Rational Method, all portions of a drainage area must first contribute to the discharge point. This point in time is known as the *time of concentration*, and is determined by identifying the longest flow path of a watershed with respect to the time of travel. To do this, Nitsch Engineering reviewed several factors of each watershed, including slope, surface cover type, and length and types of flow. As is standard practice, the analysis assumes a minimum time of concentration of six minutes for any subcatchment.

The type of surface along the runoff flow path affects the time of concentration. In general, "smooth" surfaces such as roofs and pavements will offer less resistance to flow allowing for runoff to move more quickly. "Rough" surfaces such as lawns or woods offer more resistance to flow, and therefore runoff typically moves more slowly across these types of surfaces.

In addition, runoff travels across the surface of a drainage area in two types of flow geometry. "Sheet" flow occurs over short distances, typically up to a maximum of fifty feet. Sheet flow is generally very shallow and spreads out across a wide flow path. An example of sheet flow is the runoff between the crown of a roadway to the curb and gutter. Sheet flow eventually gathers together and channelizes into "shallow concentrated" flow which carries runoff more quickly. Flow in the gutter of a road is an example of shallow concentrated flow.

The slope of the shallow concentrated or sheet flow path also affects the travel time. A site with steep slopes will produce more runoff and transport it at a faster rate than a flat site. The slope of the site is easily determined by using an existing conditions survey, proposed grading plans, or by a field examination.

**AutoDesk® Storm and Sanitary Analysis Software v. 6.4**

Nitsch Engineering used AutoDesk® Storm and Sanitary Analysis Software ("SSA") to estimate storm system inflows by the Rational Method and to size the proposed closed drainage systems. SSA contains several hydraulic modeling capabilities used to route calculated runoff through drainage system networks

**SSA & Free-Flow in Storm Pipes**

The closed drainage system has been designed to maintain free-flow conditions. Stormwater in drainage system pipes is considered to be "free-flowing" when the upstream and downstream ends of the pipes are not submerged and the flow within the pipe is below the capacity of the pipe. For these cases, SSA calculates the storm pipe capacity using *Manning's Equation* which considers pipe slope, material, and interior pipe diameter to estimate capacity. In general, when pipe diameters and slopes increase, capacities increase. Rougher pipe materials will create greater frictional forces which restrict flow when compared to smoother pipe materials. Using Manning's Equation, SSA also calculates the water surface elevation through pipes and at the pipe beginning and end. This elevation is more commonly known as the "Hydraulic Grade Line" or "HGL", and helps determine flow conditions and losses through pipe systems.

**SSA & Manning's Equation**

SSA software uses *Manning's Equation* to calculate the full flow capacity of pipes. *Manning's Equation* is a regularly used formula to calculate the flow within stormwater pipes for free flow conditions. It is commonly written as:

$$Q = {}^{1.49}/_{n}\, A\, R^{2/3}\, S^{1/2}$$

where

| | | | | | |
|---|---|---|---|---|---|
| $Q$ | = | *volumetric capacity of flow* | $n$ | = | *pipe roughness factor* |
| $A$ | = | *cross-sectional area of pipe at full flow* | $R$ | = | *hydraulic radius at full flow* |
| $S$ | = | *pipe slope* | | | |

It should be noted that the inclusion of the cross-sectional pipe flow area *A* is a common modification to the standard *Manning's Equation*. The pipe flow area may be removed from the formula to calculate velocity *V* of flow within the pipe. The addition of flow area allows stormwater designers to understand the distance at which a two-dimensional area *A* can move through a pipe over a given time period, typically measured in one second. This enables the calculation of a volumetric flow rate *Q.* For example, if a pipe has a cross-sectional flow area *A* of two square feet and the calculated velocity *V* through the pipe is five feet per second, then the distance that this two square foot area "moves" in one second is five feet. This creates an imaginary cylinder of water that is five feet long. Therefore, the volume of water that flows through the pipe over this one second time period is equal to two square feet multiplied by five lineal feet, or ten cubic feet. This is important to engineers because it allows the design of stormwater systems to relate to the hydrology calculations which are similarly measured in volumetric flow rates.

A quick assessment of the equation reveals that the pipe geometry and material are significant factors in determining capacity of flow. The pipe roughness factor, *n*, is an experimentally derived value related to the chosen pipe material. Many elements affect this, including age and condition, material, and shape of the pipe wall (ie, corrugated interiors versus smooth-walled pipes). Generally, as roughness factor increases, the frictional resistance to flow through the pipe increases, thus lowering overall speed of flow and capacity.

When considering this frictional resistance, it is important to note that resistance only occurs along the surfaces of contact between the water flow area and the pipe wall. This contact surface is known as the wetted perimeter. For full flow in circular pipes, this is considered to be the perimeter of the interior pipe wall, and is equal to the diameter of the pipe multiplied by pi.

The wetted perimeter is a significant factor in determining actual flow through a pipe when the pipe is not flowing full, as the surface of the water in the pipe does not contact a pipe wall or contribute to the frictional resistance. The equation accounts for this by applying a ratio of the area of flow to the actual wetted perimeter, otherwise known as the hydraulic radius, or *R.* In the case of full circular pipe flow, the hydraulic radius is equal to the diameter of the pipe divided by four.

The pipe flow area, or *A*, defines the two-dimensional space within the pipe that can be used to pass stormwater flow. Logically, the larger the area and pipe diameter, the greater volume of water the pipe can transmit over a given time period.

**SSA & Modeling of Hydraulic Losses**

Hydraulic Losses through a closed storm drainage network refer to the actions of natural forces which work to restrict flow rates and velocities or otherwise alter the nature of flow in pipe systems. Losses are important to stormwater design because they change the depth of flow in pipes, sometimes significantly, and must be factored into flow systems to obtain accurate hydraulic grade lines and minimize the occurrence of street flooding.

Friction between the moving column of water and pipe wall is more commonly known as *major losses*. Flow through storm pipes is generally accomplished by the pull of gravity on the water in the pipe acting to accelerate it from the higher end of the pipe to the lower end. The force of friction between the water and the pipe acts to resist the pull of gravity, and this resistance increases with the velocity of flow. As such, the pull of gravity can either be greater than the pull of friction (*subcritical flow)* or the pull of friction can be greater than the pull of gravity (*supercritical flow).* Subcritical flow tends to be deeper and slower, and supercritical flow tends to be shallower and faster. SSA uses *Manning's Equation* to determine the relationships between flow depth and velocity in free-flow conditions. In addition, SSA is able to determine the point at which friction forces overcome gravitational forces causing a *hydraulic jump,* or a point in the flow regime where depth quickly increases and flow quickly decreases due to a rapid change in velocity.

Other types of losses include changes in the flow direction or flow cross-section, such as bends, expansions from smaller to larger pipes, or entrances to or exits from storm drainage structures like manholes. These are more commonly known as *minor losses*. For the calculation of minor losses, SSA uses scientifically derived formulas which are typical of the industry.

Losses are measured in units of length, typically in lineal feet for closed system design. This is easily understood when considering that the speed of water at the outfall of a pipe is directly calculated from the change in vertical distance over which gravity acts. Typically, the larger this change in height, the steeper the slope of the pipe, and the faster the column of water will travel through the pipe. SSA uses this information and applies it to the height of vertical columns of water in closed drainage systems to determine actual HGLs relative to the rim grades of structures.

**AutoDesk® Storm and Sanitary Analysis: Understanding this Report**

Nitsch Engineering used AutoDesk® Storm and Sanitary Analysis Software ("SSA") to estimate storm system inflows by the Rational Method and to size the proposed closed drainage systems. SSA contains several hydraulic modeling capabilities which are used to simultaneously route calculated runoff through complicated drainage system networks. The software can support both free-flow and surcharged pipe conditions. The results of these analyses are automatically compiled into tabular reports by the program as described below. This document is intended to help explain the definition of terms and the interpretation in stormwater design.

The following includes definitions of the different reports, data, and terms as generated by the SSA model for this project.

**"Project Description" Section:**

File Name: The name of the stormwater model computer file

**"Rainfall Details" Section:**

Return Period: The selected return period of the IDF curve chosen for the hydrologic model

**"Subbasin Summary" Section:**

This section contains a summary of the inputs and calculations of all subbasins, or drainage areas, within the hydrology model.

| | |
|---|---|
| SN: | The assigned subbasin number |
| Subbasin ID: | The name assigned to the subbasin |
| Area: | The area of the drainage subbasin used to calculate the Peak Runoff Rate |
| Weighted Runoff Coefficient: | The dimensionless Rational *C* value for the drainage subbasin reflecting the subbasin's surface cover and ability to absorb rainfall |
| Peak Runoff: | The calculated volumetric flow rate using the Rational Method |
| Time of Concentration: | The length of time between the start of the analysis and the time when the Peak Flow Rate *Q* is achieved |

**"Link Summary" Section:**

This section contains a summary of the calculations for the closed drainage pipe network.

| | |
|---|---|
| From (Inlet) Node: | The upstream structure, or node, of the pipe |
| Inlet Invert Elevation: | The elevation of the upstream invert of the pipe used to calculate Pipe Slope |
| To (Outlet) Node: | The downstream structure, or node, of the pipe |
| Outlet Invert Elevation: | The elevation of the downstream invert of the pipe used to calculate Pipe Slope |
| Length: | The length of the pipe used to calculate the Pipe Slope |
| Pipe Slope: | The slope of the pipe calculated by subtracting the Outlet Invert Elevation from the Inlet Invert Elevation and dividing by pipe Length |
| Pipe Diameter: | The interior diameter of the pipe used to calculate the Pipe Design Capacity, Peak Flow Velocity, and Peak Flow Depth |
| Manning's Roughness: | A dimensionless coefficient describing the relative roughness of the interior pipe surface as determined from the pipe material. This coefficient is used to calculate the Pipe Flow Velocity and Pipe Design Capacity |
| Peak Flow Q: | The peak volumetric flow rate through the pipe. This is calculated from the contributing subbasin hydrology. This is used to calculate Peak Flow Velocity, Q/Qf Ratio, and Peak Flow Depth |
| Peak Flow Velocity: | The average speed of the runoff moving through the pipe during Peak Flow |
| Pipe Design | The maximum capacity of the pipe as calculated using *Manning's Equation* |

Capacity Qf:

Q/Qf Ratio: The ratio of the Peak Flow Q to Pipe Design Capacity Qf. Values of less than 1.00 indicate that the Peak Flow Rate Q does not exceed the capacity of the pipe. Values of greater than 1.00 indicate that the pipe is under capacity and flows under submerged conditions.

Peak Flow Depth: The depth of the flow, in feet, as measured from the invert of the pipe at the point of maximum depth. For free flow conditions, this value is assumed to be uniform throughout the pipe.

**"Subbasin Hydrology" Sections:**

These sections contain the full calculations and results for the individual subbasins, or drainage areas, including the Weighted Rational Coefficients, Times of Concentration, and Rational Method Runoff calculations that are included as a part of the hydrologic model and subbasin summary report.

**Attachment G**

Construction Management Plan (Prepared by Howard Stein Hudson)

HOWARD STEIN HUDSON
Engineers + Planners

# Construction Management Plan

# Utility Installations

## Channelside

244-284 A Street

Boston, MA 02210

**Prepared for**
City of Boston

**Developer**
Related Beal

**Prepared by**
Howard Stein Hudson

**Date**
September 22, 2021

# General Information

On behalf of Related Beal (The Developer), in collaboration with Howard Stein Hudson (HSH), the attached Construction Management Plan (CMP) for the Utility Installations has been developed for review and approval by the Boston Transportation Department (BTD). This CMP includes the following:

- Written agreement describing site enabling activities;
- Construction Management Plans, *dated September 22, 2021*, and;
- Construction Schedule.

Developer: Related Beal
Brian Radomski
177 Milk Street
Boston, MA 02109
617-451-2100
brian.radomski@related.com

## Project Description

The project is located at 244-284 A Street in the Fort Point neighborhood of Boston. The proposed development will consist of an approximately 1,098,292 square-foot mixed use development including a residential building, an office building, and a laboratory/research development, as well as new parks and open space. The project is bound by the future development at 15 Necco and Necco Street (a private way open to the public) to the northeast, A Street to the southeast, Binford Street to the southwest, and the Harborwalk/Fort Point Channel to the northwest. The Construction Management Plan is only for the Utility Installations; a future CMP will be submitted for the building construction.

# Construction Phasing and Scheduling

To minimize impacts on the surrounding roadway network and to provide a safe pedestrian environment, it is expected that construction would occur in two overall phases:

1) Utility Installations – Drain Line
2) Utility Installations

### WORK HOURS

| Work Period | Time Period |
|---|---|
| Typical (Monday – Friday) | 7:00 AM – 6:00 PM |
| Saturday (by permit only) | 7:00 AM – 6:00 PM |

It is expected that the overall construction duration should last approximately 6 months. If night work or weekend work becomes necessary, approval shall be obtained from BTD, Inspection Services Department (ISD), and the Office of Neighborhood Services (ONS).

## Phase I: Utility Connections – Drain Line (ref. CMP-005 – CMP-006)

### DURATION: 20 WEEKS (NOVEMBER 2021 – MARCH 2022)

This phase will include the use of excavators, delivery trucks, and other supporting equipment to install the proposed drain line and associated manholes. The installation will occur in two stages:

- **Stage I (Duration: November 2021 – January 2022):** To install the proposed 18" drain line, the workzone will be surrounded by 6-foot high cored in place chain link fence. The workzone will include approximately 4 rows of parking along the northwest side of the site while the remaining parking will stay open for commuters. In this stage, the Harborwalk adjacent to the site will be closed and pedestrians will be detoured from the northern corner of the site to the east then south via a 15' and 10' wide pedestrian path. The temporary pedestrian path will be protected by concrete MASH TL-2 barriers on one side and 6-foot high chain link fence on the work zone side. A temporary crosswalk will be installed on the west side of the site at the entrance to the parking lot. The contractor shall provide temporary lighting and surveillance along the path. The access gate for the pumphouse will be relocated to maintain access. The contractor shall coordinate and receive approval for all work with Gillette prior to construction.
- **Stage II (Duration: January 2022 – March 2022):** In this stage, the Harborwalk will be reopened, and the workzone will be expanded toward the southeast by 2 rows for the installation of the remaining 48" drain line. The remaining parking spaces will stay open for commuter travel during this phase. The workzone will be surrounded by 6-foot high cored in place chain link fence to the northeast, northwest and southwest, and a 36-inch high chain link fence on concrete barriers MASH TL-2 will line the southeastern and southern sides of the workzone.

Trucks will access the site via Gate A, located at the northwestern corner of the site. All material deliveries will occur within the site limits and will be staged such that a clear path can be maintained for on-site truck mobility. The parking lot outside of the workzone is to remain open.

## Phase II: Utility Installations (ref. CMP-007)

### DURATION: 8 WEEKS (APRIL 2022 – MAY 2022)

This phase will include the use of excavators, delivery trucks, and other supporting equipment to install the remaining telecom duct bank, hydrants, and water connections. The precast concrete barriers, gates and fence line will remain from Stage II of Phase I, except along the western corner of the site, the barriers will be slightly adjusted to occupy an additional three parking spaces. This will allow for the installation of the 15" sewer line. The remaining parking spaces will stay open for commuter travel during this phase.

Trucks will continue to enter and exit the site via swing gate A off Binford Street on the northwestern corner of the site. All material deliveries will occur within the site limits and will be staged such that a clear path can be maintained for on-site truck mobility.

## Overall Schedule

Key construction activities and approximate time periods are summarized below and on the attached CMP.

| Phase | Time Period | Duration |
|---|---|---|
| Utility Installation – Drain Line Stage I | November 2021 - January 2022 | 12 weeks |
| Utility Installation – Drain Line Stage II | January 2022 - March 2022 | 12 weeks |
| Utility Installations | April 2022 - May 2022 | 8 weeks |

# Street Occupancies

The street occupancies are limited to the Harborwalk. Throughout the duration of construction, street occupancies will include the following construction equipment.

- MASH Test-Level II Concrete Barriers
- Construction Fencing
- Construction Drums
- Pedestrian Detour Signage

# Perimeter Protection/Public Safety

The contractor will work to ensure the staging areas minimize impact to pedestrian and vehicular flow. Secure fencing and barricades will be used to isolate construction areas from pedestrian traffic around the site. In addition, sidewalk areas and walkways near construction activities will be well marked to protect pedestrians and ensure their safety. Proper signage as required by BTD will be installed and regularly updated as site conditions change during the construction process.

Police detail officers will be provided as necessary to facilitate traffic flow and pedestrian safety. Construction procedures will be designed to meet all Occupational Safety and Health Administration (OSHA) safety standards for specific site construction activities.

# Safety on Site

All subcontractors working on site shall provide and maintain all safety measures, procedures, and documentation as required by governing agencies. The jobsite will be enclosed by temporary fencing. Prior to the start of work by any subcontractor a Hazardous Risk Assessment Plan is reviewed. During this review all potential hazardous work requirements and the safety plans required to mitigate these risks are confirmed. Construction procedures will be designed to meet all Occupational Safety and Health Administration (OSHA) safety standards for specific site construction activities. With the support of The Contractor, all subcontractors will implement and manage their own Health and Safety program for the project. All site personnel will be subject to follow the safety orientation and identification guidelines and processes established by The Contractor.

Access to the site for emergency vehicles will be maintained at all times with a dedicated and marked point of access. All other site points of access will be maintained for a secondary access as needed. The proposed site logistic and traffic plans are designed to isolate the construction while providing safe access for pedestrians and automobiles during normal day to day activities and emergencies.

# Signage and Distribution of Information

Signage will direct pedestrians around the site as well as direct truck traffic and deliveries. Proper signage will be placed at every corner of the site as well as in those areas that may be confusing to pedestrians and automobile traffic. Construction and regulatory signage shall be provided as shown on the CMP.

The construction site shall have a sign installed that shall list the name of construction company/general contractor, and their contact information including the phone number. This sign shall be clearly visible to enable the public to call with any questions or concerns.

# Abutter and Agency Coordination

The Contractor recognizes the challenges of building construction in an urban setting and the importance of responding to the needs of adjacent businesses and residents. The abutting properties shall be informed of the scheduled start of construction, and will be updated on the development during its construction as needed.

As appropriate, The Contractor has coordinated construction activities with the City of Boston and other on-going construction projects in the area to help minimize the impacts to the community.

# NFPA 241 Construction Fire Safety Plan

Fire hazards and safety during construction are typically addressed in construction management plans. As such, NFPA 241 Construction Fire Safety Plans are now required to be submitted to the Boston Fire Department prior to construction. As appropriate, The Contractor will submit NFPA 241 plans to the Boston Fire Department.

# Material Handling/Construction Waste

The Contractor will take an active role regarding the processing and recycling of construction waste and will have in-place a Construction Waste Management Plan (CWMP) for the project. The CWMP will require The Contractor to contract with a licensed waste hauler that has off-site sorting capabilities. All construction debris will be taken off site by the waste hauler, sorted as either recycled debris or waste debris and sent to the proper recycling center or waste facility. Construction debris shall be wetted and covered to minimize air born dust particles.

During site development activities, it is anticipated that on-site refueling of machinery will be required. The site contractor will obtain the necessary onsite refueling permit prior to commencing site development activities. Fuel will likely be needed for temporary heat on the interior of the buildings and/or the exterior façade and the appropriate permits/inspections will be obtained from the plumbing inspector and fire department.

# Dumpster Location and Loading

Dumpsters will be located within the construction staging area. Dumpsters will be secured with odor and dust control measures and will have proper Fire Department permits. Dumpster pick-ups to be done during normal construction hours and will avoid peak traffic periods.

Loading and unloading of the dumpsters will take place with-in the proposed fence areas.

# Emergency Vehicle Access

Access to the site for emergency vehicles will be maintained at all times. The proposed staging plan is designed to isolate the construction while providing safe access for pedestrians and automobiles during normal day to day activities and emergencies.

All construction material delivery trucks will be loaded and unloaded inside the construction fence throughout the course of the project. Trucks and equipment will follow the designated truck route and be staged at the designated areas on the CMP.

# Utility Connections

There will be multiple utility connections on this project, most utilities will be located onsite, but some may affect the Harborwalk and Binford Street. All utility connections will require coordination with each respective utility company and the City of Boston Engineering Department and Boston Water and Sewer Commission. Road closures and street opening permits will be submitted for approval accordingly prior to the start of each task. All right-of-way utility work will conform to the City of Boston's utility standards and moratorium dates respectfully and as indicated per City of Boston.

# Truck Movements During Construction

Trucks are needed for material removal and delivery from and to the site as the project proceeds. Truck traffic related to this construction site shall vary considerably throughout the construction period.

Development is expected to generate an average of 8-16 trucks per day for a majority of the construction with the peak being 16-32 trucks per day.

Truck activity is expected to be uniformly distributed throughout the work day. Thus, an anticipated average of 8-16 trucks per day to the site translates to approximately 1-2 trucks per hour if distributed over an eight-hour work day.

Trucks coming to and from the site are required to use major arterial roadways or highways and not local streets. The selection of proposed truck routes is based on the following criteria:

- Minimizing truck activity in the residential neighborhoods;
- Designating specific roads where trucks are permitted; and
- Providing access to and from the major arteries (e.g. Interstate 93, 90)

A detailed Truck Routing Plan is shown on Sheet 9 and the individual truck maneuvers for entering and exiting the site are shown on Sheet 8 of the attached CMP.

# Construction Worker and Staff Parking

On-site parking by construction workers is not allowed. Any personal vehicles will be restricted from parking at or around the construction site so as to reduce the impact to residential parking. Due to the proximity of public transit systems, employees will be encouraged to use the MBTA as well as carpooling incentives. Subcontractor parking will be limited to an off-site parking location.

# Street Cleaning

Street cleaning will take place daily or as required (see dust control and snow removal sections below for more information).

# Dust Control

Construction activities generate fugitive dust that will result in localized increases in airborne particulate levels. To reduce emissions of fugitive dust and minimize impacts on the local environment, strictly enforced mitigation measures will be employed, including:

- Wetting agents will be used regularly to control and suppress dust that may come from construction activities.
- Trucks used for the transportation of construction debris will be covered before exiting the project site.

- Streets and sidewalks will be cleaned regularly using mechanical street sweepers to minimize accumulations.
- Trucks tires shall be hosed down prior to entering public streets.

# Snow Removal

The Contractor shall be responsible for removing snow from all public sidewalk and temporary pedestrian routes affected by their work. This will be done daily and continuously to ensure that all sidewalks are clear of snow and ice. Under no condition will the removed snow be disposed of on public property.

# Rodent Control

The City of Boston has declared that the infestation of rodents in the City is a problem. In order to control this infestation, the City enforces the requirements established under the Massachusetts State Sanitary Code, Chapter 11, 105 CMR 410.550 and the State Building Code, Section 108.6. Policy Number 87-4 (City of Boston) established that extermination of rodents shall be required for issuance of permits for demolition, excavation, foundation and basement rehabilitation.

The Contractor will implement a rodent control program to be administered by a licensed pest control contractor. Rodent control measures will be in-place prior to, during, and following construction activities. The program will include performance of extermination and control procedures on a bi-weekly basis, and the placement of tamper resistant bait boxes around the perimeter of the site.

# Noise and Odor Control

A significant effort will be made to minimize the noise impact of the Project's construction activities. Mitigation measures to be undertaken will include:

- Using mufflers on equipment and ongoing maintenance of intake and exhaust mufflers.
- Use of low sulfur fuels.
- Using less noisy specific construction operations and techniques where feasible (e.g., mixing concrete off-site instead of on-site.)
- Scheduling equipment operations to keep average levels low, to synchronize noisiest operations with times of highest ambient levels, and to maintain relatively uniform noise levels.

- Turning off idling equipment.
- Utilize saw-cutting methods in lieu of jack hammering where feasible.
- Use of a tower crane for structure erection will reduce street noise associated with truck-mounted equipment.

# On-site Dewatering

Site dewatering is expected to be limited and will be in accordance with the applicable stormwater pollution prevention plan (SWPPP) or National Pollutant Discharge Elimination System (NPDES) requirements for sedimentation control. Groundwater levels will be monitored during the construction process.

# Emergency Contacts

A 24-hour emergency contact list will be provided to all parties involved in the project prior to start of construction and maintained throughout construction.

***Related Beal Project Superintendents***

| | | |
|---|---|---|
| Contact: | John McGaffigan | 617-816-3940 |
| | Tony Coward | 617-956-2632 |

# Special Conditions

- Community Outreach: The Contractor and ownership will provide notices and updates on progress and upcoming expectations for the construction activities. At all times during construction activity there will management staff on-site and available for assistance. Proper 24-hour emergency contacts and information will be provided.
- The Contractor will replace, in kind, any pavement markings, signage, loop detectors, and/or other traffic signal control equipment damaged as part of construction activities.
- All local, state and federal laws governing the work will be strictly adhered to at all times.

# Signatures and Approvals

**Submitted By:**

Brian Radomski
Related Beal

Signature

Date

**Approved By:**

Ed Hesford
Boston Transportation Department

Signature

Date

# BOSTON TRANSPORTATION DEPARTMENT

## UTILITY INSTALLATIONS
## FOR
## CHANNELSIDE
## 244-284 A STREET
## BOSTON, MA

THIS PLAN DEPICTS IN SCHEMATIC FORM, THE ELEMENTS OF AN APPROACH TO THE LAYOUT AND PLANNING OF THE WORK DURING THE PROGRESS OF THE CONSTRUCTION OPERATIONS.

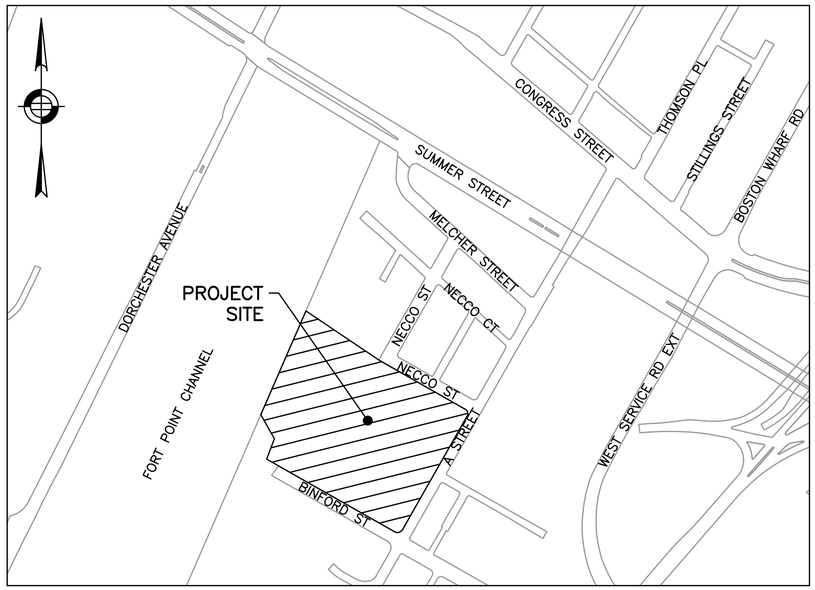
THIS PLAN CONTAINS NO EXPRESS OR IMPLIED REPRESENTATIONS AS TO THE CONSTRUCTABILITY OF ANY ASPECT OF THE WORK. THE CONSTRUCTION CONTRACTOR REMAINS EXCLUSIVELY RESPONSIBLE FOR THE PLANNING, MEANS, METHODS, SEQUENCES, PROCEDURES AND EXECUTION OF THE WORK, AND FOR THE PROPER AND TIMELY IMPLEMENTATION OF ALL INCIDENTAL AND/OR REQUIRED SAFETY PRECAUTIONS AND PROGRAMS.

NOTHING IN THIS PLAN SHALL RELIEVE, OR OTHERWISE DIMINISH THE RESPONSIBILITY OF THE CONTRACTOR FOR THIS EXCLUSIVE RESPONSIBILITY.

THE PREPARER OF THIS PLAN HAS NO ROLE IN THE OVERSIGHT OR OTHERWISE IN THE IMPLEMENTATION OF THIS PLAN.

INDEX






LOCUS PLAN

SCALE: 1"=250' (APPROXIMATE)

ALL WORK SHALL CONFORM TO THESE PLANS, THE BOSTON TRANSPORTATION DEPARTMENT STANDARDS AND SPECIFICATIONS, THE 2020 MASSACHUSETTS HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES (ENGLISH EDITION); THE 2017 CONSTRUCTION STANDARDS; THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (MUTCD) WITH LATEST REVISIONS; THE 1990 STANDARD DRAWINGS FOR SIGNS AND SUPPORTS; THE 1968 STANDARD DRAWINGS FOR TRAFFIC SIGNALS AND HIGHWAY LIGHTING; AND THE AMERICAN STANDARD FOR NURSERY STOCK CURRENT EDITION (ANSI Z–60.1–2004). WHERE CONFLICTS EXIST, THE BOSTON TRANSPORTATION DEPARTMENT STANDARDS AND SPECIFICATIONS SHALL GOVERN.


HOWARD STEIN HUDSON
11 Beacon Street, Suite 1010
Boston, MA 02108
www.hshassoc.com


**DRAFT SUBMISSION**

BOSTON TRANSPORTATION DEPARTMENT

DESIGNED BY K. MARTIN
DRAWN BY L. CAHILL
CHECKED BY K. MARTIN
APPROVED BY R. BURGESS

CITY OF BOSTON TRANSPORTATION DEPARTMENT
ENGINEERING DIVISION
CONSTRUCTION MANAGEMENT PLAN

**CHANNELSIDE**
**COVER**

BOSTON

AREA: 1
DISTRICT: 1

DATE: SEP 22, 2021
DRAWING NO. CMP–001
SHEET 1 OF 9

DRAWING PREPARED BY HOWARD STEIN HUDSON

L:\19016\CMP\UTILITY CMP_HARBORWALK CLOSED_ALT\CUTSHEETS\COVER.dwg, 9/22/2021 9:32:51 AM

## GENERAL NOTES

1. THESE PLANS ARE NOT INTENDED TO LIMIT THE CONTRACTORS RIGHT TO SCHEDULE THE WORK BUT TO OUTLINE ONE WAY OF PROGRESSING. THE CONTRACTOR IS EXPECTED TO USE KNOWLEDGE AND EXPERIENCE TO PERFORM THE WORK IN THE MOST SAFE AND EFFICIENT MANNER IN COMPLIANCE WITH THE DRAWINGS AND SPECIFICATIONS AND MEETING THE REQUIREMENTS OF THE CITY OF BOSTON.

2. CONTRACTOR SHALL SUBMIT FOR APPROVAL BY THE CITY, CONSTRUCTION MANAGEMENT PLANS FOR ANY WORK OUTSIDE OF THE WORK ZONES INDICATED IN THESE DRAWINGS.

3. ALTERNATIVE PHASING OR MODIFICATIONS TO ANY ASPECT OF THE CONSTRUCTION MANAGEMENT PLANS AND THE CONSTRUCTION STAGING PLANS WILL BE SUBJECT TO REVIEW FOR ACCEPTANCE BY THE CITY PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR SHALL BEAR ALL COSTS ASSOCIATED WITH THE SUBMISSION AND REVIEW OF ALTERNATIVE CONSTRUCTION MANAGEMENT PLANS AND CONSTRUCTION STAGING PLANS, INCLUDING PRESENTATION TO THE CITY AND THE NEIGHBORHOOD IF NEEDED, VEHICULAR AND PEDESTRIAN TRAFFIC MODELING, LEVEL OF SERVICE (LOS) ANALYSES, AND OTHER ASSOCIATED EFFORTS. ALTERNATIVE CONSTRUCTION MANAGEMENT AND CONSTRUCTION STAGING PLANS SHALL NOT CAUSE AN INTERFERENCE WITH ADJACENT CONTRACTS OR DELAY THE SCHEDULE OR INCREASE THE COST OF THIS OR ANY ADJACENT CONTRACTS. LEVEL OF SERVICE ANALYSIS SHALL BE DEFINED BY THE "HIGHWAY CAPACITY MANUAL."

4. THE CONSTRUCTION MANAGEMENT PLANS REQUIRE THAT SPECIFIC SIDEWALK WIDTHS BE MAINTAINED DURING THE VARIOUS STAGES OF CONSTRUCTION TO FACILITATE ACCEPTABLE PEDESTRIAN LEVEL OF SERVICE (LOS) MOVEMENTS ALONG TRAVEL WAYS TO AND FROM ABUTTING BUILDING AND BUSINESSES WITHIN THE PROJECT LIMITS. THE MINIMUM SIDEWALK WIDTHS SHOWN ON THE TRAFFIC MANAGEMENT PLANS ARE BASED ON ENGINEERING ANALYSIS AND ARE LOCATED ON THE PLANS AROUND TEMPORARY FIXED BARRICADED WORK ZONES AT SITE SPECIFIC POINTS OF CONSTRUCTION. THE SIDEWALK WIDTHS SHOWN ON THE CONSTRUCTION MANAGEMENT PLANS SHALL NOT BE DEVIATED FROM WITHOUT THE PERMISSION OF THE CITY. WHEN SPECIFIC DIMENSIONS ARE NOT SHOWN, THE CONTRACTOR SHALL MAINTAIN A MINIMUM 4–FOOT PASSAGE.

   A. CONTRACTOR SHALL PROVIDE AND MAINTAIN A TEMPORARY PEDESTRIAN ROUTE ACCESSIBLE TO DISABLED PERSONS AROUND BLOCKAGES TO AN EXISTING PEDESTRIAN ROUTE (E.G., SIDEWALKS, CROSSWALKS, PEDESTRIAN CURB RAMPS, ETC.). BLOCKAGES INCLUDE, BUT ARE NOT LIMITED TO, CONSTRUCTION WORK, EXCAVATIONS, EQUIPMENT AND VEHICLES, TEMPORARY WATER AND UTILITY LINES.

   B. SIDEWALK AREAS SHALL REMAIN OPEN AND FREE FROM SAFETY CONTROL DEVICES AND CONSTRUCTION DEBRIS THROUGHOUT THE DURATION OF THE CONSTRUCTION. PEDESTRIAN DETOURING SHALL NOT OCCUR UNLESS APPROVED BY THE CITY.

5. CONTRACTOR SHALL SECURE WORK AREAS TO ENSURE PUBLIC SAFETY AND CONVENIENCE. THIS SHALL INCLUDE ENSURING THAT ALL EXCAVATIONS ARE PROTECTED AT ALL TIMES.

6. ALL CONSTRUCTION SIGNING, DRUMS, BARRICADES AND OTHER DEVICES SHALL CONFORM WITH THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AS AMENDED AND BOSTON TRANSPORTATION DEPARTMENT SIGN STANDARDS.

7. ALL TRAFFIC CONTROL DEVICES SHALL BE INSTALLED ALONG THE ROADWAY IN ORDER WITH THE FLOW OF TRAFFIC. SIMILARLY, ALL DEVICES SHALL BE REMOVED IN ORDER AGAINST THE FLOW OF TRAFFIC.

8. CHANNELIZATION WILL BE ACCOMPLISHED THROUGH THE USE OF REFLECTORIZED PLASTIC DRUMS OR APPROVED EQUAL IN ACCORDANCE WITH THE MUTCD.

9. CONTRACTOR SHALL COORDINATE WITH THE CITY TO ACCOMMODATE ACCESS NEEDS OF ABUTTING PROPERTIES NOT SPECIFIED IN THE PLANS.

10. CONTRACTOR SHALL MAINTAIN EMERGENCY PASSAGE AT ALL TIMES TO BUILDINGS WITHIN THE PROJECT LIMITS. CONTRACTOR SHALL MAINTAIN 24–HOUR EMERGENCY VEHICLE ACCESS TO AND THROUGH CONSTRUCTION AREAS.

11. CONTRACTOR SHALL PROVIDE POLICE DETAIL OFFICERS FOR WORK WITHIN THE CITY OF BOSTON RIGHT OF WAY AS STIPULATED IN THE CITY OF BOSTON MUNICIPAL CODE (CHAPTER 11, SECTION 6.9).

12. CONTRACTOR SHALL USE STATE POLICE DETAIL OFFICERS ON DCR ROADWAYS.

13. SAFETY SIGNS PROPOSED FOR LOCATIONS OTHER THAN ERECTED ON TEMPORARY BARRICADES MAY BE ERECTED ON EXISTING LIGHT POLES, SIGN POSTS, AND OTHER EXISTING FEATURES AS APPROVED BY THE CITY.

14. LOCATIONS OF SIGNS SHOWN ARE APPROXIMATE. EXACT LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR IN THE FIELD. THE CONTRACTOR SHALL ENSURE THAT SIGNS ARE PLACED SO MAXIMUM VISIBILITY IS OBTAINED.

15. EXISTING SIGNAGE WHICH CONFLICTS WITH PROPOSED SIGNING SHALL BE REMOVED AND STACKED OR COVERED AS DETERMINED BY THE CITY. IF NECESSARY, AT THE END OF CONSTRUCTION THE CONTRACTOR SHALL RESTORE THE SIGNAGE TO ORIGINAL.

16. THE BOSTON POLICE, FIRE, AND TRANSPORTATION DEPARTMENTS SHALL BE ADVISED OF THE SCHEDULE OF CONSTRUCTION AS WELL AS OF ANY DETOURS OR ALTERNATE ROUTES.

17. CONTRACTOR SHALL NOT REMOVE PARKING METER HEADS AND SHALL COORDINATE WITH CITY OF BOSTON FOR THEIR REMOVAL.

18. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR AND THE INFORMATION FURNISHED TO THE CITY FOR RESOLUTION OF THE CONFLICT.

19. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF ELECTRIC, TELEPHONE, AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY COMPANIES AT NO ADDITIONAL COST TO THE CITY. IF THE CONTRACTOR ADJUSTS UTILITY COVERS IT SHALL BE DEEMED PART OF THE WORK AND THERE WILL BE NO ADDITIONAL COMPENSATION.

20. ALL UTILITY COMPANIES, PUBLIC AND PRIVATE, MUST BE NOTIFIED, INCLUDING THOSE IN CONTROL OF UTILITIES NOT SHOWN ON THIS PLAN, (SEE CHAPTER 370, ACTS OF 1963, MASSACHUSETTS) PRIOR TO EXCAVATING, BLASTING, INSTALLING, BACKFILLING GRADING, PAVEMENT RESTORATION, OR REPAVING.

21. THE ACCURACY AND COMPLETENESS OF UNDERGROUND UTILITIES ARE NOT GUARANTEED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATION, SIZE, TYPE, ETC. OF ALL UNDERGROUND UTILITIES THAT MAY BE AFFECTED BY THE WORK. AT LEAST 72 HOURS BEFORE DIGGING BEGINS, THE CONTRACTOR IS REQUIRED TO CALL DIG SAFE AT (888)344–7233. ALL CITY OWNED UTILITY STRUCTURES WITHIN AREAS AFFECTED BY THE WORK SHALL BE ADJUSTED TO NEW LINE AND GRADE AS DIRECTED BY THE ENGINEER. ANY UTILITY POLES AND/OR GUY POLES WITHIN AREAS AFFECTED BY THE WORK SHALL BE REMOVED AND RESET BY THE RESPECTIVE UTILITY COMPANY. ALTERATIONS TO UTILITIES NOT OWNED BY THE CITY SHALL BE MADE BY THE RESPECTIVE UTILITY OWNERS.

22. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR CONSTRUCTION MANAGEMENT EFFORTS OUTSIDE OF THE SITE PLANS AND TO COMPLY WITH CONDITIONS OUTLINED WITHIN THE PLANS AND SPECIFICATIONS USING APPROVED METHODS.

23. AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS, INCLUDING STAGING AREAS, SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.

24. THE CONTRACTOR IS HEREBY NOTIFIED THAT ADDITIONAL WORK WITHIN THE PROJECT LIMITS MAY BE PERFORMED BY OTHERS.

25. THE CONTRACTOR SHALL FIELD VERIFY CONDITIONS AND DIMENSIONS PRIOR TO CONSTRUCTION.

26. THE CONTRACTOR SHALL VERIFY PROPERTY LIMITS PRIOR TO CONSTRUCTION AND PLACE ANY TEMPORARY OR NEW EQUIPMENT WITHIN THE PROJECT LIMITS OR THE CITY OF BOSTON'S RIGHT OF WAY.

27. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT FOR REVIEW A DETAILED SCHEDULE OF OPERATIONS IN ADDITION TO OTHER CONTRACT REQUIREMENTS TO THE BOSTON TRANSPORTATION DEPARTMENT AND PUBLIC WORKS DEPARTMENT.

28. ANY WORK ASSOCIATED WITH THIS CONSTRUCTION MANAGEMENT PLAN SHALL BE PERFORMED IN ACCORDANCE WITH THE BOSTON PUBLIC WORKS DEPARTMENT STANDARD SPECIFICATIONS AND DRAWINGS BTD STANDARD SPECIFICATIONS AND DRAWINGS; THE PLANS AND THE SPECIAL PROVISIONS. WHERE CONFLICTS EXIST, THE BTD AND BPWD SPECIFICATIONS SHALL GOVERN.

29. NO EXISTING PUBLIC UTILITY STRUCTURES SHALL BE ABANDONED AND/OR DISMANTLED WITHOUT AUTHORIZATION FROM THE CITY.

30. THE CONTRACTOR SHALL DISPOSE OF ALL WASTE MATERIAL IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS AT HIS OWN EXPENSE.

31. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ADEQUATE STREET LIGHTING ADJACENT TO THE PROJECT, FOR THE DURATION OF THE PROJECT, AS APPROVED BY THE CITY. CONTRACTOR SHALL ENSURE THAT STREET LIGHTING SERVICE WILL NOT BE INTERRUPTED AND THAT STREET LIGHTING WILL BE OPERATIONAL AT THE END OF EACH WORKDAY.

32. ALL PAVEMENT MARKINGS IN PLACE FOR 6 MONTHS OR MORE SHALL BE THERMOPLASTIC, OR APPROVED EQUAL, AND MEET BTD SPECIFICATIONS. IF NECESSARY, AT THE END OF CONSTRUCTION THE CONTRACTOR SHALL RESTORE THE PAVEMENT MARKINGS TO ORIGINAL.

33. THE CONTRACTOR SHALL ERADICATE EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH PROPOSED PAVEMENT MARKINGS.

34. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ANY TRAFFIC SIGNAL EQUIPMENT, LOOP DETECTORS, PAVEMENT MARKINGS, AND SIGNAGE DAMAGED OR TEMPORARILY REMOVED DURING CONSTRUCTION.

35. CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING ANY WEIGHT RESTRICTIONS ON AREA BRIDGES AND TO INSURE THAT TRAFFIC DOES NOT EXCEED WEIGHT RESTRICTIONS IF BRIDGES ARE USED.

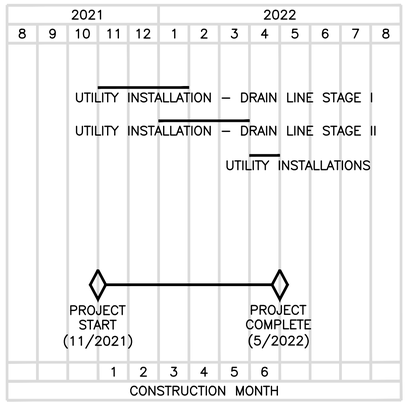
36. AT CROSSWALK LOCATIONS AND OTHER LOCATIONS WHERE PEDESTRIAN AND/OR VEHICLE SIGHT LINES MAY BE IMPACTED BY CONSTRUCTION FENCING, THE CONTRACTOR SHALL NOT INSTALL SCREEN THAT MAY DIMINISH SIGHT LINES.

37. THE PARKING METERS SHALL BE REMOVED IN ACCORDANCE WITH BTD'S "RULES FOR WORK THAT INVOLVES BTD PARKING METER AND MULTI–SPACE PARKING KIOSK REMOVAL GUIDELINES."

38. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE AND STACK ALL TEMPORARY SIGNAGE INCLUDING PARKING RESTRICTIONS, DETOUR ROUTES, AND WARNING SIGNS UTILIZED DURING CONSTRUCTION.

39. ALL EXISTING PAVEMENT MARKINGS TO BE REMOVED SHALL BE REMOVED BY MECHANICAL MEANS ONLY.

## BAR SCHEDULE

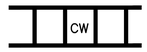



## CMP LEGEND

- SIGN
- CONSTRUCTION GATE
- ROLLING GATE
- PERMANENT CHAIN LINK FENCE
- MOVEABLE CHAIN LINK FENCE
- CONSTRUCTION DRUM
- CONSTRUCTION CONE
- TRAFFIC FLOW
- PEDESTRIAN FLOW
- POLICE DETAIL
- SIGNALIZED INTERSECTION
- PORTABLE PRECAST CONCRETE BARRIER
- CHAIN LINK FENCE ON CONCRETE BARRIER
- PORTABLE PRECAST CONCRETE BARRIER WITH HANDRAIL
- TAPERED END BARRIER
- IMPACT ATTENUATOR
- WATER–FILLED TEMPORARY BARRIER
- TEMPORARY WHEELCHAIR RAMP (SIDE APRONS)
- TEMPORARY PARALLEL WHEELCHAIR RAMP
- TEMPORARY PERPENDICULAR WHEELCHAIR RAMP
- BUILDING ACCESS POINTS

## PAVEMENT MARKING LEGEND


8" SOLID YELLOW CHANNELIZATION (10' O.C. @45').




WHITE – CROSS WALK (12" LINES, 10' O.C.; 12" LONGITUDINAL LINES, 4' O.C.) (UNLESS OTHERWISE SHOWN)

## ABBREVIATIONS

| | |
|---|---|
| R&R | REMOVE & RESET |
| R&S | REMOVE & STACK |
| PBS | PRINT BOTH SIDES |
| PROP. | PROPOSED |
| TEMP. | TEMPORARY |

**DRAFT SUBMISSION**

BOSTON TRANSPORTATION DEPARTMENT

DESIGNED BY K. MARTIN
DRAWN BY L. CAHILL
CHECKED BY K. MARTIN
APPROVED BY R. BURGESS

CITY OF BOSTON TRANSPORTATION DEPARTMENT
ENGINEERING DIVISION
CONSTRUCTION MANAGEMENT PLAN

# CHANNELSIDE

**GENERAL NOTES, LEGEND AND SCHEDULE**

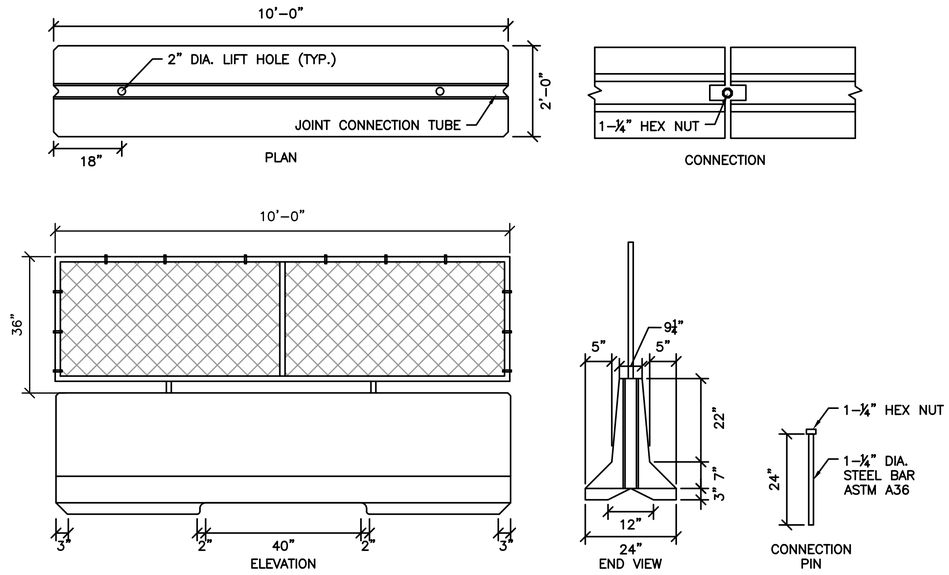
BOSTON

AREA: 1
DISTRICT: 1

DATE: SEP 22, 2021
DRAWING NO. CMP–002
SHEET 2 OF 9

DRAWING PREPARED BY HOWARD STEIN HUDSON

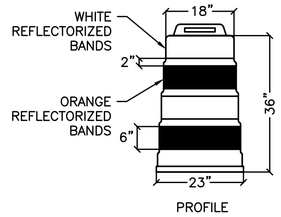
L:\19916\CMP\UTILITY CMP_HARBORWALK CLOSED_ALT\CUTSHEETS\GeneralNotes-Legend-Schedule.dwg, 9/22/2021 9:32:59 AM



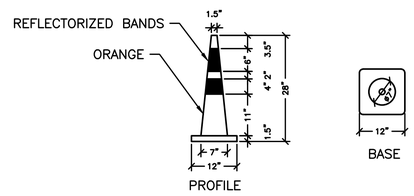

TEMPORARY CONCRETE BARRIER MASH TL–2 WITH 36" CHAIN LINK FENCE

## SIGN SUMMARY

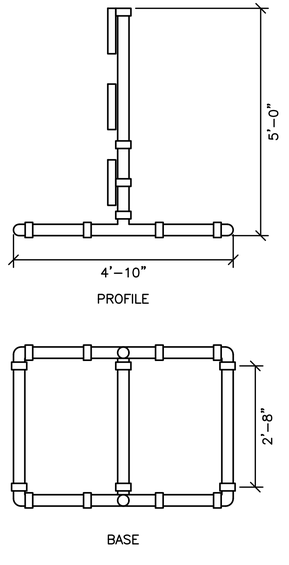
| IDENTIF–ICATION NUMBER | SIZE OF SIGN (INCHES) WIDTH | HEIGHT | UNIT AREA SF | TEXT | TEXT DIMENSIONS | NUMBER OF SIGNS REQUIRED | COLOR | POST SIZE AND NUMBER REQUIRED PER SIGN | AREA IN SQUARE FEET |
|---|---|---|---|---|---|---|---|---|---|
| M4–9bR | 30" | 24" | 5.00 | DETOUR | SEE THE MUTCD STANDARD DETAIL | 1 | SEE MUTCD STANDARD DETAIL | MUTCD SPEC. MOUNT ON POST | 5.00 |
| R9–9 (MOD) | 24" | 12" | 2.00 | PATH CLOSED | | 2 | | | 4.00 |
| SP–1 | 30" | 24" | 5.00 | HARBOR WALK DETOUR | | 2 | | | 10.00 |
| SP–2 | 30" | 24" | 5.00 | PARKING LOT ENTRANCE | | 1 | | | 5.00 |

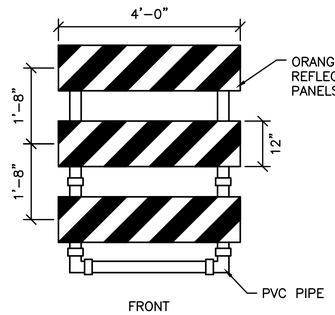



REFLECTORIZED DRUM



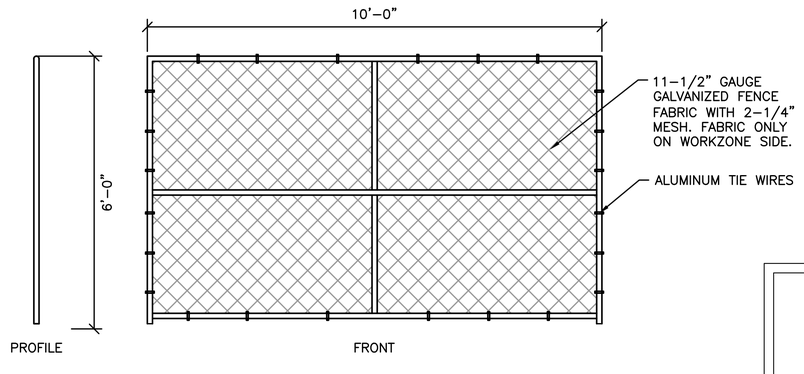

28" REFLECTORIZED TRAFFIC CONE



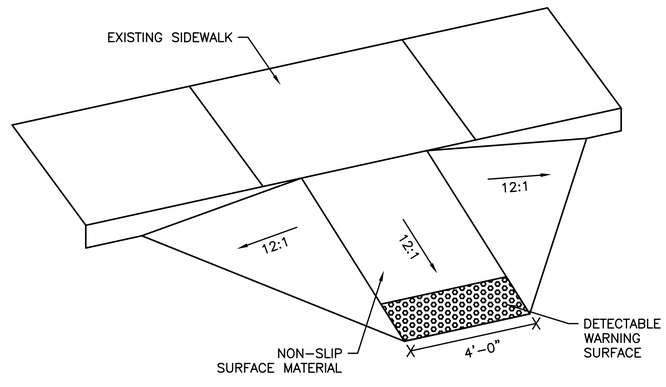

TYPE III BARRICADE

TYPE III BARRICADES SHALL MEET MUTCD REQUIREMENTS (CURRENT EDITION)




NOTE:
POSTS SHALL BE CORED INTO THE PAVEMENT.

72" CORED IN PLACE CHAIN LINK FENCE




TEMPORARY PERPENDICULAR WHEELCHAIR RAMP
(SIDE APRONS)

**DRAFT SUBMISSION**

BOSTON TRANSPORTATION DEPARTMENT

DESIGNED BY K. MARTIN
DRAWN BY L. CAHILL
CHECKED BY K. MARTIN
APPROVED BY R. BURGESS

CITY OF BOSTON TRANSPORTATION DEPARTMENT
ENGINEERING DIVISION
CONSTRUCTION MANAGEMENT PLAN

# CHANNELSIDE

**TEMPORARY TRAFFIC CONTROL DEVICES AND SIGN SUMMARY**

BOSTON

AREA: 1
DISTRICT: 1

DATE: SEP 22, 2021
DRAWING NO. CMP–003
SHEET 3 OF 9

DRAWING PREPARED BY HOWARD STEIN HUDSON

L:\19016\COMPUTILITY CMP_HARBORWALK CLOSED_ALT\OUTSHEETS\TrafficControlDevices AND SIGN SUMMARY.dwg, 9/22/2021 9:33:02 AM

FORT POINT CHANNEL

HARBOR WALK

45 BINFORD ST

PROJECT SITE

15 NECCO ST
(UNDER CONSTRUCTION)

NECCO STREET
(PRIVATE WAY)

MELCHER STREET

NECCO CT

BINFORD STREET

NECCO ST

A ST

A STREET

STATE HIGHWAY LAYOUT NO. 6982

STATE HIGHWAY LAYOUT NO. 6982

TOW ZONE
NO STOPPING ANY TIME

South Boston Resident Permit Parking Only

Street Cleaning
1st & 3rd TUESDAY
8AM - 1PM
Tow Zone

Street Cleaning
2nd & 4th TUESDAY
8AM - 1PM
Tow Zone

SHARE THE ROAD

South Boston Permit Parking Only

PERMIT PARKING ONLY
UNAUTHORIZED VEHICLES WILL BE TOWED AT VEHICLE OWNER'S EXPENSE
BOSTON TOW AND STORAGE
617-536-2011

PRIVATE WAY
NO PARKING
ALL VIOLATORS WILL BE TOWED AT OWNERS EXPENSE

NO PARKING
VEHICLES WILL BE TOWED AT VEHICLE OWNER'S EXPENSE
BOSTON TOW AND STORAGE

$$ CITY POINT
NO STANDING TOW ZONE

BIKE LANE

STOP

DEAD END

AHEAD

A ST

0 20 40 80 160 FEET
ENGINEERING SCALE

**DRAFT SUBMISSION**

BTD
BOSTON TRANSPORTATION DEPARTMENT

DESIGNED BY K. MARTIN
DRAWN BY L. CAHILL
CHECKED BY K. MARTIN
APPROVED BY R. BURGESS

CITY OF BOSTON TRANSPORTATION DEPARTMENT
ENGINEERING DIVISION
CONSTRUCTION MANAGEMENT PLAN

# CHANNELSIDE
## EXISTING CONDITIONS

BOSTON

AREA: 1
DISTRICT: 1

DATE: SEP 22, 2021
DRAWING NO. CMP–004
SHEET 4 OF 9

DRAWING PREPARED BY HOWARD STEIN HUDSON

L:\19916\CMP\UTILITY CMP_HARBORWALK CLOSED_ALT\CUTSHEETS\EXISTING CONDITIONS.dwg, 9/22/2021 9:33:16 AM

FORT POINT CHANNEL

TYPE III BARRICADE
PATH CLOSED
R9-9 (MOD)
DETOUR
M4-9bR

45 BINFORD STREET

30' SWING GATE A

PROP 18" RCP

PROP 60" RCP

PROP SURVAILLANCE CAMERA WITH ASSOCIATED "VIDEO SURVEILLANCE IN USE" SIGNAGE (TYP.)

HARBOR WALK

PATH CLOSED
R9-9 (MOD)
HARBOR WALK DETOUR
SP-1

INSTALL 30' SWING GATE TO MAINTAIN ACCESS TO 45 BINFORD STREET

EXCAVATOR (TYP.)

DUMP TRUCK (TYP)

72" CHAIN LINK FENCE CORED IN PLACE (BY OTHERS)

15' PEDESTRIAN PATH (SEE NOTES 1 AND 2)

15 NECCO ST (UNDER CONSTRUCTION)

REMOVE EXISTING FENCE

72" CHAIN CORED IN PLACE CHAIN LINK FENCE (TYP.)

PRECAST CONCRETE MASH TL-2 BARRIERS (TYP.)

10' CW

A

A

BINFORD STREET

TEMP WHEELCHAIR RAMP

10' (TYP.)

24'

SYCHL @45 DEGREES AND 10' O.C. (TYP.)

10' PEDESTRIAN PATH (SEE NOTES 1 AND 2)

PROP BOX LIGHTS ON FENCE (TYP.) (SEE NOTE 1)

15 NECCO'S TEMP POWER

NECCO STREET (PRIVATE WAY)

MELCHER STREET

MAINTAIN PEDESTRIAN ACCESS TO PARKING LOT

STATE HIGHWAY LAYOUT NO. 6886

PARKING LOT TO REMAIN OPEN

STATE HIGHWAY LAYOUT NO. 6886

NECCO STREET (PRIVATE WAY)

NECCO CT

A STREET

10' ALTERNATE PEDESTRIAN PATH

WORK ZONE

PARKING LOT

DETAIL A-A
(NOT TO SCALE)

WORK TO BE COMPLETED:

1. INSTALL RELOCATED DRAIN LINE AND ASSOCIATED MANHOLES.

NOTES:

1. CONTRACTOR SHALL PROVIDE TEMPORARY LIGHTING AND SURVEILLANCE.
2. THE DESIGNER OF THIS PLAN IS NOT RESPONSIBLE FOR THE SAFETY AND SECURITY OF THE PEDESTRIANS USING THE TEMPORARY PATH.
3. SEE SHEET 8 DETAIL 1-4 FOR VEHICLE TURNING MANEUVERS.

ENTERING
EXITING
PEDESTRIAN ROUTE

**DURATION**
**NOVEMBER 2021 - JANUARY 2022**
**(12 WEEKS)**

0 20 40 80 160
FEET
ENGINEERING SCALE

**DRAFT SUBMISSION**

BOSTON TRANSPORTATION DEPARTMENT

DESIGNED BY K. MARTIN
DRAWN BY L. CAHILL
CHECKED BY K. MARTIN
APPROVED BY R. BURGESS

CITY OF BOSTON TRANSPORTATION DEPARTMENT
ENGINEERING DIVISION
CONSTRUCTION MANAGEMENT PLAN

# CHANNELSIDE
## UTILITY INSTALLATION - DRAIN LINE STAGE I

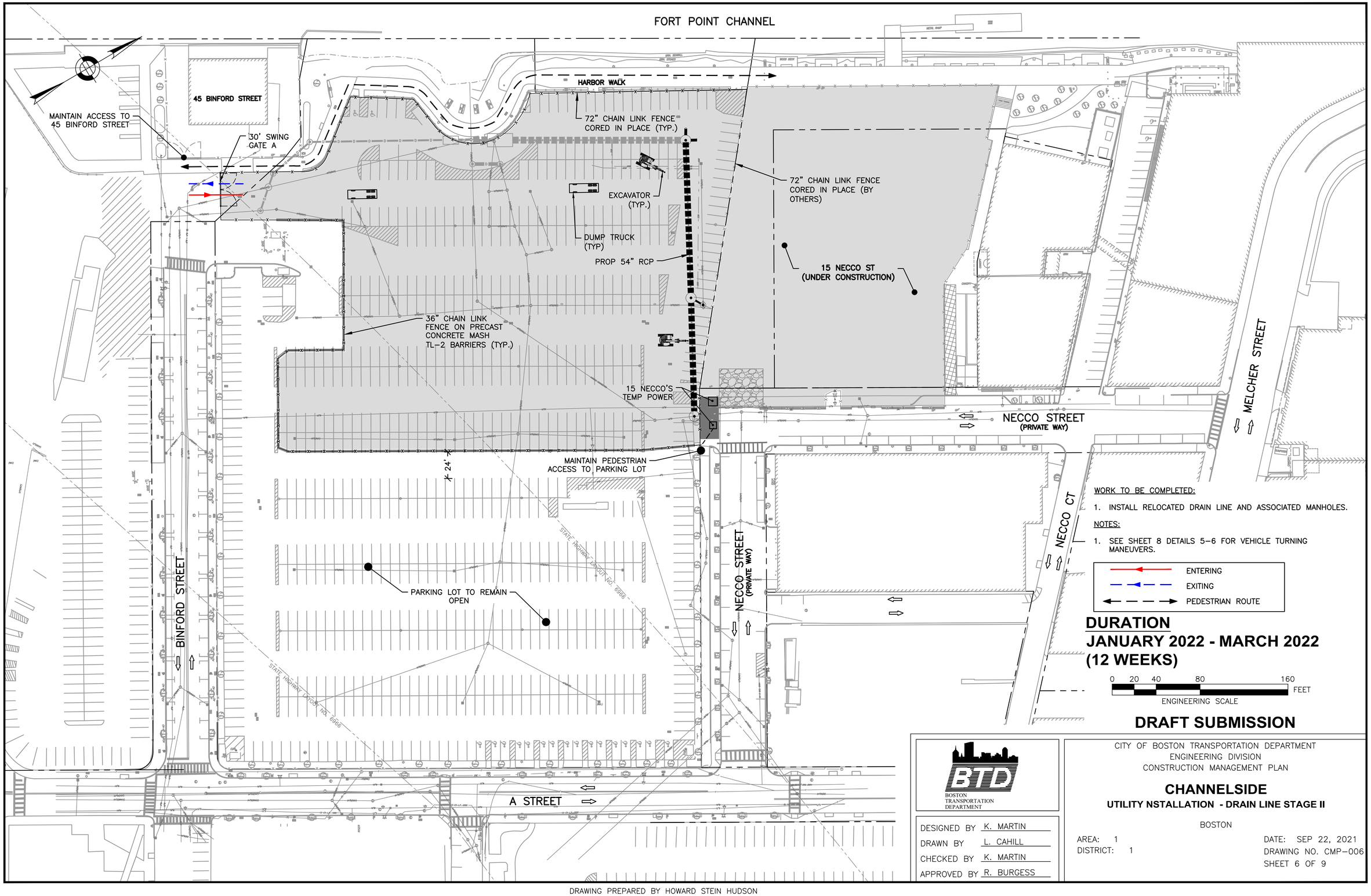
BOSTON

AREA: 1
DISTRICT: 1

DATE: SEP 22, 2021
DRAWING NO. CMP-005
SHEET 5 OF 9

DRAWING PREPARED BY HOWARD STEIN HUDSON

L:\19016\CMP\UTILITY CMP_HARBORWALK CLOSED_ALT\CUTSHEETS\UTILITY CONNECTIONS - DRAIN I.dwg, 9/22/2021 9:33:53 AM




WORK TO BE COMPLETED:

1. INSTALL RELOCATED DRAIN LINE AND ASSOCIATED MANHOLES.

NOTES:

1. SEE SHEET 8 DETAILS 5–6 FOR VEHICLE TURNING MANEUVERS.

ENTERING
EXITING
PEDESTRIAN ROUTE

**DURATION**
**JANUARY 2022 - MARCH 2022**
**(12 WEEKS)**

0 20 40 80 160 FEET
ENGINEERING SCALE

**DRAFT SUBMISSION**

BOSTON TRANSPORTATION DEPARTMENT

DESIGNED BY K. MARTIN
DRAWN BY L. CAHILL
CHECKED BY K. MARTIN
APPROVED BY R. BURGESS

CITY OF BOSTON TRANSPORTATION DEPARTMENT
ENGINEERING DIVISION
CONSTRUCTION MANAGEMENT PLAN

# CHANNELSIDE
## UTILITY NSTALLATION - DRAIN LINE STAGE II

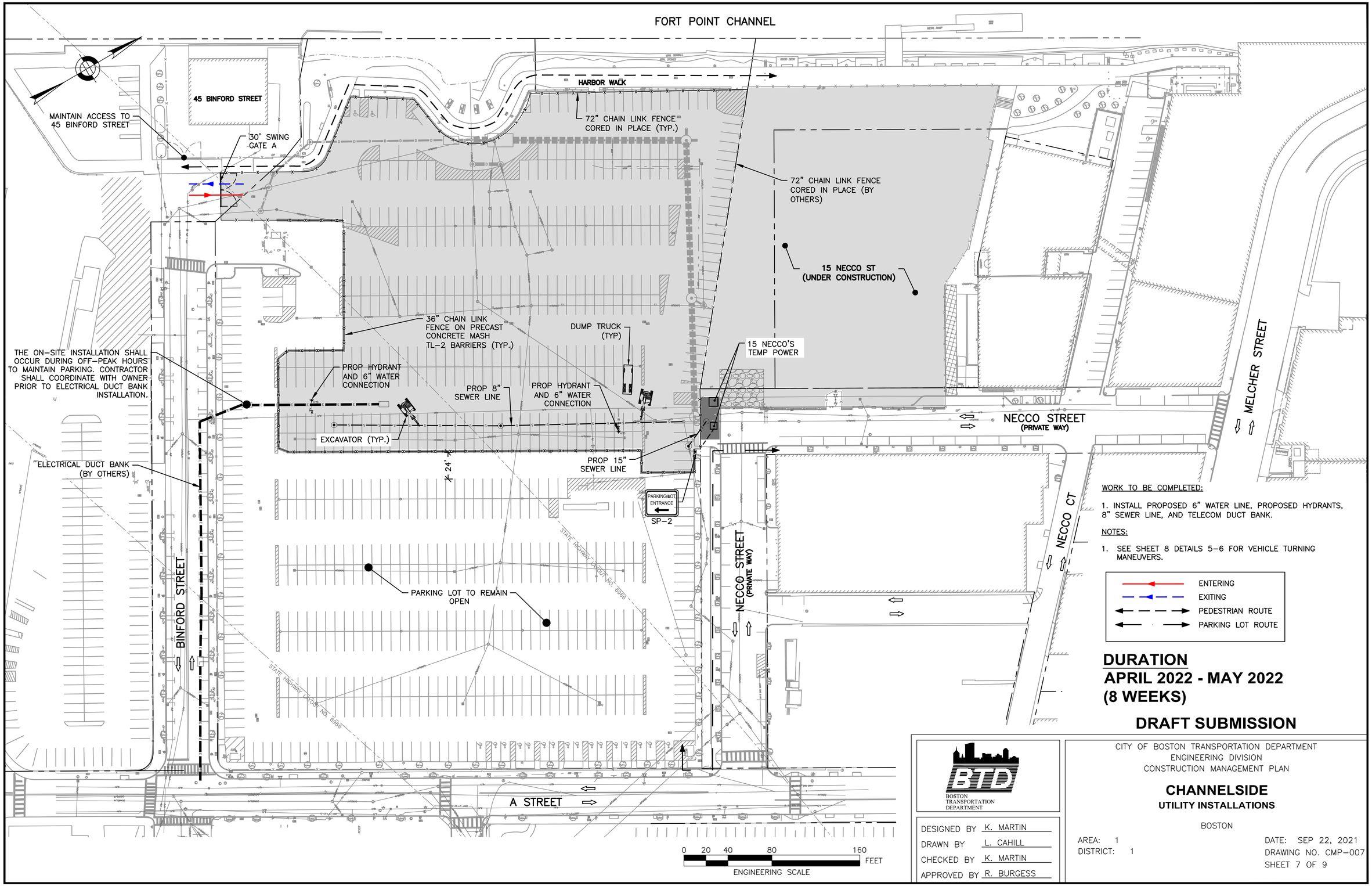
BOSTON

AREA: 1
DISTRICT: 1

DATE: SEP 22, 2021
DRAWING NO. CMP–006
SHEET 6 OF 9

DRAWING PREPARED BY HOWARD STEIN HUDSON

L:\19016\CM\PUTILITY CMP_HARBORWALK CLOSED_ALT\CUTSHEET\UTILITY CONNECTIONS - DRAIN II.dwg, 9/22/2021 9:34:32 AM




WORK TO BE COMPLETED:

1. INSTALL PROPOSED 6" WATER LINE, PROPOSED HYDRANTS, 8" SEWER LINE, AND TELECOM DUCT BANK.

NOTES:

1. SEE SHEET 8 DETAILS 5–6 FOR VEHICLE TURNING MANEUVERS.

ENTERING
EXITING
PEDESTRIAN ROUTE
PARKING LOT ROUTE

## DURATION
## APRIL 2022 - MAY 2022
## (8 WEEKS)

## DRAFT SUBMISSION

BOSTON TRANSPORTATION DEPARTMENT

DESIGNED BY K. MARTIN
DRAWN BY L. CAHILL
CHECKED BY K. MARTIN
APPROVED BY R. BURGESS

CITY OF BOSTON TRANSPORTATION DEPARTMENT
ENGINEERING DIVISION
CONSTRUCTION MANAGEMENT PLAN

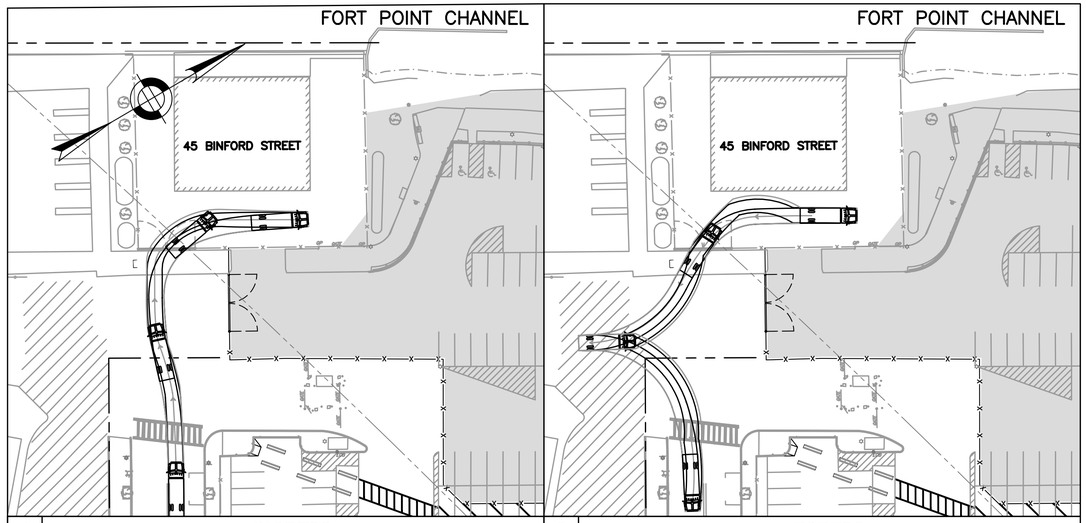
# CHANNELSIDE
## UTILITY INSTALLATIONS

BOSTON

AREA: 1
DISTRICT: 1

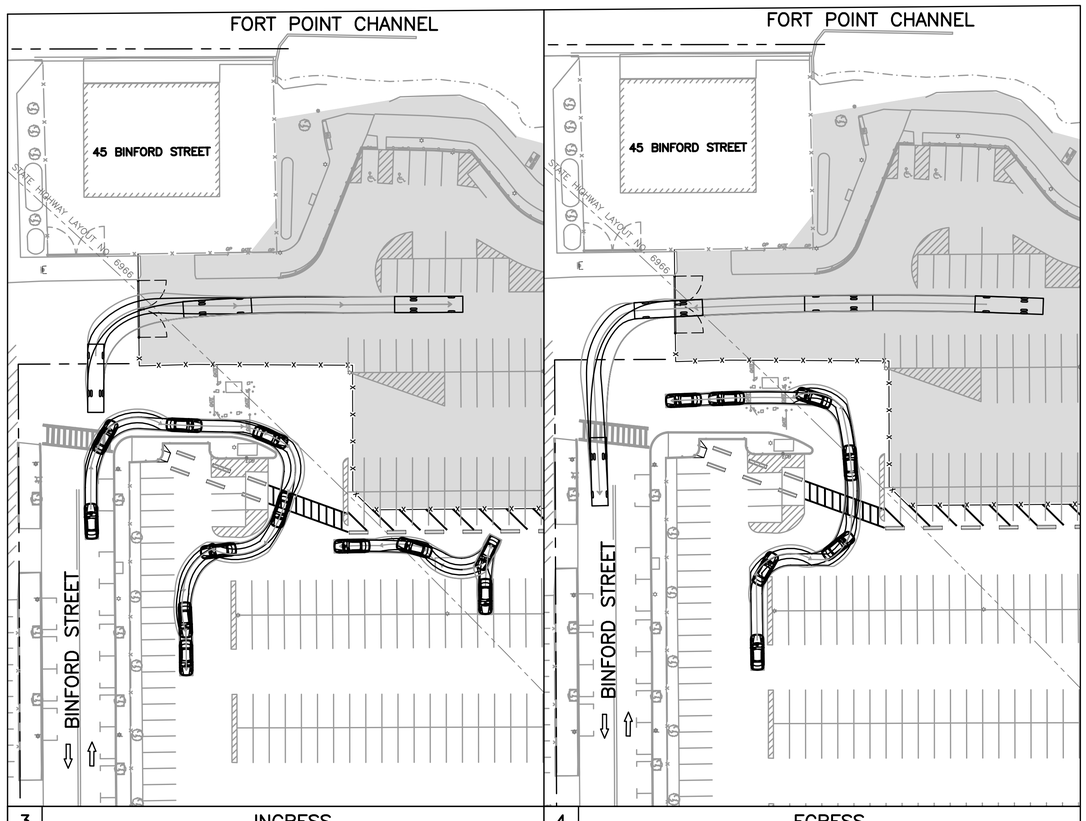
DATE: SEP 22, 2021
DRAWING NO. CMP-007
SHEET 7 OF 9

DRAWING PREPARED BY HOWARD STEIN HUDSON



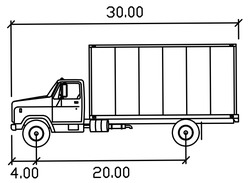

1 INGRESS | 2 EGRESS

UTILITY INSTALLATION – DRAIN LINE STAGE I – SU–30



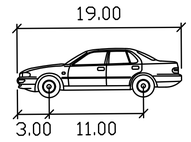

3 INGRESS | 4 EGRESS

UTILITY INSTALLATION – DRAIN LINE STAGE I – SU–36 & PASSENGER VEHICLE



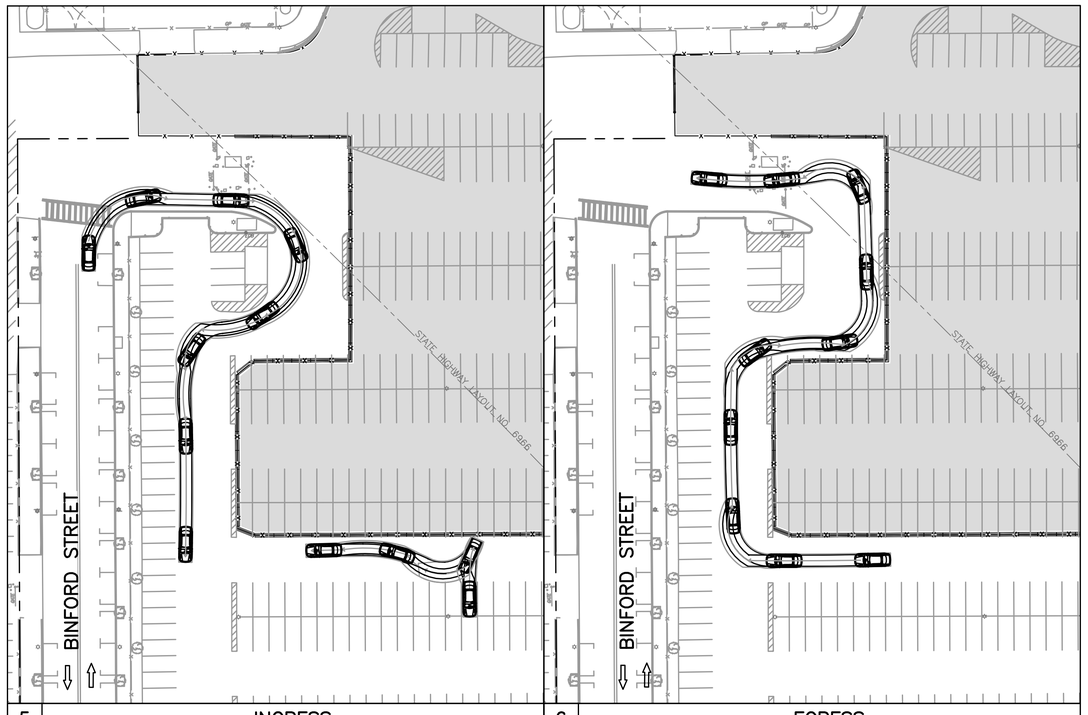

SU-30

| | feet |
|---|---|
| Width | : 8.00 |
| Track | : 8.00 |
| Lock to Lock Time | : 6.0 |
| Steering Angle | : 31.8 |




PASSENGER VEHICLE

| | feet |
|---|---|
| Width | : 7.00 |
| Track | : 6.00 |
| Lock to Lock Time | : 6.0 |
| Steering Angle | : 31.6 |




5 INGRESS | 6 EGRESS

UTILITY INSTALLATIONS – PASSENGER VEHICLE

0 20 40 80 160 FEET

ENGINEERING SCALE

**DRAFT SUBMISSION**

BOSTON TRANSPORTATION DEPARTMENT

DESIGNED BY K. MARTIN
DRAWN BY L. CAHILL
CHECKED BY K. MARTIN
APPROVED BY R. BURGESS

CITY OF BOSTON TRANSPORTATION DEPARTMENT
ENGINEERING DIVISION
CONSTRUCTION MANAGEMENT PLAN

# CHANNELSIDE

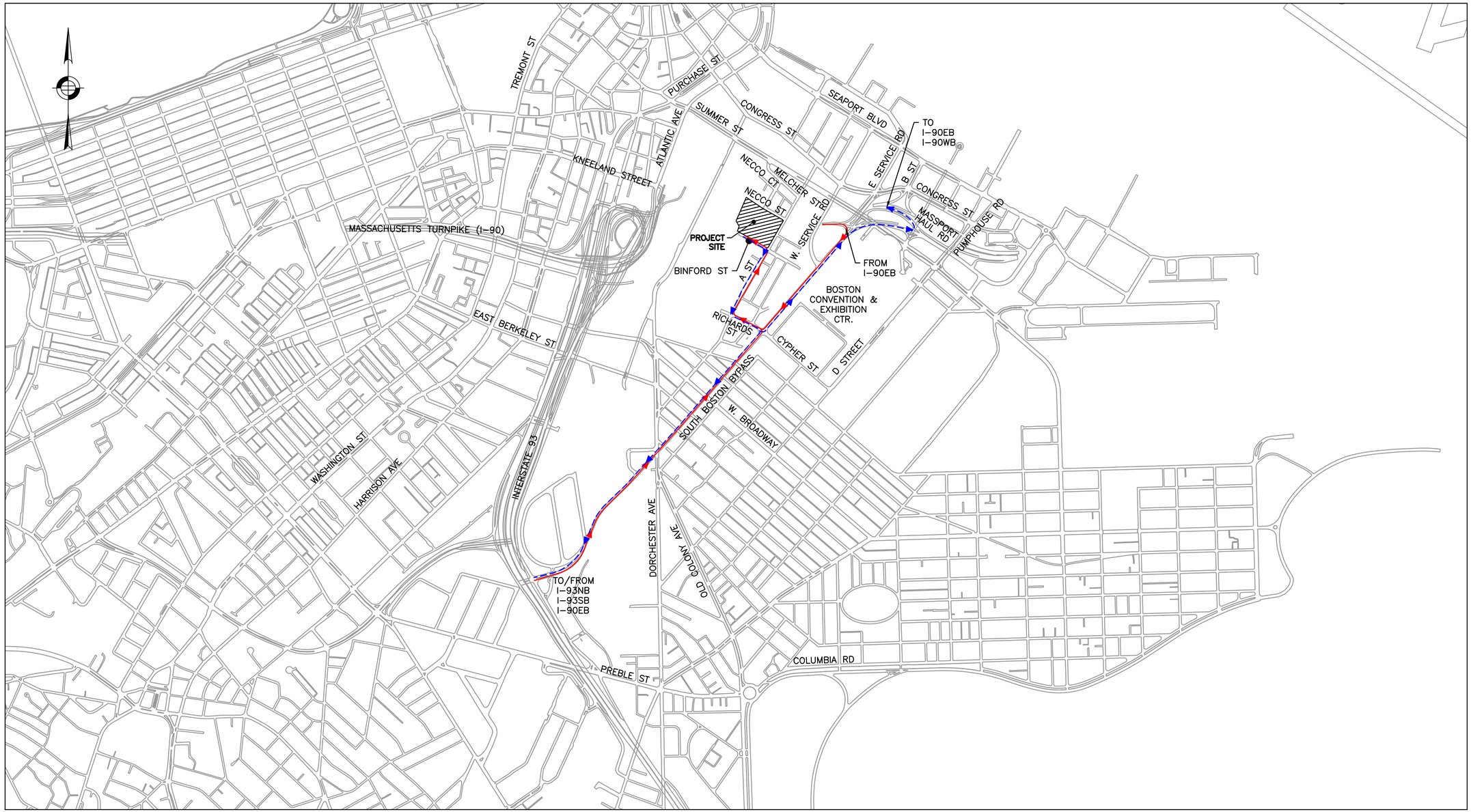
## TRUCK TURNING MANEUVERS I

BOSTON

AREA: 1
DISTRICT: 1

DATE: SEP 22, 2021
DRAWING NO. CMP–008
SHEET 8 OF 9

DRAWING PREPARED BY HOWARD STEIN HUDSON




ENTERING
EXITING

0 375 750 1500 3000 FEET
ENGINEERING SCALE

**DRAFT SUBMISSION**

BOSTON TRANSPORTATION DEPARTMENT

DESIGNED BY K. MARTIN
DRAWN BY L. CAHILL
CHECKED BY K. MARTIN
APPROVED BY R. BURGESS

CITY OF BOSTON TRANSPORTATION DEPARTMENT
ENGINEERING DIVISION
CONSTRUCTION MANAGEMENT PLAN

# CHANNELSIDE
## TRUCK ROUTING PLAN

BOSTON

AREA: 1
DISTRICT: 1

DATE: SEP 22, 2021
DRAWING NO. CMP–009
SHEET 9 OF 9

DRAWING PREPARED BY HOWARD STEIN HUDSON

L:\19016\CMP\UTILITY CMP_HARBORWALK CLOSED_ALT\CUTSHEETS\TRUCK ROUTING.dwg, 9/22/2021 9:38:59 AM

**Attachment H**

Permitting Plan (Prepared by Nitsch Engineering)

## PROPOSED LEGEND

- LIMIT OF WORK
- EXISTING UTILITY TO BE ABANDONED, REMOVED AND DISPOSED IF IN CONFLICT WITH NEW SITE IMPROVEMENTS, OR AS INDICATED ON DRAWINGS
- S — SANITARY SEWER PIPE
- D — STORM DRAIN PIPE
- DRAIN MANHOLE
- SEWER MANHOLE

## ABBREVIATIONS

| | |
|---|---|
| CPP | CORRUGATED POLYETHYLENE PIPE |
| DMH | DRAIN MANHOLE |
| INV | INVERT ELEVATION |
| M&P | MAINTAIN AND PROTECT |
| PVC | POLYVINYL CHLORIDE PIPE |
| R&D | REMOVE AND DISPOSE |
| RIM | RIM ELEVATION |
| SMH | SEWER MANHOLE |
| SS | SEWER SERVICE |

## DEMOLITION NOTES:

1. SITE PREPARATION AND DEMOLITION SHALL INCLUDE THOSE AREAS WITHIN THE LIMIT OF WORK LINE AS SHOWN ON THE CONTRACT DOCUMENTS.
2. ANY AREA OUTSIDE THE LIMIT OF WORK THAT IS DISTURBED SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE OWNER.
3. CONSULT ALL OF THE DRAWINGS AND SPECIFICATIONS FOR COORDINATION REQUIREMENTS BEFORE COMMENCING DEMOLITION.
4. THE CONTRACTOR SHALL COORDINATE SITE DEMOLITION EFFORTS WITH ALL TRADES THAT MAY BE AFFECTED BY THE WORK.
5. ALL ITEMS REQUIRING REMOVAL SHALL BE REMOVED TO FULL DEPTH TO INCLUDE BASE MATERIAL AND FOOTINGS OR FOUNDATIONS AS REQUIRED TO FACILITATE CONSTRUCTION, AND LEGALLY DISPOSED OF OFFSITE BY CONTRACTOR.
6. UTILITY PIPES DESIGNATED TO BE ABANDONED IN PLACE SHALL BE PLUGGED AT THEIR ENDS WITH WATERTIGHT BRICK MASONRY OR CEMENT MORTAR WITH A MINIMUM THICKNESS OF 8 INCHES.
7. UTILITY PIPES DESIGNATED TO BE REMOVED SHALL CONSIST OF THE COMPLETE REMOVAL AND DISPOSAL OF THE ENTIRE LENGTH OF PIPE AND BACKFILL AND 95% COMPACTION OF THE VOID WITH ORDINARY BORROW. WHEN THE VOID IS WITHIN THE FOOTPRINT OF THE NEW BUILDING, GRAVEL BORROW SHALL BE USED TO BACKFILL THE VOID.
8. UTILITY STRUCTURES DESIGNATED TO BE ABANDONED IN PLACE SHALL HAVE THEIR CAST IRON CASTINGS REMOVED AND DISPOSED, INLET AND OUTLET PIPES PLUGGED, THE BOTTOM OF THE STRUCTURES SHALL BE BROKEN, THE VOID OF THE STRUCTURES SHALL BE BACKFILLED AND COMPACTED TO 95% WITH ORDINARY BORROW OR FLOWABLE FILL, AND THE TOP OF THE STRUCTURE SHALL BE REMOVED SO THAT IT IS AT LEAST 36 INCHES BELOW FINISH GRADE.
9. UTILITY STRUCTURES DESIGNATED TO BE REMOVED SHALL CONSIST OF THE REMOVAL AND DISPOSAL OF CAST IRON CASTINGS, PLUGGING OF INLET AND OUTLET PIPES, REMOVAL OF THE STRUCTURE, AND BACKFILL AND 95% COMPACTION OF THE VOID WITH ORDINARY BORROW. WHEN HE VOID IS WITHIN THE FOOTPRINT OF THE NEW BUILDING, GRAVEL BORROW SHALL BE USED TO BACKFILL THE VOID.
10. ALL DEBRIS GENERATED DURING SITE PREPARATION ACTIVITIES SHALL BE LEGALLY DISPOSED OF OFFSITE.
11. AT ALL LOCATIONS WHERE EXISTING CURBING, CONCRETE PAVEMENT OR BITUMINOUS CONCRETE ROADWAY ABUTS NEW CONSTRUCTION, THE EDGE OF THE EXISTING CURB OR PAVEMENT SHALL BE SAW CUT TO A CLEAN, SMOOTH EDGE.
12. EXTEND DESIGNATED LIMIT OF WORK AS NECESSARY TO ACCOMPLISH ROUGH GRADING, EROSION CONTROL, TREE PROTECTION, AND SITE WORK AS REQUIRED BY THESE DRAWINGS AND SPECIFICATIONS.
13. THE CONTRACTOR SHALL REMOVE FROM THE SITE ALL RUBBISH AND DEBRIS FOUND THEREON. STORAGE OF SUCH MATERIALS ON THE PROJECT SITE WILL NOT BE PERMITTED. THE CONTRACTOR SHALL LEAVE THE SITE IN SAFE, CLEAN, AND LEVEL CONDITION UPON COMPLETION OF THE SITE DEMOLITION WORK.
14. REMOVE AND STOCKPILE ALL EXISTING SITE LIGHTS, BENCHES, TRASH RECEPTACLES, TRAFFIC SIGNS, GRANITE CURB, AND OTHER SITE IMPROVEMENTS WITHIN LIMIT OF WORK LINE UNLESS OTHERWISE NOTED.
15. ALL EXISTING TREES AND SHRUBS TO REMAIN SHALL BE PROTECTED AND MAINTAINED THROUGHOUT THE TIME OF CONSTRUCTION, AS SPECIFIED AND DIRECTED BY THE LANDSCAPE ARCHITECT.
16. BEFORE ANY TREES OR SHRUBS ARE REMOVED, THE CONTRACTOR SHALL ARRANGE A CONFERENCE ON THE SITE WITH THE OWNER OR OWNER'S REPRESENTATIVE TO IDENTIFY TREES AND SHRUBS THAT ARE TO BE REMOVED, AS WELL AS THOSE WHICH ARE TO BE PROTECTED. DO NOT COMMENCE CLEARING OPERATIONS WITHOUT A CLEAR UNDERSTANDING OF EXISTING CONDITIONS TO BE PRESERVED.
17. THE CONTRACTOR SHALL REMOVE FROM THE AREA OF CONSTRUCTION PAVEMENT, CONCRETE, CURBING, POLES AND FOUNDATIONS, ISLANDS, TREE BERMS AND OTHER FEATURES WITHIN THE LIMITS OF CONSTRUCTION AS REQUIRED TO ACCOMMODATE NEW CONSTRUCTION WHETHER SPECIFIED ON THE DRAWINGS OR NOT.

## BWSC & CONTRACTOR NOTES:

1. BACKWATER VALVES SHALL BE PROVIDED BY THE PLUMBER AT ALL GRAVITY SANITARY SEWER AND STORM DRAIN CONNECTIONS FOR ANY FIXTURE LOCATED AT AN ELEVATION BELOW THE TOP OF THE SEWER OR DRAIN MANHOLE.
2. THE CONTRACTOR SHALL NOTIFY THE BWSC CROSS-CONNECTION DEPARTMENT AT 617-989-7283 ONCE BACKWATER VALVES ARE INSTALLED FOR BWSC INSPECTION.
3. DYE TESTING SHALL BE PERFORMED ON NEW STORM DRAIN AND SANITARY SEWER CONNECTIONS AFTER INSTALLATION IS COMPLETE. DYE TESTS SHALL BE WITNESSED BY THE BWSC.
4. A PREREQUISITE FOR FILING A GENERAL SERVICE APPLICATION WITH THE BWSC FOR NEW CONSTRUCTION IS THE ROUGH CONSTRUCTION SIGN-OFF DOCUMENT FROM THE CITY OF BOSTON'S INSPECTIONAL SERVICES DEPARTMENT.
5. AN AS-BUILT PLAN (AUTOCAD 2016 OR EARLIER RELEASE) SHALL BE PROVIDED BY THE CONTRACTOR AND ENDORSED BY A CIVIL ENGINEER OR PROFESSIONAL LAND SURVEYOR SHOWING THE LOCATION, DEPTH, AND INVERT OF EVERY BEND, FITTING, VALVE, CLEANOUT AND ANCHOR. THE AS-BUILT DRAWING SHALL BE SUBMITTED TO THE BOSTON AND WATER SEWER COMMISSION FOR REVIEW AND APPROVAL.
6. WATER SHUT DOWN SHALL BE COORDINATED WITH BWSC WATER OPERATIONS, (617) 989-7276, 24 HOURS NOTICE REQUIRED.
7. PROVIDE "DON'T DUMP" PLAQUES AT ALL CATCH BASIN AND DRAIN INLET LOCATIONS. "DON'T DUMP" PLAQUES TO BE PURCHASED FROM BWSC.
8. THE CONTRACTOR SHALL PURCHASE THE NEW HYDRANT(S) FROM THE BWSC. THE CONTRACTOR SHALL PURCHASE THE HYDRANT(S) FROM THE COMMISSION WHEN FILING THE GENERAL SERVICE APPLICATION.
9. THE CONTRACTOR SHALL VIDEO INSPECT THE EXISTING XXX" BWSC XXXX MAIN IN XXX STREET PRIOR TO CONSTRUCTION AND AFTER CONSTRUCTION IS COMPLETE AND SUBMIT TO BWSC AND NITSCH ENGINEERING FOR REVIEW. THE INSPECTION SOFTWARE SHALL BE CAPABLE OF EXPORTING DIGITAL INSPECTION LOG DATA INTO AN MSACCESS DATABASE IN THE PIPELINE ASSESSMENT AND CERTIFICATION PROGRAM (PACP) STANDARD EXCHANGE FORMAT. THE INSPECTION SOFTWARE CODING SYSTEM SHALL BE PACP CERTIFIED (LATEST EDITION) AS PER THE NATIONAL ASSOCIATION OF SEWER SERVICE COMPANIES (NASSCO). THE SOFTWARE SHALL BE EQUIPPED WITH ALL MODULES NECESSARY FOR PACP INSPECTIONS AND SCORING. THE CONTRACTOR SHALL COORDINATE DIRECTLY WITH BWSC TO DETERMINE AN APPROVED VIDEO INSPECTION COMPANY AND DELIVERABLE.

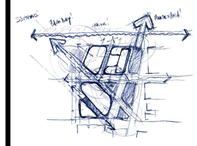
## GENERAL NOTES:

1. TOPOGRAPHIC DATA, PROPERTY LINE INFORMATION, AND EXISTING SITE FEATURES WERE OBTAINED FROM A PLAN ENTITLED "EXISTING CONDITIONS PLAN OF LAND #244 "A" STREET, BOSTON, MASS", PREPARED BY FELDMAN LAND SURVEYORS, DATED JULY 19, 2019.
2. FLOODPLAIN INFORMATION WAS OBTAINED FROM THE FLOOD INSURANCE RATE MAP (FIRM) NO. 25025C0081J. THE SITE IS IN ZONE AE.
3. THE CONTRACTOR SHALL COMPLY WITH MASSACHUSETTS GENERAL LAWS CHAPTER 82, SECTION 40, AS AMENDED, WHICH STATES THAT NO ONE MAY EXCAVATE IN THE COMMONWEALTH OF MASSACHUSETTS EXCEPT IN AN EMERGENCY WITHOUT 72 HOURS NOTICE, EXCLUSIVE OF SATURDAYS, SUNDAYS, AND LEGAL HOLIDAYS, TO NATURAL GAS PIPELINE COMPANIES, AND MUNICIPAL UTILITY DEPARTMENTS THAT SUPPLY GAS, ELECTRICITY, TELEPHONE, OR CABLE TELEVISION SERVICE IN OR IN TO THE CITY OR TOWN WHERE THE EXCAVATION IS TO BE MADE. THE CONTRACTOR SHALL CALL "DIG SAFE" AT 1-888-DIG-SAFE.
4. THE CONTRACTOR SHALL COMPLY WITH MASSACHUSETTS GENERAL LAWS CHAPTER 82A, ALSO REFERRED TO AS JACKIE'S LAW, AS DETAILED IN SECTION 520 CMR 14.00 OF THE CODE OF MASSACHUSETTS REGULATIONS.
5. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES, REGULATIONS AND SAFETY CODES IN THE CONSTRUCTION OF ALL IMPROVEMENTS.
6. THE LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES ARE APPROXIMATE AND ALL UTILITIES MAY NOT BE SHOWN. PRESENCE AND LOCATIONS OF ALL UTILITIES WITHIN THE LIMIT OF WORK MUST BE DETERMINED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING AND CONTACTING THE CONTROLLING AUTHORITIES AND/OR UTILITY COMPANIES RELATIVE TO THE LOCATIONS AND ELEVATIONS OF THEIR LINES. THE CONTRACTOR SHALL KEEP A RECORD OF ANY DISCREPANCIES OR CHANGES IN THE LOCATIONS OF ANY UTILITIES SHOWN OR ENCOUNTERED DURING CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE OWNER AND NITSCH ENGINEERING. ANY DAMAGE RESULTING FROM THE FAILURE OF THE CONTRACTOR TO MAKE THESE DETERMINATIONS AND CONTACTS SHALL BE BORNE BY THE CONTRACTOR.
7. THE CONTRACTOR SHALL, THROUGHOUT CONSTRUCTION, TAKE ADEQUATE PRECAUTIONS TO PROTECT ALL WALKS, GRADING, SIDEWALKS AND SITE DETAILS OUTSIDE OF THE LIMIT OF WORK AS DEFINED ON THE DRAWINGS AND SHALL REPAIR AND REPLACE OR OTHERWISE MAKE GOOD AS DIRECTED BY THE ENGINEER OR OWNER'S DESIGNATED REPRESENTATIVE ANY SUCH OR OTHER DAMAGE SO CAUSED.
8. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SITE SAFETY AND ALL CONSTRUCTION MEANS AND METHODS.
9. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE SITE AND CONSTRUCTION DOCUMENTS TO DEVELOP A THOROUGH UNDERSTANDING OF THE PROJECT, INCLUDING ANY SPECIAL CONDITIONS AND CONSTRAINTS.
10. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BECOME FAMILIAR WITH THE PROJECT SITE AND TO VERIFY ALL CONDITIONS IN THE FIELD AND REPORT DISCREPANCIES BETWEEN PLANS AND ACTUAL CONDITIONS TO THE OWNER OR OWNER'S REPRESENTATION IMMEDIATELY.
11. THE CONTRACTOR SHALL CONDUCT ALL NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN ALL NECESSARY CONSTRUCTION PERMITS.
12. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE ESTABLISHMENT AND USE OF ALL VERTICAL AND HORIZONTAL CONSTRUCTION CONTROLS.
13. ELEVATIONS REFER TO BOSTON CITY BASE (BCB).
14. THE CONTRACTOR SHALL COMPLY WITH THE ORDER OF CONDITIONS DATED XXXX XX, XXXX AND ISSUED BY THE XXXX CONSERVATION COMMISSION (DEP #XXX-XXX).
15. FOR SOIL INFORMATION REFER TO GEOTECHNICAL REPORT.

## UTILITY NOTES:

1. ALL UTILITY CONNECTIONS ARE SUBJECT TO THE APPROVAL OF, AND GRANTING OF PERMITS BY, THE LOCAL MUNICIPALITY. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL PERMITS AND APPROVALS RELATED TO UTILITY WORK PRIOR TO COMMENCEMENT OF CONSTRUCTION.
2. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR OBTAINING ALL PERMISSIONS FOR, AND FOR CONDUCTING ALL PREPARATIONS RELATED TO, WORK AFFECTING ANY UTILITIES WITHIN THE JURISDICTION OF ANY NON-MUNICIPAL UTILITY COMPANY, INCLUDING BUT NOT LIMITED TO ELECTRIC, TELEPHONE, AND/OR GAS. THE CONTRACTOR SHALL NOTIFY ALL APPROPRIATE AGENCIES, DEPARTMENTS, AND UTILITY COMPANIES, IN WRITING, AT LEAST 7 DAYS (OR PER UTILITY COMPANY REQUIREMENT) AND NOT MORE THAN 30 DAYS PRIOR TO ANY CONSTRUCTION.
3. THE CONTRACTOR SHALL MAINTAIN UTILITIES SERVICING BUILDINGS AND FACILITIES WITHIN OR OUTSIDE THE PROJECT LIMIT UNLESS THE INTERRUPTION OF SERVICE IS COORDINATED WITH THE OWNER.
4. ALL WATER, SEWER, AND DRAIN WORK SHALL BE PERFORMED ACCORDING TO THE REQUIREMENTS AND STANDARD SPECIFICATIONS OF THE LOCAL MUNICIPALITY.
5. GAS, TELECOMMUNICATIONS AND ELECTRIC SERVICES ARE TO BE DESIGNED BY EACH UTILITY COMPANY IN COORDINATION WITH THE MECHANICAL, ELECTRIC, AND PLUMBING CONSULTANTS.
6. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES OF NEW UTILITIES WITH GAS, TELECOMMUNICATION AND ELECTRICAL SERVICES.
7. INSTALL WATER LINES WITH A MINIMUM OF FIVE FEET OF COVER AND A MAXIMUM OF SEVEN FEET COVER FROM THE FINAL DESIGN GRADES.
8. MAINTAIN 10 FEET HORIZONTAL SEPARATION AND 18 INCHES VERTICAL SEPARATION (WATER OVER SEWER) BETWEEN SEWER AND WATER LINES. WHEREVER THERE IS LESS THAN 10 FEET OF HORIZONTAL SEPARATION AND 18 INCHES OF VERTICAL SEPARATION BETWEEN A PROPOSED OR EXISTING SEWER LINE TO REMAIN AND A PROPOSED OR EXISTING WATER LINE TO REMAIN BOTH WATER MAIN AND SEWER MAIN SHALL BE CONSTRUCTED OF MECHANICAL JOINT CEMENT LINED DUCTILE IRON PIPE FOR A DISTANCE OF 10-FEET ON EITHER SIDE OF THE CROSSING. ONE (1) FULL LENGTH OF WATER PIPE SHALL BE CENTERED OVER THE SEWER AT THE CROSSING.
9. THE CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES EXCEPT THOSE NOTED TO BE ABANDONED AND/OR REMOVED & DISPOSED.
10. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR TRENCHING, BACKFILLING, AND SURFACE RESTORATION FOR GAS UTILITY SYSTEMS.
11. ALL ONSITE UTILITIES SHALL BE INSTALLED UNDERGROUND UNLESS OTHERWISE NOTED.
12. ALL EXISTING AND PROPOSED MANHOLE FRAMES, COVERS, VALVES, CLEANOUTS, CASTINGS, ETC. SHALL BE RAISED TO FINISHED GRADE PRIOR TO FINAL GRADING AND PAVING CONSTRUCTION.
13. ALL GRATES IN WALKWAYS SHALL BE ADA COMPLIANT.

# 244-284 A STREET





*Client*
ChannelSide Acquisitions, LLC
c/o The Related Companies, L.P.
60 Columbus Circle
New York, NY 10023
TEL:

*Architect*
Kohn Pedersen Fox Associates PC
Architects & Planning Consultants
11 West 42nd Street
New York, New York 10036
TEL: 212.977.6500 FAX: 212.956.2526

*Structural Engineer*
McNamara Salvia
101 Federal Street
Boston, MA 02110
TEL: 617-737-0040

*MEP Engineer*
WSP USA
88 Black Falcon Ave
Boston, MA 02210
TEL: 617-210-1708

*MEP Engineer- Lab*
BR+A Consulting Engineers
10 Guest Street, 4th flr
Boston, MA 02135
TEL: 617-254-0016

*Geotechnical*
Haley Aldrich
465 Medford St, Suite 200
Boston, MA 02129
TEL: 617-886-7400

*Civil*
Nitsch Engineering
2 Center Plaza, Suite 430
Boston, MA 02108
TEL:

*Landscape*
Halvorson Design Partnership, Inc
25 Kingston St 5th flr
Boston, MA 02111
TEL: 617-536-0380

*Code*
Jensen Hughes
3610 Commerce Drive, Suite 817
Baltimore, MD, 21227
TEL: 508-273-8484

*Marine*
Childs Engineering Company
34 William Way
Bellingham, MA 02019
TEL:

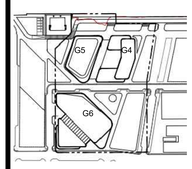
*Resiliency*
Arcadis
630 Plaza Drive, Suite 200
Highlands Ranch, CO 80129
TEL:

*Traffic*
Howard Stein Hudson
11 Beacon St, 10th flr, Suite 1010
Boston MA, 02108
TEL: 617-482-7081

*Vertical Transportation*
VDA
100 Summer St., Suite 1600
Boston, MA, 02110
TEL:


| Revision | | |
|---|---|---|
| 4 | CONSERVATION COMMISSION | 09-22-2021 |
| 3 | DOC ISSUE #3 (100% SD) | 09-03-2021 |
| 2 | DOC ISSUE #2 (50% SD) | 05-12-2021 |
| 1 | DOC ISSUE #1 (25% SD) | 11-15-2019 |
| *No.* | *Description* | *Date* |

*Key Plan*

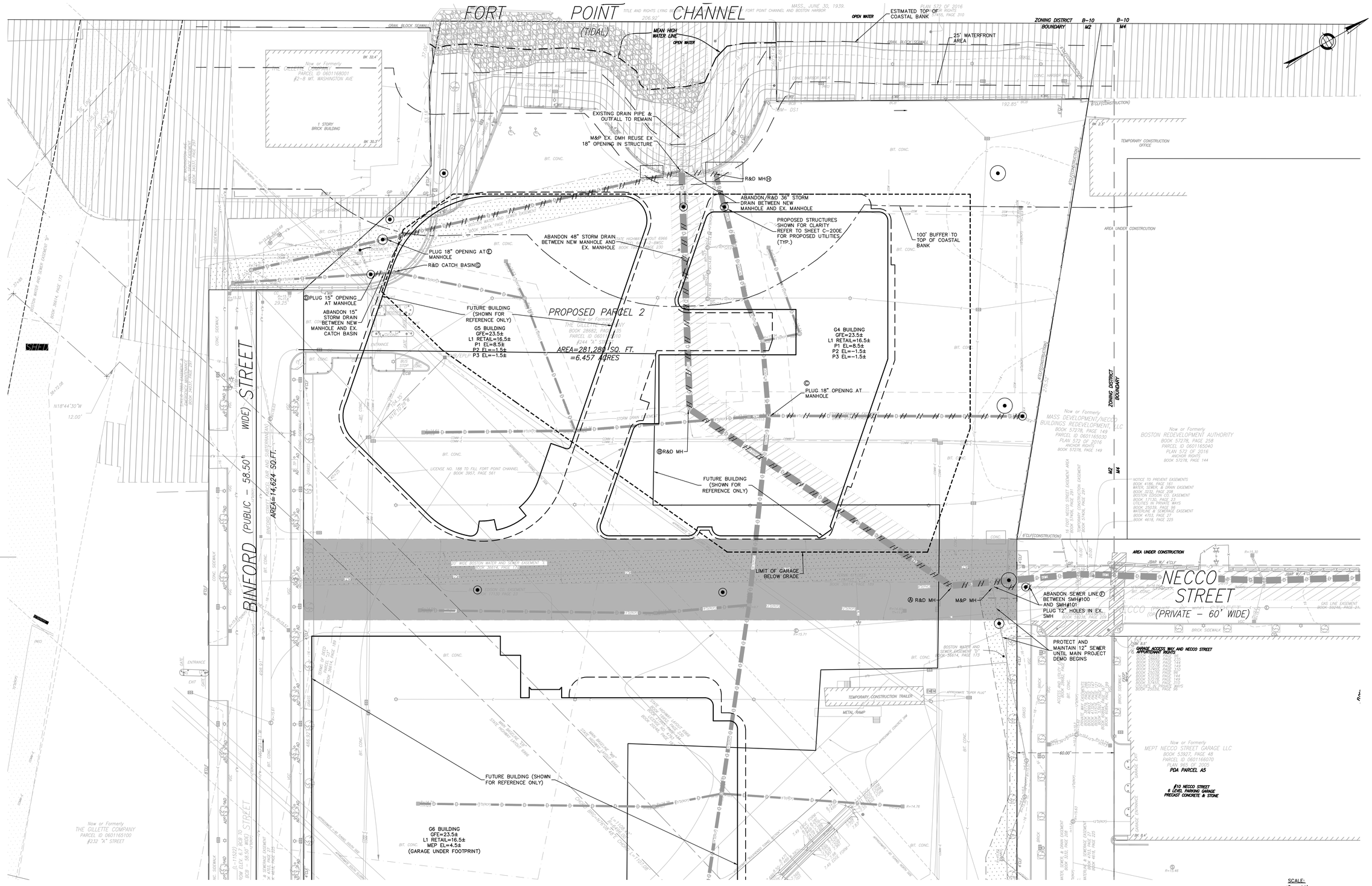



| | |
|---|---|
| *Issue Date:* | 05/12/2021 |
| *Scale* | AS NOTED |
| *Project No.* | 2030 |
| *Drawn By* | CDH |

COMMONWEALTH OF MASSACHUSETTS
CHRISTOPHER DEAN HODNEY
CIVIL
No. 52650
REGISTERED PROFESSIONAL ENGINEER
5/12/21

**SITE UTILITY ENABLING NOTES SHEET**

C-000E




| BWSC INSPECTION SIGN OFF LIST | DATE AND SIGNATURE | COMMENT | DYE TEST |
|---|---|---|---|
| Ⓐ R&D EXISTING MANHOLE | | | |
| Ⓑ R&D EXISTING MANHOLE | | | |
| Ⓒ PLUG 18" OPENING AT EX. MANHOLE | | | |
| Ⓓ PLUG 15" OPENING AT EX. MANHOLE | | | |
| Ⓔ PLUG 18" OPENING AT EX. MANHOLE | | | |
| Ⓕ PLUG 12" OPENING AT EX. MANHOLE | | | |
| Ⓖ R&D CATCH BASIN | | | |
| Ⓗ R&D EXISTING MANHOLE | | | |

BWSC SITE PLAN #20518

BWSC USE ONLY

SITE ADDRESS:
244-284 A STREET
BOSTON, MA 02210

NEW ACCOUNT NUMBER:
XXXX

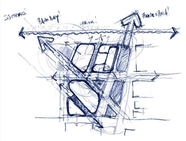
WARD / PARCEL NUMBER:
06 / 01165010

LAND USE CODE:
C

TYPE OF PREMISE:
LAB/COMMERCIAL

OWNER CONTACT INFORMATION:
STEVEN NG
RELATED BEAL
177 MILK STREET
BOSTON, MA 02109

# 244-284 A STREET



*Client*
ChannelSide Acquisitions, LLC
c/o The Related Companies, L.P.
60 Columbus Circle
New York, NY 10023
TEL:

*Architect*
Kohn Pedersen Fox Associates PC
Architects & Planning Consultants
11 West 42nd Street
New York, New York 10036
TEL: 212.977.6500 FAX: 212.956.2526

*Structural Engineer*
McNamara Salvia
101 Federal Street
Boston, MA 02110
TEL: 617-737-0040

*MEP Engineer*
WSP USA
88 Black Falcon Ave
Boston, MA 02210
TEL: 617-210-1708

*MEP Engineer- Lab*
BR+A Consulting Engineers
10 Guest Street, 4th flr
Boston, MA 02135
TEL: 617-254-0016

*Geotechnical*
Haley Aldrich
465 Medford St, Suite 200
Boston, MA 02129
TEL: 617-886-7400

*Civil*
Nitsch Engineering
2 Center Plaza, Suite 430
Boston, MA 02108
TEL:

*Landscape*
Halvorson Design Partnership, Inc
25 Kingston St 5th flr
Boston, MA 02111
TEL: 617-536-0380

*Code*
Jensen Hughes
3610 Commerce Drive, Suite 817
Baltimore, MD, 21227
TEL: 508-273-8484

*Marine*
Childs Engineering Company
34 William Way
Bellingham, MA 02019
TEL:

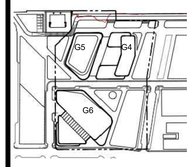
*Resiliency*
Arcadis
630 Plaza Drive, Suite 200
Highlands Ranch, CO 80129
TEL:

*Traffic*
Howard Stein Hudson
11 Beacon St, 10th flr, Suite 1010
Boston MA, 02108
TEL: 617-482-7081

*Vertical Transportation*
VDA
100 Summer St., Suite 1600
Boston, MA, 02110
TEL:

| Revision | | |
|---|---|---|
| 4 | CONSERVATION COMMISSION | 09-22-2021 |
| 3 | DOC ISSUE #3 (100% SD) | 09-03-2021 |
| 2 | DOC ISSUE #2 (50% SD) | 05-12-2021 |
| 1 | DOC ISSUE #1 (25% SD) | 11-15-2019 |
| *No.* | *Description* | *Date* |

*Key Plan*



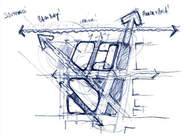

| | |
|---|---|
| Issue Date: | 09/12/2021 |
| Scale | AS NOTED |
| Project No. | 2930 |
| Drawn By | CDH |

COMMONWEALTH OF MASSACHUSETTS
CHRISTOPHER DEAN CONEY
No. 52650
REGISTERED PROFESSIONAL ENGINEER
09/22/21

**SITE UTILITY ENABLING DEMOLITION PLAN**

# C-100E

# 244-284 A STREET



*Client*
ChannelSide Acquisitions, LLC
c/o The Related Companies, L.P.
60 Columbus Circle
New York, NY 10023
TEL:

*Architect*
Kohn Pedersen Fox Associates PC
Architects & Planning Consultants
11 West 42nd Street
New York, New York 10036
TEL: 212.977.6500 FAX: 212.956.2526

*Structural Engineer*
McNamara Salvia
101 Federal Street
Boston, MA 02110
TEL: 617-737-0040

*MEP Engineer*
WSP USA
88 Black Falcon Ave
Boston, MA 02210
TEL: 617-210-1708

*MEP Engineer- Lab*
BR+A Consulting Engineers
10 Guest Street, 4th flr
Boston, MA 02135
TEL: 617-254-0016

*Geotechnical*
Haley Aldrich
465 Medford St, Suite 200
Boston, MA 02129
TEL: 617-886-7400

*Civil*
Nitsch Engineering
2 Center Plaza, Suite 430
Boston, MA 02108
TEL:

*Landscape*
Halvorson Design Partnership, Inc
25 Kingston St 5th flr
Boston, MA 02111
TEL: 617-536-0380

*Code*
Jensen Hughes
36 10 Commerce Drive, Suite 817
Baltimore, MD, 21227
TEL: 508-273-8484

*Marine*
Childs Engineering Company
34 William Way
Bellingham, MA 02019
TEL:

*Resiliency*
Arcadis
630 Plaza Drive, Suite 200
Highlands Ranch, CO 80129
TEL:

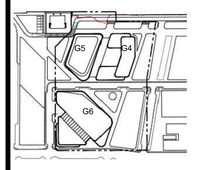
*Traffic*
Howard Stein Hudson
11 Beacon St, 10th flr, Suite 1010
Boston MA, 02108
TEL: 617-482-7081

*Vertical Transportation*
VDA
100 Summer St., Suite 1600
Boston, MA, 02110
TEL:

*Revision*

| No. | Description | Date |
|---|---|---|
| 4 | CONSERVATION COMMISSION | 09-22-2021 |
| 3 | DOC ISSUE #3 (100% SD) | 09-03-2021 |
| 2 | DOC ISSUE #2 (50% SD) | 05-12-2021 |
| 1 | DOC ISSUE #1 (25% SD) | 11-15-2019 |

*Key Plan*




| | |
|---|---|
| Issue Date: | 05/12/2021 |
| Scale | AS NOTED |
| Project No. | 2930 |
| Drawn By | CDH |

COMMONWEALTH OF MASSACHUSETTS
CHRISTOPHER DEAN HODNEY
CIVIL
No. 52650
REGISTERED PROFESSIONAL ENGINEER
11/22/21

## SITE UTILITY ENABLING PLAN

# C-200E



FORT POINT CHANNEL (TIDAL)

BINFORD STREET (PUBLIC – 58.50' WIDE)

A STREET (PUBLIC–VARIABLE WIDTH)

NECCO STREET (PRIVATE – 60' WIDE)

MEAN HIGH WATER LINE

OPEN WATER

ESTIMATED TOP OF COASTAL BANK

25' WATERFRONT AREA

ZONING DISTRICT BOUNDARY B-10 M2 / B-10 M4

EXISTING OUTFALL AND TIDE GATE STRUCTURE TO REMAIN

BWSC EASEMENT (TYP.)

100' BUFFER TO TOP OF COASTAL BANK

AREA UNDER CONSTRUCTION

TEMPORARY CONSTRUCTION OFFICE

TEMPORARY CONSTRUCTION TRAILER

METAL RAMP

FUTURE BUILDING (SHOWN FOR REFERENCE ONLY)

G5 BUILDING
GFE=23.5±
L1 RETAIL=16.5±
P1 EL=8.5±
P2 EL=–1.5±
P3 EL=–1.5±

G4 BUILDING
GFE=23.5±
L1 RETAIL=16.5±
P1 EL=8.5±
P2 EL=–1.5±
P3 EL=–1.5±

G6 BUILDING
GFE=23.5±
L1 RETAIL=16.5±
MEP EL=4.5±
(GARAGE UNDER FOOTPRINT)

Ⓜ DMH #202– 8' DIA.
RIM=13.58
INV IN=3.65
INV OUT=5.55
INV OUT=7.00

Ⓝ DMH #208
RIM=15.00
INV IN=2.30±
INV OUT=2.2±

Ⓞ DMH #207
RIM=14.50
INV IN(EX.)=6.4±
INV OUT=6.30

Ⓟ DMH #205
RIM=15.10
INV IN(DMH #204)=6.92
INV OUT=6.92

Ⓠ DMH #206
RIM=15.45
INV IN=6.68
INV OUT=6.58

Ⓡ DMH #204
RIM=15.15
INV IN(18"–EX.)=7.1±
INV IN(DMH #203)=7.35
INV OUT=7.05

Ⓢ DMH #203
RIM=14.94
INV IN(15"–EX.)=11.7±
INV OUT=11.57

Ⓣ DMH #201–8' DIA.
RIM=13.36
INV IN=4.55
INV IN=9.06
INV OUT=4.45

Ⓤ DMH #209
CONVERT EX. CB TO MANHOLE
RIM=13.21
INV IN=9.60 (EX.)
INV OUT=9.50

Ⓥ DMH #200– 8' DIA.
RIM=15.29
INV IN(EX.)=5.3±
INV OUT=5.20

Ⓦ SMH #100
RIM=15.70
INV IN(EX.)=7.10±(V.I.F)
INV OUT=7.00

Ⓧ SMH #101
RIM=15.30
INV OUT=10.27

Ⓨ SMH #101(5 FT. DIA.)
RIM=15.80
INV IN(12"–NORTH)=6.80
INV IN(EX.12"–WEST)=6.8±(V.I.F.)
INV OUT(EX.12"–EAST)=6.8±(V.I.F.)

Ⓐ SMH #102
RIM=15.20
INV IN=8.75
INV OUT=8.65

Ⓑ TIDEGATE CHAMBER #1
W. 18" TIDEGATE
INV IN=6.00
INV OUT=5.90

Ⓒ TIDEGATE CHAMBER #2
W. 60" TIDEGATE
RIM=14.8±
INV IN=2.50
INV OUT=2.40

Ⓓ CONNECT EX. 18" PIPE INTO PROP. MANHOLE
INV IN(18")=7.1

Ⓔ CONNECT TO EX. 15" PIPE

Ⓕ CONNECT TO EX. DRAIN MANHOLE
INV IN(TIDEGATE CHAMBER #1)=5.80
INV IN(TIDEGATE CHAMBER #2)=2.30

Ⓖ CONNECT TO MAIN WITH TAPPING SLEEVE AND VALVE

Ⓗ CONNECT TO EXISTING SEWER
INV=7.00

Ⓘ INSTALL MANHOLE ON EX. 12" SEWER LINE

Ⓙ 12" STUB FOR FUTURE INFILTRATION SYSTEM CONNECTION
INV=7.20

Ⓚ 46 DAYS PER DIEM TO CONSTRUCT 48" MAIN

Ⓛ 46 DAYS PER DIEM TO CONSTRUCT 18" MAIN

Ⓜ 25 DAYS PER DIEM TO CONSTRUCT 18" MAIN

Ⓝ REROUTE ELECTRIC CONDUIT AROUND PROPOSED MANHOLE

Ⓞ TEMPORARY STORM DRAIN CONNECTION UNTIL PARKING LOT IS DEMOED

Ⓟ NEW 20' WIDE BWSC UTILITY EASEMENT (PARTIALLY ON ABUTTER'S PROPERTY)

Ⓠ 18" CPP

Ⓡ NEW PRIVATE STORM DRAINAGE EASEMENT

Ⓢ 54" RCP CLASS IV

Ⓣ 60" RCP CLASS IV

Ⓤ 36" CPP

Ⓥ 18" RCP CLASS IV

Ⓦ 15" RCP CLASS IV

Ⓧ 6" ZINC COATED CLDI

Ⓨ 8" SDR 35 PVC

Ⓩ 15" SDR 35 PVC

AA 6" ZINC COATED CLDI

AB FIRE HYDRANT

AC FIRE HYDRANT

EMH #1

EMH #2

EMH #3

ELECTRIC DUCTBANK (REFER TO ELECTRICAL PLANS)

6W–5"

LIMIT OF GARAGE BELOW GRADE

GARAGE ACCESS WAY AND NECCO STREET APPURTENANT RIGHTS

Now or Formerly THE GILLETTE COMPANY PARCEL ID 0601165100 #232 "A" STREET

Now or Formerly THE GILLETTE COMPANY BOOK 28662, PAGE 233 PARCEL ID 0601165010 #244 "A" STREET

Now or Formerly BOSTON REDEVELOPMENT AUTHORITY BOOK 57278, PAGE 258 PARCEL ID 0601165040 PLAN 572 OF 2016 ANCHOR RIGHTS BOOK 57278, PAGE 144

Now or Formerly MASS. PORT AUTHORITY/NECCO BUILDING ASSESSMENT, LLC PARCEL ID 0601165030

Now or Formerly MEPT NECCO STREET GARAGE LLC BOOK 53927, PAGE 48 PARCEL ID 0601166070 PLAN 965 OF 2005 PDA PARCEL A5

#10 NECCO STREET
6 LEVEL PARKING GARAGE
PRECAST CONCRETE & STONE

SCALE:
1" = 20'
20 10 0 20 40

## BWSC INSPECTION SIGN OFF LIST

| | DATE AND SIGNATURE | COMMENT | DYE TEST |
|---|---|---|---|
| (I) SMH#100 | | | |
| (J) SMH#101 | | | |
| (K) DMH#200 | | | |
| (L) DMH#201 | | | |
| (M) DMH#202 | | | |
| (N) DMH#203 | | | |
| (O) DMH#204 | | | |
| (P) DMH#205 | | | |
| (Q) DMH#206 | | | |
| (R) DMH#207 | | | |
| (S) DMH#208 | | | |
| (T) DMH#209 | | | |
| (U) CONNECT TO EXISTING SEWER MANHOLE | | | |
| (V) CONNECT TO EXISTING 18" DRAIN PIPE | | | |
| (W) CONNECT TO EXISTING 15" DRAIN PIPE | | | |
| (X) TIDEGATE CHAMBER #1 | | | |
| (Y) TIDEGATE CHAMBER #2 | | | |
| (Z) CONNECT TO EXISTING DRAIN MANHOLE | | | |
| (AA) SMH#102 | | | |
| (AB) FIRE HYDRANT | | | |
| (AC) FIRE HYDRANT | | | |

SITE ADDRESS:
244–284 A STREET
BOSTON, MA 02210

NEW ACCOUNT NUMBER:
XXXX

WARD / PARCEL NUMBER:
06 / 01165010

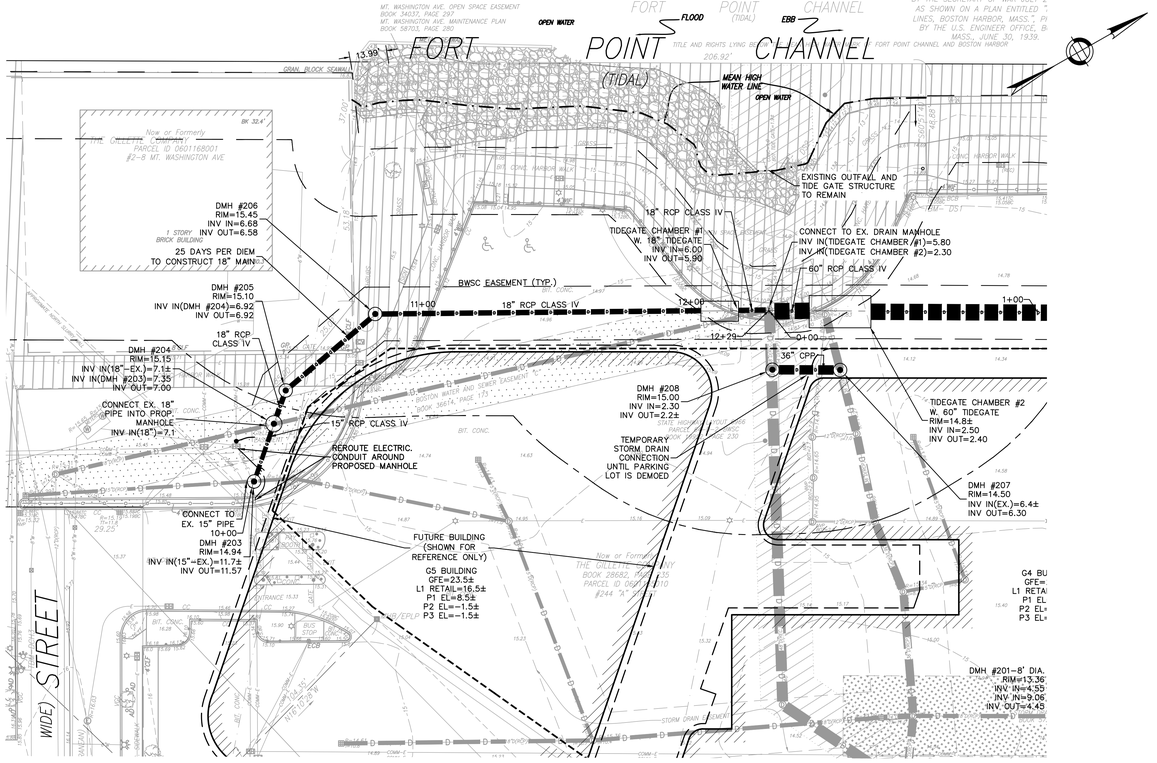
LAND USE CODE:
C

TYPE OF PREMISE:
LAB/COMMERCIAL

OWNER CONTACT INFORMATION:
STEVEN NG
RELATED BEAL
177 MILK STREET
BOSTON, MA 02109

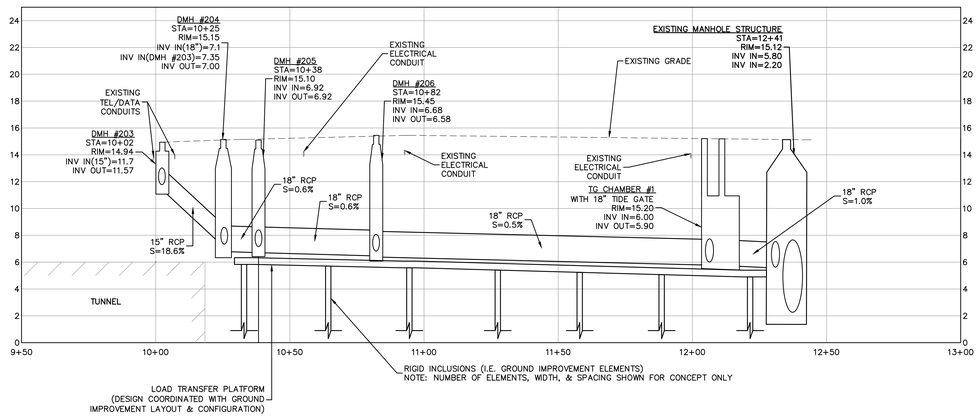
BWSC SITE PLAN #20518

BWSC USE ONLY




Binford Street Storm Drain Plan View

SCALE: 1" = 20'




Binford Street Storm Drain

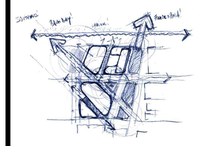
VERTICAL SCALE: 1"=4'
HORIZONTAL SCALE: 1"=20'

## NOTES:

1. ALL RCP PIPES SHALL BE CLASS IV
2. ALL PVC PIPES SHALL BE SDR 35

SCALE:
1" = 20'
20 10 0 0 20 40
4 2 0 4 8
1" = 4'

# 244-284 A STREET



*Client*
ChannelSide Acquisitions, LLC
c/o The Related Companies, L.P.
60 Columbus Circle
New York, NY 10023
TEL:

*Architect*
Kohn Pedersen Fox Associates PC
Architects & Planning Consultants
11 West 42nd Street
New York, New York 10036
TEL: 212.977.6500 FAX: 212.956.2526

*Structural Engineer*
McNamara Salvia
101 Federal Street
Boston, MA 02110
TEL: 617-737-0040

*MEP Engineer*
WSP USA
88 Black Falcon Ave
Boston, MA 02210
TEL: 617-210-1708

*MEP Engineer- Lab*
BR+A Consulting Engineers
10 Guest Street, 4th flr
Boston, MA 02135
TEL: 617-254-0016

*Geotechnical*
Haley Aldrich
465 Medford St, Suite 200
Boston, MA 02129
TEL: 617-886-7400

*Civil*
Nitsch Engineering
2 Center Plaza, Suite 430
Boston, MA 02108
TEL:

*Landscape*
Halvorson Design Partnership, Inc
25 Kingston St 5th flr
Boston, MA 02111
TEL: 617-536-0380

*Code*
Jensen Hughes
3610 Commerce Drive, Suite 817
Baltimore, MD, 21227
TEL: 508-273-8484

*Marine*
Childs Engineering Company
34 William Way
Bellingham, MA 02019
TEL:

*Resiliency*
Arcadis
630 Plaza Drive, Suite 200
Highlands Ranch, CO 80129
TEL:

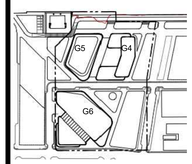
*Traffic*
Howard Stein Hudson
11 Beacon St, 10th flr, Suite 1010
Boston MA, 02108
TEL: 617-482-7081

*Vertical Transportation*
VDA
100 Summer St., Suite 1600
Boston, MA, 02110
TEL:

*Revision*

| No. | Description | Date |
|---|---|---|
| 4 | CONSERVATION COMMISSION | 09-22-2021 |
| 3 | DOC ISSUE #3 (100% SD) | 09-03-2021 |
| 2 | DOC ISSUE #2 (50% SD) | 05-12-2021 |
| 1 | DOC ISSUE #1 (25% SD) | 11-15-2019 |

*Key Plan*

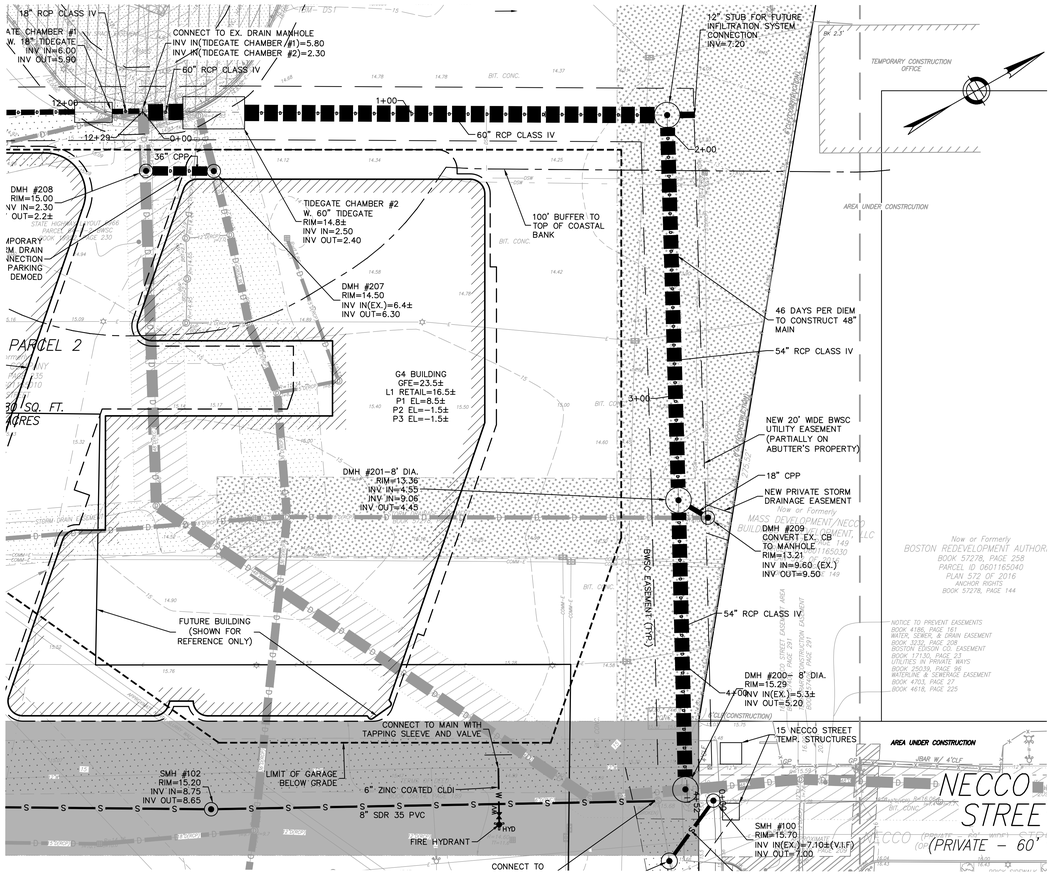



| | |
|---|---|
| *Issue Date:* | 05/12/2021 |
| *Scale* | AS NOTED |
| *Project No.* | 2930 |
| *Drawn By:* | CDH |

COMMONWEALTH OF MASSACHUSETTS
CHRISTOPHER DEAN HOUNEY
CIVIL
No. 52650
REGISTERED PROFESSIONAL ENGINEER
5/12/21

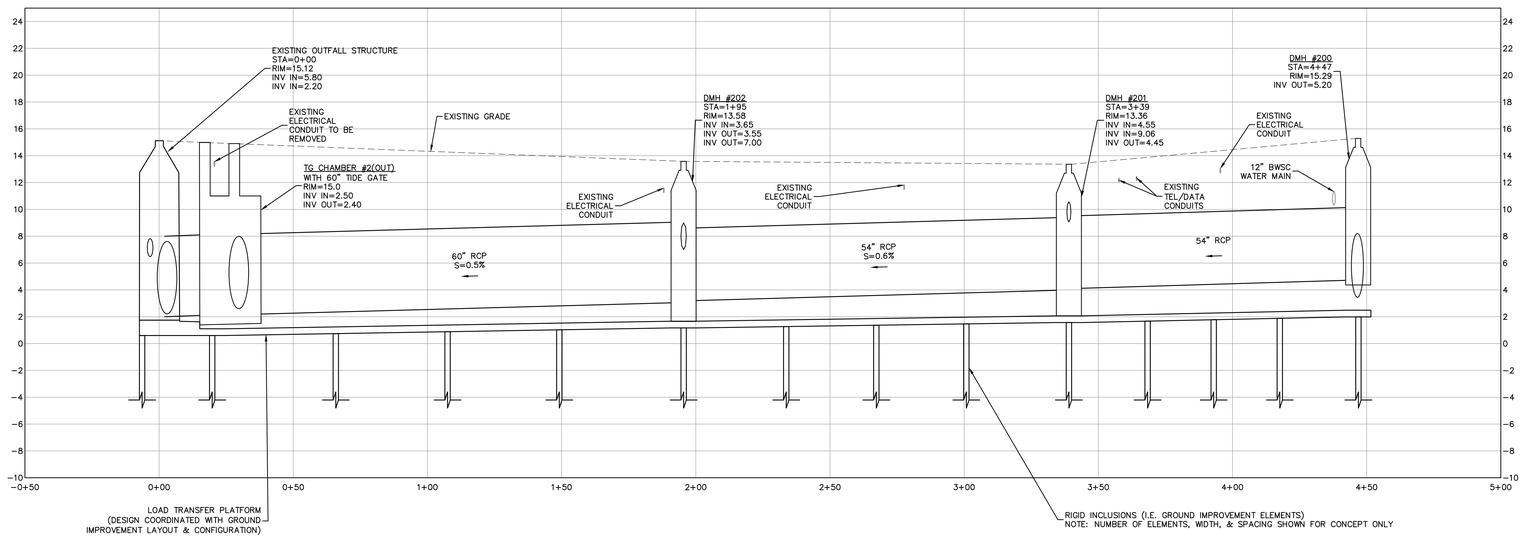
## SITE UTILITY ENABLING PROFILE

C-201E




Necco Street Storm Drain Plan View

SCALE: 1" = 20'




Necco Street Storm Drain

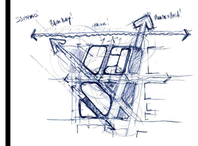
VERTICAL SCALE: 1"=4'
HORIZONTAL SCALE: 1"=20'

## NOTES:

1. ALL RCP PIPES SHALL BE CLASS IV
2. ALL PVC PIPES SHALL BE SDR 35

SCALE:
1" = 20'
20 10 0 20 40
4 2 0 4 8
1" = 4'

# 244-284 A STREET



*Client*
ChannelSide Acquisitions, LLC
c/o The Related Companies, L.P.
60 Columbus Circle
New York, NY 10023
TEL:

*Architect*
Kohn Pedersen Fox Associates PC
Architects & Planning Consultants
11 West 42nd Street
New York, New York 10036
TEL: 212.977.6500 FAX: 212.956.2526

*Structural Engineer*
McNamara Salvia
101 Federal Street
Boston, MA 02110
TEL: 617-737-0040

*MEP Engineer*
WSP USA
88 Black Falcon Ave
Boston, MA 02210
TEL: 617-210-1708

*MEP Engineer- Lab*
BR+A Consulting Engineers
10 Guest Street, 4th flr
Boston, MA 02135
TEL: 617-254-0016

*Geotechnical*
Haley Aldrich
465 Medford St, Suite 200
Boston, MA 02129
TEL: 617-886-7400

*Civil*
Nitsch Engineering
2 Center Plaza, Suite 430
Boston, MA 02108
TEL:

*Landscape*
Halvorson Design Partnership, Inc
25 Kingston St 5th flr
Boston, MA 02111
TEL: 617-536-0380

*Code*
Jensen Hughes
3610 Commerce Drive, Suite 817
Baltimore, MD, 21227
TEL: 508-273-8484

*Marine*
Childs Engineering Company
34 William Way
Bellingham, MA 02019
TEL:

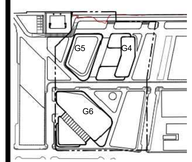
*Resiliency*
Arcadis
630 Plaza Drive, Suite 200
Highlands Ranch, CO 80129
TEL:

*Traffic*
Howard Stein Hudson
11 Beacon St, 10th flr, Suite 1010
Boston MA, 02108
TEL: 617-482-7081

*Vertical Transportation*
VDA
100 Summer St., Suite 1600
Boston, MA, 02110
TEL:

| Revision | | |
|---|---|---|
| 4 | CONSERVATION COMMISSION | 09-22-2021 |
| 3 | DOC ISSUE #3 (100% SD) | 09-03-2021 |
| 2 | DOC ISSUE #2 (50% SD) | 05-12-2021 |
| 1 | DOC ISSUE #1 (25% SD) | 11-15-2019 |
| No. | Description | Date |

*Key Plan*

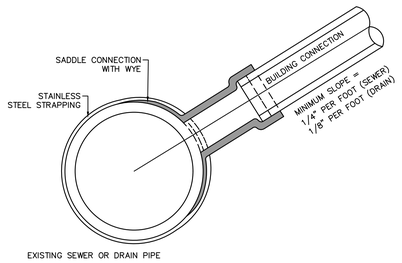



| | |
|---|---|
| Issue Date: | 05/12/2021 |
| Scale | AS NOTED |
| Project No. | 2930 |
| Drawn By: | CDH |

COMMONWEALTH OF MASSACHUSETTS
CHRISTOPHER DEAN HOONEY
CIVIL
No. 52650
REGISTERED PROFESSIONAL ENGINEER
5/12/21

# SITE UTILITY ENABLING PROFILE

# C-202E

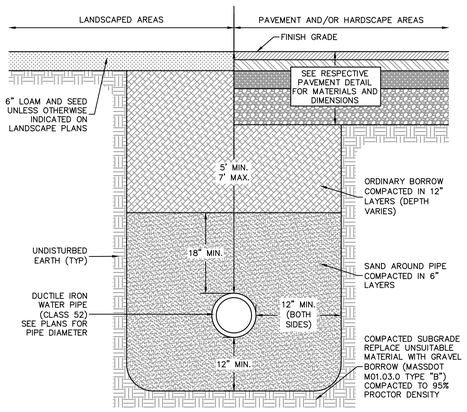



NOTES:

1. FULL PVC OR IRON SADDLE MAY BE USED TO CONNECT TO EXISTING PVC, CLAY, CONCRETE OR IRON PIPE.
2. SADDLES MUST HAVE RUBBER GASKETS AND SHALL BE TIGHTENED WITH STRAPS. SADDLES WILL NOT BE CEMENTED ONTO THE PIPE.
3. FULL WYE CONNECTION FITTINGS MAY BE USED.
4. PIPE SHALL BE CUT TO CONFORM TO THE OPENING IN THE SADDLE.
5. CONNECTIONS DIRECTLY INTO THE EXISTING PIPE WITHOUT A SADDLE OR A FULL WYE FITTING ARE NOT ALLOWED.

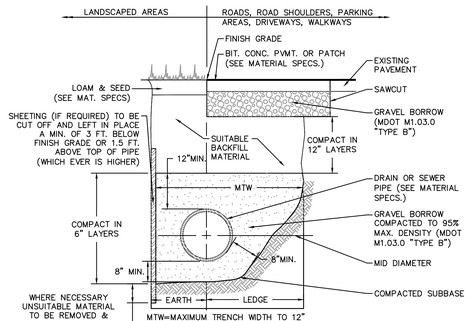
## TYPICAL SADDLE CONNECTION DETAIL TO EXISTING DRAIN OR SEWER (6" TO 15")

NOT TO SCALE



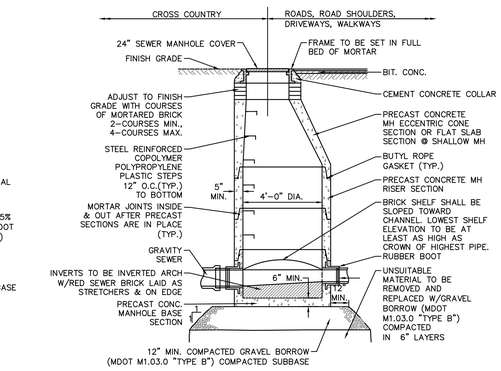

## WATER TRENCH DETAIL

NOT TO SCALE



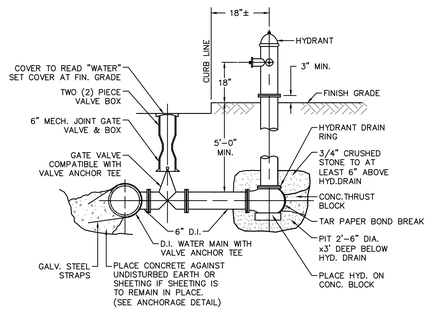

## STANDARD TRENCH DETAIL FOR UTILITY PIPE

NOT TO SCALE




## TYPICAL SEWER MANHOLE DETAIL

NOT TO SCALE



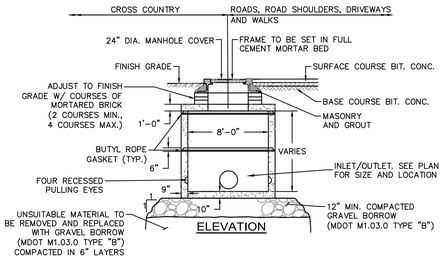

NOTE: ALL JOINTS ON HYDRANT BRANCH TO BE RESTRAINED JOINTS

## FIRE HYDRANT DETAIL

NOT TO SCALE

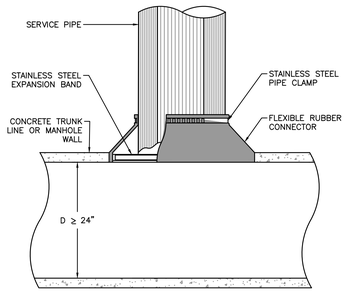
NOTES:

1. CONCRETE STRENGTH 5,000 PSI AT 28 DAYS.
2. CEMENT, PORTLAND TYPE 1 OR 111 PER ASTM C150-81.
3. REINFORCING PER ASTM A-615-79 GRADE 60, 1" MINIMUM COVER.
4. DESIGN LOADING PER AASHTO HS-20-44 AND ACI 318-83.
5. CONSTRUCTION JOINTS SEALED WITH 1" DIA. ASPHALT ROPE TAR WHERE APPLICABLE.




## 8-FOOT DRAIN MANHOLE DETAIL

NOT TO SCALE

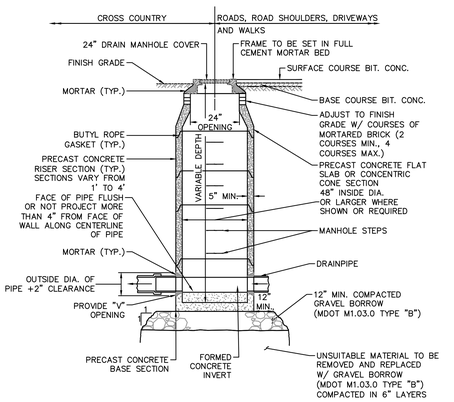



NOTES:

1. OPENING IN CONCRETE WALL SHALL BE CORED USING HIGH SPEED DIAMOND DRILL.
2. ALL METAL FIXTURES SHALL BE OF STAINLESS STEEL.
3. SERVICE LINE SHALL BE FLUSH WITH THE INSIDE OF THE CONCRETE PIPE OR WALL.
4. IF TRUNK LINE DIAMETER IS LESS THAN 24" THEN A SADDLE TYPE CONNECTION WILL BE USED.

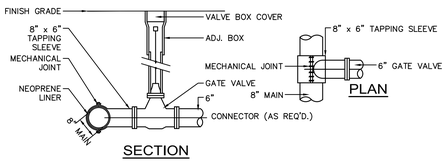
## TYPICAL FIELD CONNECTION TO LARGE CONCRETE PIPE OR CONCRETE MANHOLE DETAIL

NOT TO SCALE



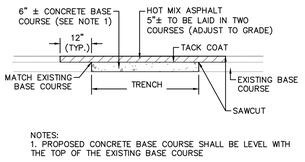

## TYPICAL DRAIN MANHOLE DETAIL

NOT TO SCALE




## TAPPING SLEEVE, VALVE & BOX DETAIL

NOT TO SCALE

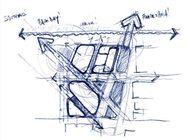



NOTES:
1. PROPOSED CONCRETE BASE COURSE SHALL BE LEVEL WITH THE TOP OF THE EXISTING BASE COURSE

## PAVEMENT RESTORATION OVER TRENCH DETAIL

NOT TO SCALE

# 244-284 A STREET




*Client*
ChannelSide Acquisitions, LLC
c/o The Related Companies, L.P.
60 Columbus Circle
New York, NY 10023
TEL:

*Architect*
Kohn Pedersen Fox Associates PC
Architects & Planning Consultants
11 West 42nd Street
New York, New York 10036
TEL: 212.977.6500 FAX: 212.956.2526

*Structural Engineer*
McNamara Salvia
101 Federal Street
Boston, MA 02110
TEL: 617-737-0040

*MEP Engineer*
WSP USA
88 Black Falcon Ave
Boston, MA 02210
TEL: 617-210-1708

*MEP Engineer- Lab*
BR+A Consulting Engineers
10 Guest Street, 4th flr
Boston, MA 02135
TEL: 617-254-0016

*Geotechnical*
Haley Aldrich
465 Medford St, Suite 200
Boston, MA 02129
TEL: 617-886-7400

*Civil*
Nitsch Engineering
2 Center Plaza, Suite 430
Boston, MA 02108
TEL:

*Landscape*
Halvorson Design Partnership, Inc
25 Kingston St 5th flr
Boston, MA 02111
TEL: 617-536-0380

*Code*
Jensen Hughes
3610 Commerce Drive, Suite 817
Baltimore, MD, 21227
TEL: 508-273-8484

*Marine*
Childs Engineering Company
34 William Way
Bellingham, MA 02019
TEL:

*Resiliency*
Arcadis
630 Plaza Drive, Suite 200
Highlands Ranch, CO 80129
TEL:

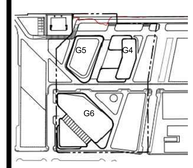
*Traffic*
Howard Stein Hudson
11 Beacon St, 10th flr, Suite 1010
Boston MA, 02108
TEL: 617-482-7081

*Vertical Transportation*
VDA
100 Summer St., Suite 1600
Boston, MA, 02110
TEL:


*Revision*

| No. | Description | Date |
|---|---|---|
| 4 | CONSERVATION COMMISSION | 09-22-2021 |
| 3 | DOC ISSUE #3 (100% SD) | 09-03-2021 |
| 2 | DOC ISSUE #2 (50% SD) | 05-12-2021 |
| 1 | DOC ISSUE #1 (25% SD) | 11-15-2019 |

*Key Plan*

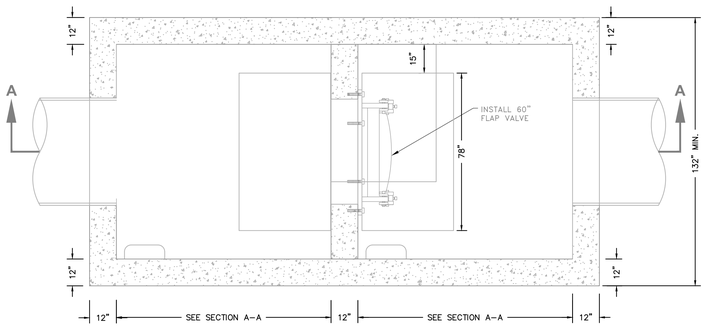



| | |
|---|---|
| *Issue Date:* | 05/12/2021 |
| *Scale* | AS NOTED |
| *Project No.* | 2930 |
| *Drawn By* | CDH |

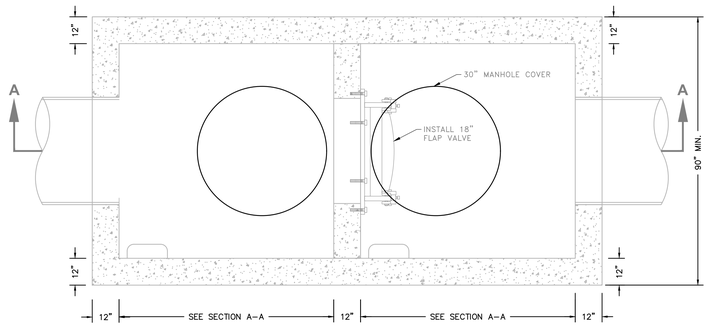
COMMONWEALTH OF MASSACHUSETTS
CHRISTOPHER DEAN HODNEY
CIVIL
No. 52650
REGISTERED PROFESSIONAL ENGINEER
5/12/21

**SITE UTILITY ENABLING DETAILS SHEET**

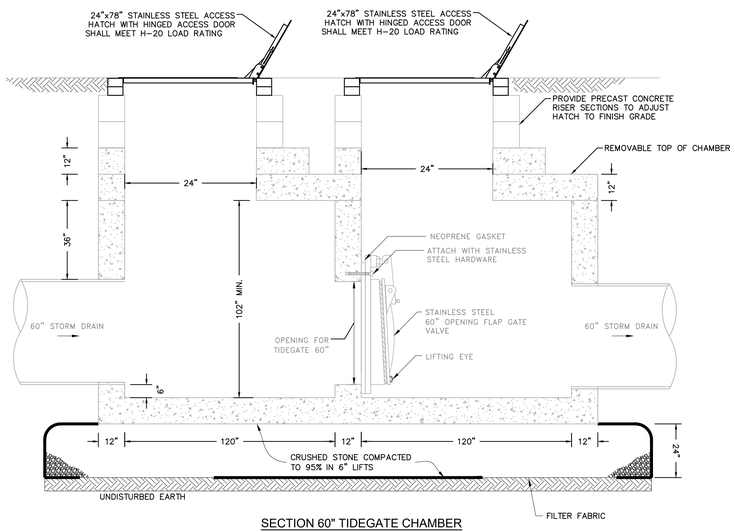
# C-300E




PLAN 60" TIDEGATE CHAMBER




PLAN 18" TIDEGATE CHAMBER

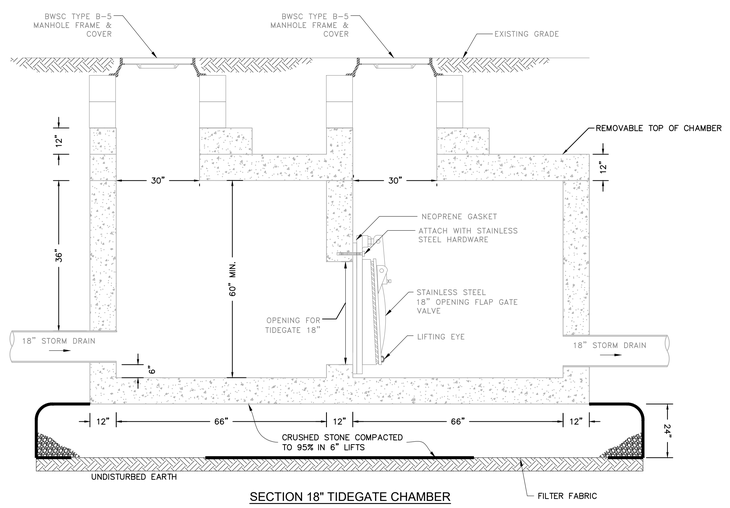



SECTION 60" TIDEGATE CHAMBER

TIDE GATE CHAMBER NOTES:

1. DESIGN LOADING – AASHTO HS–20–44 / CONCRETE: 5,000 PSI MINIMUM AFTER 28 DAYS.
2. ALL HARDWARE WITHIN THE CHAMBER SHALL BE SS 316 STAINLESS STEEL.

PLAN 60" TIDEGATE CHAMBER

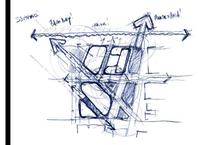



SECTION 18" TIDEGATE CHAMBER

TIDE GATE CHAMBER NOTES:

1. DESIGN LOADING – AASHTO HS–20–44 / CONCRETE: 5,000 PSI MINIMUM AFTER 28 DAYS.
2. ALL HARDWARE WITHIN THE CHAMBER SHALL BE SS 316 STAINLESS STEEL.

# 244-284 A STREET



*Client*
ChannelSide Acquisitions, LLC
c/o The Related Companies, L.P.
60 Columbus Circle
New York, NY 10023
TEL:

*Architect*
Kohn Pedersen Fox Associates PC
Architects & Planning Consultants
11 West 42nd Street
New York, New York 10036
TEL: 212.977.6500 FAX: 212.956.2526

*Structural Engineer*
McNamara Salvia
101 Federal Street
Boston, MA 02110
TEL: 617-737-0040

*MEP Engineer*
WSP USA
88 Black Falcon Ave
Boston, MA 02210
TEL: 617-210-1708

*MEP Engineer- Lab*
BR+A Consulting Engineers
10 Guest Street, 4th flr
Boston, MA 02135
TEL: 617-254-0016

*Geotechnical*
Haley Aldrich
465 Medford St, Suite 200
Boston, MA 02129
TEL: 617-886-7400

*Civil*
Nitsch Engineering
2 Center Plaza, Suite 430
Boston, MA 02108
TEL:

*Landscape*
Halvorson Design Partnership, Inc
25 Kingston St 5th flr
Boston, MA 02111
TEL: 617-536-0380

*Code*
Jensen Hughes
3610 Commerce Drive, Suite 817
Baltimore, MD, 21227
TEL: 508-273-8484

*Marine*
Childs Engineering Company
34 William Way
Bellingham, MA 02019
TEL:

*Resiliency*
Arcadis
630 Plaza Drive, Suite 200
Highlands Ranch, CO 80129
TEL:

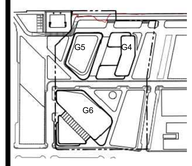
*Traffic*
Howard Stein Hudson
11 Beacon St, 10th flr, Suite 1010
Boston MA, 02108
TEL: 617-482-7081

*Vertical Transportation*
VDA
100 Summer St., Suite 1600
Boston, MA, 02110
TEL:

*Revision*

| No. | Description | Date |
|---|---|---|
| 4 | CONSERVATION COMMISSION | 09-22-2021 |
| 3 | DOC ISSUE #3 (100% SD) | 09-03-2021 |
| 2 | DOC ISSUE #2 (50% SD) | 05-12-2021 |
| 1 | DOC ISSUE #1 (25% SD) | 11-15-2019 |

*Key Plan*




| | |
|---|---|
| *Issue Date:* | 05/12/2021 |
| *Scale* | AS NOTED |
| *Project No.* | 2930 |
| *Drawn By* | CDH |

COMMONWEALTH OF MASSACHUSETTS
CHRISTOPHER DEAN HODNEY
CIVIL
No. 52650
REGISTERED PROFESSIONAL ENGINEER
5/12/21

**SITE UTILITY ENABLING DETAILS SHEET**

# C-301E