NOTICE OF INTENT

1 Westinghouse Plaza
Units 3 and 5
Hyde Park – Boston, Massachusetts

SUBMITTED TO:
City of Boston
Conservation Commission
City Hall Plaza, Room 709
Boston, MA 02201

PREPARED FOR:
BIV–1WH Unit 3, LLC & BIV–1WH Unit 5, LLC
c/o The Seyon Group
118 Newbury Street, 3rd Floor
Boston, MA 02116

PREPARED BY:
Lucas Environmental, LLC
500A Washington Street
Quincy, Massachusetts 02169

IN ASSOCIATION WITH:
RJ O'Connell & Associates, Inc.
80 Montvale Avenue, Suite 201
Stoneham, MA 02180

REPORT DATE: April 3, 2019

LUCAS ENVIRONMENTAL, LLC

LUCAS
ENVIRONMENTAL, LLC

500A Washington Street, Quincy, MA 02169

April 3, 2019

Boston Conservation Commission
City Hall Plaza, Room 709
Boston, MA 02201

Re: Notice of Intent
1 Westinghouse Plaza, Units 3 & 5
Hyde Park – Boston, Massachusetts 02136

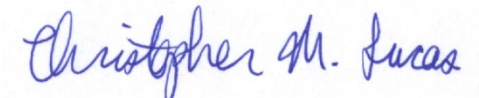
Members of the Boston Conservation Commission:

On behalf of BIV – 1 WH Unit 3, LLC & BIV – 1WH Unit 5, LLC, and in association with R.J. O'Connell & Associates, Inc., Lucas Environmental, LLC (LE) is pleased to submit this Notice of Intent (NOI) to the Boston Conservation Commission for the redevelopment of 1 Westinghouse Plaza (Units 3 & 5) in the Hyde Park neighborhood of Boston, Massachusetts. The proposed work includes the partial demolition of Unit 5 to construct a driveway to improve access to the existing paved yard for additional parking, stormwater improvements, and repaving of parking areas. Portions of the proposed work will occur within the 100-Foot Buffer Zone to Inland Bank and the 25-Foot Riverfront Area of Mother Brook. This NOI is submitted in accordance with the Massachusetts Wetlands Protection Act (WPA; M.G.L. Ch. 131, Section 40) and implementing regulations (310 CMR 10.00 et seq.).

Enclosed please find one original and seven (7) copies of the NOI, two (2) copies of the Stormwater Report, and eight copies (8) copies of the Site Plans reduced to 11" x 17". The NOI application package includes the WPA Form 3, project narrative, figures, photographic documentation, abutter notification, filing fees, and MassDEP data forms. Site Plans and a stormwater report are provided separately. A link to an electronic copy of the pdf file of the NOI application and supporting documentation will be provided concurrently with this submittal. We respectfully request that you place this matter on your agenda for the April 17, 2019 Public Hearing.

If you have any questions, please do not hesitate to contact me at 617.405.4140 or cml@lucasenvironmental.net. Thank you for your consideration in this matter.

Sincerely,
LUCAS ENVIRONMENTAL, LLC



Christopher M. Lucas, PWS, CWS
Environmental Consultant/Soil Scientist

cc: BIV – 1 WH Unit 3, LLC & BIV – 1WH Unit 5, LLC c/o The Seyon Group
R.J. O'Connell & Associates, Inc.
MassDEP – NERO

LUCAS ENVIRONMENTAL, LLC

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SECTION I – FORMS

Checklist for Filing a Notice of Intent with Boston Conservation Commission

In order for the Boston Conservation Commission to effectively process your Notice of Intent, BCC requests that you complete the checklist below and include it with your submission. If you should need assistance please contact Commission staff: 617-635-3850 (cc@boston.gov).

To the Conservation Commission:

- ☒ Eight copies (a signed original and 7 copies) of a completed Notice of Intent (WPA Form 3)
- ☒ Eight copies of plans (reduced to 11" X 17") in their final form with engineer's stamp affixed supporting calculations and other documentation necessary to completely describe the proposed work and mitigating measures. Plans must include existing conditions, the proposed project, erosion controls and mitigation measures, grading and spot elevations and all wetland resource areas and associated buffer zones.
- ☒ Eight copies of an 8 ½" x 11" section of the USGS quadrangle map of the area, containing sufficient information for the Conservation Commission and the Department to locate the site of the work.
- ☒ (If applicable) Eight copies the Federal Emergency Management Agency Flood Insurance Rate Map for the project site. FEMA Flood Maps: https://msc.fema.gov/portal.
- ☒ Determination regarding the Natural Heritage and Endangered Species Program: Review Section C. Other Applicable Standards and Requirements of the Notice of Intent, page 4 of 8, pertaining to wildlife habitat. The Conservation Commission and the Natural Heritage & Endangered Species Program have the maps necessary to make this determination.
- ☒ (If applicable) Two hard copies of a Stormwater Report to document compliance with the Stormwater Management Standards per 310 CMR 10.05(6)(k)-(q), including associated drainage calculations for rooftops, parking lots, driveways, etc., for the required design storm events.
- ☒ (If applicable) Eight hard copies of the Checklist for Stormwater Report
- ☒ Details of the stormwater management system, including: catch basins, oil separating tanks, detention basins, outfalls, sewer connections, etc.
- ☒ Any photographs related to the project representing the wetland resource areas.
- ☒ A project narrative describing the following: a brief overview of the entire project, the work proposed within wetland resource areas and/or buffer zones; how the performance standards specific to the wetland resource areas will be met; construction equipment and material involved; and measures to protect wetland resource areas and mitigate impacts.
- ☒ Abutters List, Affidavit of Service and Abutter Notification, filed concurrently with the Notice of Intent.
- ☐ (If applicable) Eight copies of the BPDA Climate Resiliency Checklist (for new buildings). This can be completed online at http://www.bostonplans.org/planning/planning-initiatives/article-37-green-building-guidelines. Please print the pdf that you will receive via email after completion and include it in your submission.
- ☒ **Electronic copies. Documents may be submitted via email, or via an email link to downloadable documents.**

To minimize the use of non-recyclable materials ***please do not include vinyl or plastic binders, bindings, folders or covers with the filing.*** Staples and binder clips are good choices.

Updated 1/14/19

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

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

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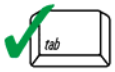
Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



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):

a. Street Address	b. City/Town	c. Zip Code
1 Westinghouse Plaza, Units 3 & 5	Boston	02136

Latitude and Longitude:

d. Latitude	e. Longitude
42.24554	71.13212

f. Assessors Map/Plat Number	g. Parcel /Lot Number
Unit 3: 1812152016; Unit 5: 1812152020	

2. Applicant:

a. First Name	b. Last Name
Bryan	Blake

c. Organization: BIV - 1WH Unit 3 & BIV - 1WH Unit 5, c/o The Seyon Group

d. Street Address: 118 Newbury Street, 3rd Floor

e. City/Town	f. State	g. Zip Code
Boston	MA	02116

h. Phone Number	i. Fax Number	j. Email Address
857.350.4583		bblake@seyon.com

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):

a. First Name	b. Last Name
Christopher	Lucas

c. Company: Lucas Environmental, LLC

d. Street Address: 500A Washington Street

e. City/Town	f. State	g. Zip Code
Quincy	MA	02169

h. Phone Number	i. Fax Number	j. Email address
617.405.4140	617.405.4465	cml@lucasenvironmental.net

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

a. Total Fee Paid	b. State Fee Paid	c. City/Town Fee Paid
$1,575.00 Per BCC	$775.00	$1,500.00

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A. General Information (continued)

6. General Project Description:

The proposed project involves the partial demolition of an existing structure and reconstruction of a parking lot within the 100-Foot Buffer Zone to Inland Bank, and the 25-Foot Riverfront Area of Mother Brook.

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
45948	170

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.

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

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

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ☐ 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 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 3. cubic feet of flood storage lost	2. square feet 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	Mother Brook 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: 24,637 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.
2,262 - Degraded	2,262 - Degraded	N/A

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

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

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

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

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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 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 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 1. cubic yards dredged	
l. ☐ Land Subject to Coastal Storm Flowage	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

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C. Other Applicable Standards and Requirements

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

Streamlined Massachusetts Endangered Species Act/Wetlands Protection Act Review

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

   August 1, 2017
   b. Date of map

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

   c. Submit Supplemental Information for Endangered Species Review*

      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.

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

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

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

(d) ☐ Vegetation cover type map of site

(e) ☐ Project plans showing Priority & Estimated Habitat boundaries

(f) OR Check One of the Following

1. ☐ Project is exempt from MESA review.
Attach applicant letter indicating which MESA exemption applies. (See 321 CMR 10.14, http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/mesa/mesa_exemptions.htm; the NOI must still be sent to NHESP if the project is within estimated habitat pursuant to 310 CMR 10.37 and 10.59.)

2. ☐ Separate MESA review ongoing.
a. NHESP Tracking # _____ b. Date submitted to NHESP _____

3. ☐ Separate MESA review completed.
Include copy of NHESP "no Take" determination or valid Conservation & Management Permit with approved plan.

3. For coastal projects only, is any portion of the proposed project located below the mean high water line or in a fish run?

a. ☐ Not applicable – project is in inland resource area only b. ☐ Yes ☐ No

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

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

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

North Shore - Hull to New Hampshire border:

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

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

Massachusetts Department of Environmental Protection
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C. Other Applicable Standards and Requirements (cont'd)

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

4. Is any portion of the proposed project within an Area of Critical Environmental Concern (ACEC)?

   a. ☐ Yes ☒ No If yes, provide name of ACEC (see instructions to WPA Form 3 or MassDEP Website for ACEC locations). **Note:** electronic filers click on Website.

   b. ACEC

5. Is any portion of the proposed project within an area designated as an Outstanding Resource Water (ORW) as designated in the Massachusetts Surface Water Quality Standards, 314 CMR 4.00?

   a. ☐ Yes ☒ No

6. Is any portion of the site subject to a Wetlands Restriction Order under the Inland Wetlands Restriction Act (M.G.L. c. 131, § 40A) or the Coastal Wetlands Restriction Act (M.G.L. c. 130, § 105)?

   a. ☐ Yes ☒ No

7. Is this project subject to provisions of the MassDEP Stormwater Management Standards?

   a. ☒ Yes. Attach a copy of the Stormwater Report as required by the Stormwater Management Standards per 310 CMR 10.05(6)(k)-(q) and check if:

      1. ☐ Applying for Low Impact Development (LID) site design credits (as described in Stormwater Management Handbook Vol. 2, Chapter 3)

      2. ☒ A portion of the site constitutes redevelopment

      3. ☐ Proprietary BMPs are included in the Stormwater Management System.

   b. ☐ No. Check why the project is exempt:

      1. ☐ Single-family house

      2. ☐ Emergency road repair

      3. ☐ Small Residential Subdivision (less than or equal to 4 single-family houses or less than or equal to 4 units in multi-family housing project) with no discharge to Critical Areas.

D. Additional Information

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

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

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

1. ☒ USGS or other map of the area (along with a narrative description, if necessary) containing sufficient information for the Conservation Commission and the Department to locate the site. (Electronic filers may omit this item.)

2. ☒ Plans identifying the location of proposed activities (including activities proposed to serve as a Bordering Vegetated Wetland [BVW] replication area or other mitigating measure) relative to the boundaries of each affected resource area.

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D. Additional Information (cont'd)

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

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

Site Plan for Site Improvements at 1 Westinghouse Plaza, Units 3 & 5
a. Plan Title

RJ O'Connell & Associates, Inc.
b. Prepared By

John Stoy, P.E.
c. Signed and Stamped by

April 2, 2019
d. Final Revision Date

1" = 30'
e. Scale

Stormwater Report
f. Additional Plan or Document Title

April 2, 2019
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:

22527
2. Municipal Check Number

April 1, 2019
3. Check date

22528
4. State Check Number

April 1, 2019
5. Check date

R. J. O'Connell & Associates, Inc.
6. Payor name on check: First Name

7. Payor name on check: Last Name

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F. Signatures and Submittal Requirements

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

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

DocuSigned by:
Andrew Iglowski
39E6E5009FBD497...

1. Signature of Applicant

2. Date: 4/1/2019

3. Signature of Property Owner (if different)

4. Date

Christopher M. Lucas

5. Signature of Representative (if any)

6. Date: 04/01/19

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.

SECTION II – PROJECT NARRATIVE

1.0 INTRODUCTION

On behalf of BIV – 1 WH Unit 3, LLC & BIV – 1WH Unit 5, LLC, (c/o The Seyon Group) and in association with R.J. O'Connell & Associates, Inc. (RJOC), Lucas Environmental, LLC (LE) is pleased to submit this Notice of Intent (NOI) to the Boston Conservation Commission for the redevelopment of 1 Westinghouse Plaza (Units 3 & 5) in the Hyde Park neighborhood of Boston, Massachusetts. The Applicant is the owner of condominium Units 3 & 5 in Westinghouse Plaza.

The proposed work includes the partial demolition of Unit 5 to construct a driveway to improve access to the rear parking area, stormwater improvements, and repaving of parking areas. Portions of the proposed work will occur within the 100-Foot Buffer Zone to Inland Bank and the 25-Foot Riverfront Area of Mother Brook. This NOI is submitted in accordance with the Massachusetts Wetlands Protection Act (WPA; M.G.L. Ch. 131, Section 40) and implementing regulations (310 CMR 10.00 et seq.).

This project narrative describes the existing conditions, wetland resource areas, proposed design, project impacts, and regulatory compliance for work within jurisdictional areas on and near the site. The proposed project is depicted on the enclosed permitting Site Plans prepared by RJOC, entitled "Site Plan for Site Improvements at 1 Westinghouse Plaza, Units 3 & 5," and dated April 2, 2019.

2.0 EXISTING CONDITIONS

The subject property is located at 1 Westinghouse Plaza in the Hyde Park neighborhood of Boston, Massachusetts (See Figure 1 – USGS Map and Figure 2 – Aerial Map). 1 Westinghouse Plaza is a large approximate 22.7-acre parcel that contains several businesses and condominium units, parking areas, and landscaped areas. Units 3 and 5 consist of a one story industrial warehouse along the western portion of the lot. Units 3 and 5 include rights to the approximate 1.2-acre paved yard to the rear (west side) of the buildings. The Westinghouse Plaza property has frontage along Neponset Valley Parkway to the south, abuts Knight Street and Mother Brook to the west, and the MBTA commuter rail to the east.

A review of the current MassGIS data layer for the Massachusetts Natural Heritage Atlas (effective August 1, 2017) under the Natural Heritage & Endangered Species Program (NHESP) indicates that no portion of the Study Area is located within Estimated Habitat of Rare Wildlife or Priority Habitat of Rare Species (See Figure 3 – NHESP Map). No Certified or Potential Vernal Pools under the jurisdiction of the Wetlands Protection Act Regulations (310 CMR 10.00 et seq.) or the Massachusetts Endangered Species Act (321 CMR 10.00 et seq.) are mapped by NHESP in the Study Area.

The Study Area is not located within an Area of Critical Environmental Concern (ACEC), Outstanding Resource Water (ORW), or Wellhead Protection Zone.

3.0 WETLAND RESOURCE AREAS

A Professional Wetland Scientist (PWS) from LE conducted a wetland site investigation at the project site and adjacent areas on December 13, 2018. The wetland investigation was performed in accordance with the Massachusetts Wetlands Protection Act (M.G.L. Ch. 131, § 40) and regulations (310 CMR 10.00 et seq.); Section 404 of the Clean Water Act (33 U.S.C. 1344); Massachusetts Department of Environmental Protection (MassDEP) publication "Delineating Bordering Vegetated Wetlands" under the Massachusetts Wetlands Protection Act (1995); the U.S. Army Corp of Engineers (USACE) Wetland Delineation Manual (1987); and the Northcentral and Northeast Regional Supplement (2012). The following data sources were examined prior to the site investigation:

- Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps;
- United States Geological Survey Topographic Quadrangle;
- MassGIS MassDEP Wetland and Hydrography Datalayers;
- MassGIS Natural Heritage Atlas Datalayers; and
- United States Department of Agriculture, Natural Resources Conservation Service (USDA-NRCS) Soil Survey.

Resource areas identified include Inland Bank, Bordering Vegetated Wetlands (BVW), Land Under Water Bodies and Waterways (LUWW), Bordering Land Subject to Flooding (BLSF), and Riverfront Area. The resource area Bank (delineated based on the Mean Annual High Water line) and Land Under Water Bodies and Waterways (LUWW) are associated with Mother Brook, a perennial stream that flows through the northern portion of the site. Under the Massachusetts Wetlands Protection Act, the wetlands near the site are regulated as follows.

3.1 Inland Bank – 310 CMR 10.54

Section 310 CMR 10.54 of the WPA defines a Bank *as the portion of the land surface which normally abuts and confines a water body. It occurs between a water body and a vegetated bordering wetland and adjacent flood plain, or, in the absence of these, it occurs between a water body and an upland. The upper boundary of a Bank is the first observable break in the slope or the mean annual flood level, whichever is lower. The lower boundary of a Bank is the mean annual low flow level*.

3.2 Bordering Vegetated Wetlands – 310 CMR 10.55

Section 310 CMR 10.55 of the WPA defines bordering vegetated wetlands as *freshwater wetlands which border on creeks, rivers, streams, ponds and lakes. The types of freshwater wetlands are wet meadows, marshes, swamps and bogs. Bordering Vegetated Wetlands are areas where the soils are saturated and/or inundated such that they support a predominance of wetland indicator plants. The boundary of Bordering Vegetated Wetlands is the line within which 50% or more of the vegetational community consists of wetland indicator plants and saturated or inundated conditions exist. Wetland indicator plants are also those classified in the indicator categories of Facultative, Facultative+, Facultative Wetland-, Facultative Wetland, Facultative Wetland+, or Obligate Wetland in the National List of Plant Species That Occur in Wetlands: Massachusetts (Fish & Wildlife Service, U.S. Department of the Interior, 1988) or plants exhibiting physiological or morphological adaptations to life in saturated or inundated conditions.*

3.3 Land Under Water Bodies and Waterways – 310 CMR 10.56

Land Under Water Bodies and Waterways is located within perennial streams and is defined as *the mean annual low water level* under section 310 CMR 10.56 (2)(c) of the WPA. This resource area is located below the edge of Bank or the Mean Annual High Water (MAHW) mark in perennial streams, therefore it is not field delineated.

3.4 Bordering Land Subject to Flooding – 310 CMR 10.57

Section 310 CMR 10.57(2)(a) of the WPA defines BLSF as *an area with low, flat topography adjacent to and inundated by flood waters rising from creeks, rivers, streams, ponds or lakes. It extends from the banks of these waterways and water bodies; where a bordering vegetated wetland occurs, it extends from said wetland. The boundary of Bordering Land Subject to Flooding is the estimated maximum lateral extent of flood water which will theoretically result from the statistical 100-year frequency storm.*

According to the March 16, 2016 FEMA Flood Insurance Rate Map for Suffolk County, Massachusetts, Map Number 25025C0157J, Mother Brook is located within Zone AE, which is defined as an area subject to the 1% annual chance flood (100-year flood), where base flood elevations have been determined. Base flood elevations within the property range between 45 to 47 NAVD88. There is no proposed work within Bordering Land Subject to Flooding under the WPA (See Figure 4 – FEMA Map).

3.5 Riverfront Area – 310 CMR 10.58

Under section 310 CMR 10.58 of the WPA, the Riverfront Area *is the area of land between a river's mean annual high-water line measured horizontally outward from the river and a parallel line located 200 feet away,* except in the City of Boston where it extends 25 feet away.

3.6 Resource Area Descriptions

The following section briefly characterizes the wetland resource area identified on-site. Representative photographs are included in Appendix A.

Wetland A

Wetland A is a small fringe wetland area located southeast of the work area, near flags BF1-7 to BF1-14. The wetland is delineated with pink survey tape numbered sequentially with flag series WFA-1 to WFA-3. The wetland boundary generally follows a very steep, well-defined edge of slope. The wetland edge is vegetated with a mix of red maple (*Acer rubrum*), red osier dogwood (*Cornus sericea*), green ash (*Fraxinus pennsylvanica),* Oriental bittersweet (*Celastrus orbiculatus*), and poison ivy (*Toxicodendron radicans*). The wetland/upland boundary corresponds with the topographic break in slope, or the transition to a non-hydrophytic plant community and absence of hydric soils/wetland hydrology. State, local, and federal boundaries are coincident. Indicators of wetland hydrology include shallow soil saturation, evidence of seasonal inundation, and drainage patterns.

Bank Series 1 – Mother Brook

Mother Brook flows from west to east along the northern property line. The MAHW line of the stream was delineated using blue nylon survey tape numbered sequentially as BF1-1 to BF1-54. Plant species observed along the river include red maple, Norway maple (*Acer platanoides*), gray birch (*Betula populifolia*), red oak (*Quercus rubra*), burning bush (*Euonymus alatus*), American elm (*Ulmus americana*), Oriental bittersweet, common greenbriar (*Smilax rotundifolia*), and poison ivy.

Channel width varies and is approximately twenty to thirty feet-wide with a substrate consisting of sands, gravels, and small cobbles. Sinuosity and gradient are low. Banks are well-defined. The MAHW and Bank line are coincident.

4.0 PROPOSED WORK

The proposed work includes the partial demolition of Unit 5 to construct a driveway to improve access to the rear parking area, stormwater improvements, and repaving of parking areas. The existing pavement will be reclaimed by pulverizing and blending it with the underlying base material. Existing stormwater runoff sheet flows across the pavement to the two paved swales and down the bank to the river with no treatment. Grading of the renovated area will follow existing grades and drain toward new deep-sump catch basins with hoods on their outlet pipes. The catch basins will discharge to an oil/particle separator before connecting to an existing manhole, to which a roof drain from the building currently connects, and outlets to the Mother Brook.

The lot will then be paved with two courses of bituminous concrete. The renovated paved area will provide parking for approximately 114 vehicles and will result in an increase of approximately 3,000+/- square feet of pervious, landscaped space. To provide improved access to the new parking area, a 30-foot-wide portion of the existing building between the low and high bay buildings will be demolished and an access drive with five-foot-wide sidewalks on each side of the drive will be constructed. A new catch basin will be installed to drain the access drive and will discharge to an existing 24-inch drain in the front (east side) of the building to which runoff from the building's roof currently discharges. The proposed parking layout will reduce impervious area, which will reduce peak flow and significantly improve water quality treatment.

Stormwater quality and quantity issues have been addressed in the proposed stormwater management design. Specifically, the proposed stormwater management system has been designed utilizing the BMPs referenced above in order to meet the requirements as set forth by the standards of MassDEP. The proposed project provides deep sump catch basins and an oil/grit separator prior to discharge to achieve the required pre-treatment TSS removal for the proposed use. Additionally, peak runoff rates exiting the site will be reduced for all design storms analyzed including the 2-, 10-, 25-, and 100-year events. The proposed project meets or exceeds the MassDEP Stormwater Management Standards as detailed in the Drainage Report, prepared by RJOC, dated April 2, 2019.

Runoff control, water quality improvement and groundwater recharge will be accomplished by implementing the following drainage improvements:

- Collect storm runoff in deep sump catch basins with hoods and pass it through hydrodynamic Continuous Deflection Separation (CDS) particle separators for treatment of Total Suspended Solids (TSS).
- Increase landscape/open area on the site over existing conditions resulting in reduced peak rates of stormwater discharged from the site and increased groundwater recharged under redeveloped conditions.
- Implement a Construction Period Pollution Protection Plan (CPPPP) to control erosion, sedimentation and other construction related impacts during construction.
- Implement an Operation and Maintenance (O&M) Plan for the proposed stormwater management system that describes the various components of the system, identifies inspection and maintenance tasks, and provides a schedule to follow which will ensure the proper, long-term, post-construction performance of the system.
- Implement a Long Term Pollution Prevention Plan (LTPPP) to prevent illicit discharges to the stormwater management system.

The proposed Stormwater Operation and Maintenance (O&M) Plan included in the Stormwater Management Report outlines procedures and time tables for the long term operation and maintenance of the proposed site stormwater management system, including initial inspections upon completion of construction, and periodic monitoring of the system components in accordance with established practices and manufacturer's recommendations. The O&M Plan includes a list of responsible parties associated with inspections and maintenance.

Erosion and sedimentation control BMPs have been incorporated into the project design in order to control runoff and prevent siltation to the wetland resource area during construction (See Site Plans). This will consist primarily of straw wattles and silt fencing. At the outset of the construction, the site limit of work will be staked and erosion controls will be installed. In addition, silt fence will be used on the down-gradient sides of material stockpile areas.

With the above measures in place, runoff will be reduced, runoff water quality significantly improved, and groundwater recharge increased over existing conditions resulting in an overall benefit to Mother Brook.

5.0 REGULATORY COMPLIANCE

The following section details the project's compliance with the performance standards for each resource area under the Wetlands Protection Act including the requirements for Riverfront Area (310 CMR 10.58). There are no direct impacts proposed to Inland Bank, BVW, LUWW, or BLSF, therefore no further discussion is warranted for these resource areas. The project constitutes a redevelopment of a previously developed site and complies with the Riverfront Area performance standards per Section 310 CMR 10.58(5) of the WPA. Quantification of impacts to Riverfront Area within previously developed and degraded portions of the site are inclusive of proposed paved surfaces that occur on existing degraded areas (those areas previously disturbed).

5.1 Riverfront Area – 310 CMR 10.58 (5)

This section documents the projects compliance for work within the 200-Foot Riverfront Area under 310 CMR 10.58(5) with the performance standards identified in *italics* and a response below in standard format.

310 CMR 10.58(5) Notwithstanding the provisions of 310 CMR 10.58(4)(c) and (d), the issuing authority may allow work to redevelop a previously developed riverfront area, provided the proposed work improves existing conditions. Redevelopment means replacement, rehabilitation or expansion of existing structures, improvement of existing roads, or reuse of degraded or previously developed areas. A previously developed riverfront area contains areas degraded prior to August 7, 1996 by impervious surfaces from existing structures or pavement, absence of topsoil, junkyards, or abandoned dumping grounds. Work to redevelop previously developed riverfront areas shall conform to the following criteria:

(a) At a minimum, proposed work shall result in an improvement over existing conditions of the capacity of the riverfront area to protect the interests identified in M.G.L. c. 131 § 40. When a lot is previously developed but no portion of the riverfront area is degraded, the requirements of 310 CMR 10.58(4) shall be met.

This standard has been met. There will be a net reduction of 747 square feet of impervious within the 25-Foot Riverfront Area. There will be a total reduction in impervious area of 3,042 square feet across the entire work area, including areas outside the Riverfront Area.

(b) *Stormwater management is provided according to standards established by the Department.*

This standard has been met. The project has been designed in accordance with the Massachusetts Stormwater Management Standards for redevelopment projects. A Stormwater Report has been provided under separate cover.

(c) Within 200 foot riverfront areas, proposed work shall not be located closer to the river than existing conditions or 100 feet, whichever is less, or not closer than existing conditions within 25 foot riverfront areas, except in accordance with 310 CMR 10.58(5)(f) or (g).

This standard has been met. There will not be further encroachment into the 25-Foot Riverfront Area.

(d) *Proposed work, including expansion of existing structures, shall be located outside the riverfront area or toward the riverfront area boundary and away from the river, except in accordance with 310 CMR 10.58(5)(f) or (g).*

This standard has been met. The site is completely developed up to the river and there will be no further expansion into the Riverfront Area.

The area of proposed work shall not exceed the amount of degraded area, provided that the proposed work may alter up to 10% if the degraded area is less than 10% of the riverfront area, except in accordance with 310 CMR 10.58(5)(f) or (g).

This standard has been met. The area of proposed work within the existing degraded/developed areas will not exceed the amount of degraded areas as the work occurs in areas that are already degraded.

(e) *When the applicant proposes restoration on-site of degraded riverfront area, alteration may be allowed notwithstanding the criteria of 310 CMR 10.58(5)(c), (d), and (e) at a ratio in square feet of at least 1:1 restored area to area of alteration not conforming to the criteria. Areas immediately along the river shall be selected for restoration.*

Not applicable.

(f) When an applicant proposes mitigation either on-site or in the riverfront area within the same general area of the river basin, alteration may be allowed notwithstanding the criteria of 310 CMR 10.58(5)(c), (d), or (e), at a ratio in square feet of at least 2:1 of mitigation area to area of alteration not conforming to the criteria or an equivalent level of environmental protection where square footage is not a relevant measure…

Not applicable.

6.0 SUMMARY

The proposed project consists of the redevelopment of 1 Westinghouse Plaza (Units 3 & 5) in the Hyde Park neighborhood of Boston, Massachusetts As currently designed, work will occur within the 100-Foot Buffer Zone of Inland Bank and the 25-Foot Riverfront Area of Mother Brook.

It is LE's opinion, based on our professional education, training, and familiarity with the project site, that the proposed work will not have any adverse effect on any interests identified in the Wetlands Protection Act. The basis for our opinion is as follows:

- The proposed work area is previously altered and degraded, providing little value to existing resource areas.
- Erosion controls will be installed and consist of straw wattles and silt fencing.
- The proposed project includes the installation of a stormwater management system designed in accordance with the MassDEP Standards.
- The proposed drainage improvements to pre-treat runoff from the parking area, through the use of structural and non-structural BMPs, will result in a reduction in annual stormwater pollutant loads discharged from the site to Mother Brook and significantly improve the water quality of runoff under proposed as compared to existing conditions.
- The increase in pervious/landscaped area in the redeveloped site will reduce peak rates of stormwater discharge from the site and increase groundwater recharge under proposed as compared to existing conditions.

The proposed design achieves the goals of the Applicant, while being sensitive to adjacent regulated resource areas. Accordingly, the Applicant respectfully requests that the Conservation Commission consider a finding that the proposed design is adequately protective of the interests identified in the Wetlands Protection Act and issue an Order of Conditions approving the project as described in this Notice of Intent and as shown on the attached Site Plans.

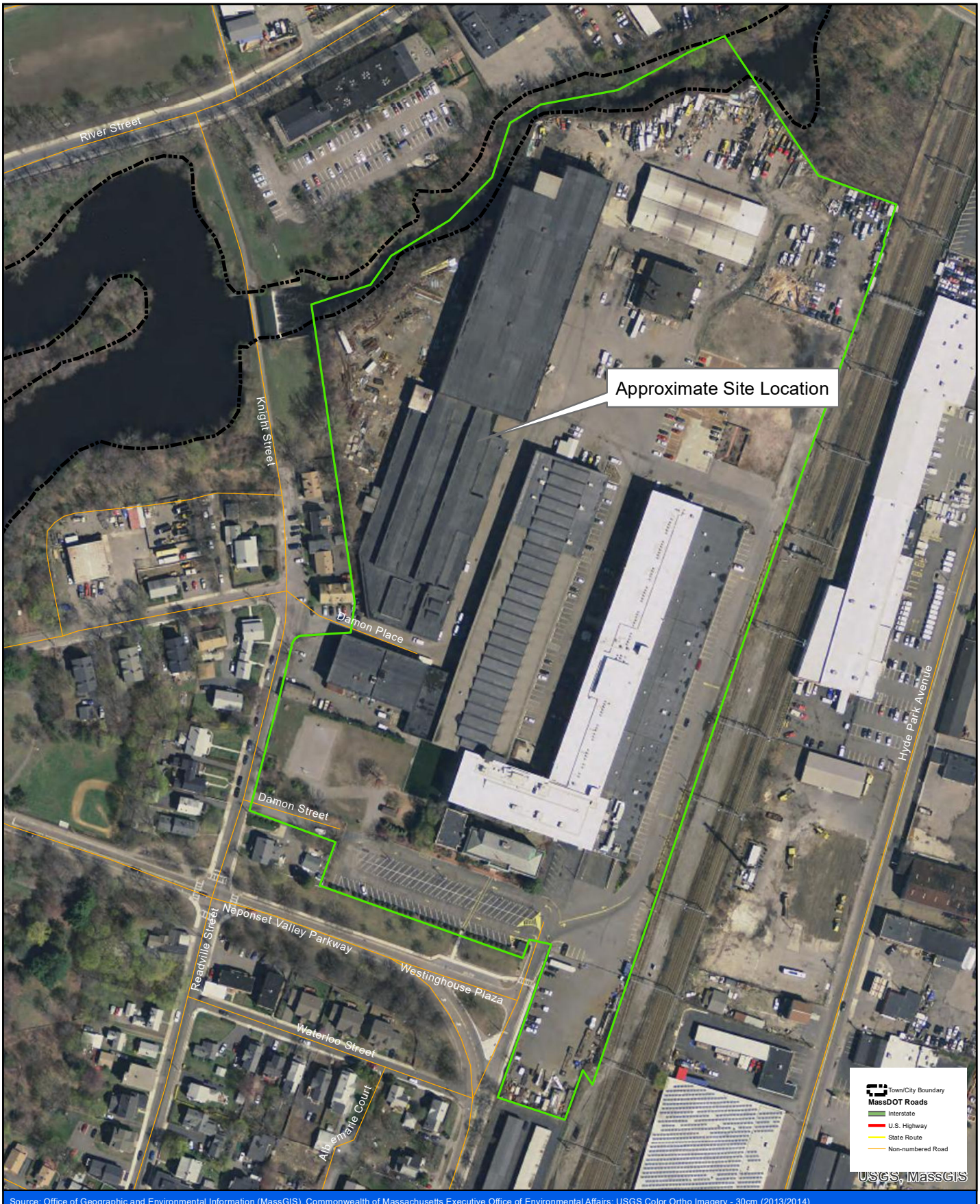
SECTION III – FIGURES

USGS Map

Notice of Intent
1 Westinghouse Plaza
Boston, MA

FIGURE 1

LUCAS ENVIRONMENTAL, LLC



Source: Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Environmental Affairs; USGS Color Ortho Imagery - 30cm (2013/2014)

N

0 75 150 300 Feet

Aerial Map

Notice of Intent
1 Westinghouse Plaza
Boston, MA

FIGURE 2

LUCAS ENVIRONMENTAL, LLC

Source: Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Environmental Affairs; USGS Color Ortho Imagery - 30cm (2013/2014)

N

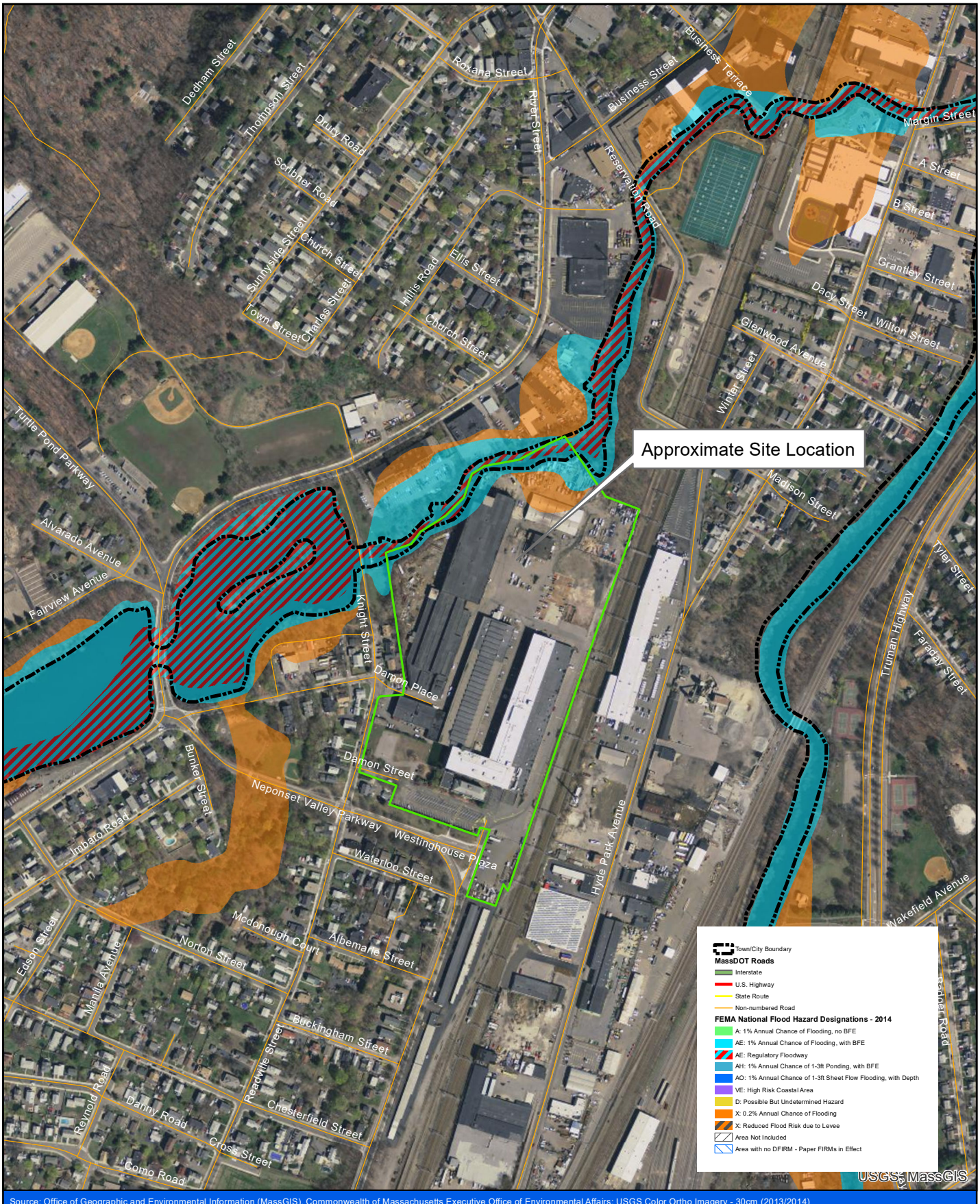
0 500 1,000 2,000 Feet

NHESP Map

Notice of Intent
1 Westinghouse Plaza
Boston, MA

FIGURE 3

LUCAS ENVIRONMENTAL, LLC



Source: Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Environmental Affairs; USGS Color Ortho Imagery - 30cm (2013/2014)

N

0 150 300 600 Feet

FEMA Map

Notice of Intent
1 Westinghouse Plaza
Boston, MA

FIGURE 4

LUCAS ENVIRONMENTAL, LLC

SECTION IV – APPENDICES

APPENDIX A

PHOTOGRAPHIC DOCUMENTATION

Photograph 1: Rear of the property behind the existing building.

Photograph 2: Upland/degraded area near rear of property.

Photograph 3: Slope to Mother Brook along the rear of the property behind the existing building.

Photograph 4: Rear of the property behind the existing building near slope toward Mother Brook.

Photograph 5: View of Wetland A.

Photograph 6: Typical view of Mother Brook, looking upstream.

Photograph 7: View of Mother Brook, looking upstream, near proposed work areas.

Photograph 8: View of Mother Brook, looking downstream toward proposed work areas.

APPENDIX B

ABUTTER INFORMATION

LUCAS ENVIRONMENTAL, LLC

ABUTTER NOTIFICATION

Notification to Abutters Under the Massachusetts Wetlands Protection Act

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

A. The name of the applicant is **BIV – 1WH Unit 3, LLC & BIV – 1WH Unit 5, LLC c/o The Seyon Group**

B. The applicant has filed a Notice of Intent with the Conservation Commission for the Municipality **Boston** seeking to remove, fill, dredge or alter an Area Subject to Protection Under the Wetlands Protection Act (General Laws Chapter 131, Section 40).

Activities Proposed: **The Applicant proposes a redevelopment project at 1 Westinghouse Plaza (Units 3 & 5), in the Hyde Park neighborhood of Boston, Massachusetts. The proposed work includes the partial demolition of Unit 5 to construct a driveway to access additional parking, stormwater improvements, and repaving of parking areas. Portions of the project are within the 100-foot Buffer Zone to Inland Bank and within the 25-Foot Riverfront Area of Mother Brook.**

C. The Address of the Lot where the activity is proposed is **1 Westinghouse Plaza, Units 3 & 5, Boston, MA**

D. Copies of the Notice of Intent may be examined at the **Boston Conservation Commission Office**
For more information, call: **617.635.3850**
between the hours of **9:00 AM** And **4:00 PM** on the following days of the week: **Mon–Friday**
This is the applicant ☐, representative ☐, or other ☑ (specify): **Boston Conservation Commission**

E. Electronic copies of the Notice of Intent may be obtained from either (check one) the applicant ☐ or the applicant's representative ☑ by calling this telephone number **617.405.4140**
between the hours of **8:00 AM** And **5:00 PM** on the following days of the week: **Mon–Friday**
Name of Representative: Christopher M. Lucas, Lucas Environmental, LLC
Copies will be provided for the cost of copying and postage.

F. Information regarding the date, time, and place of the public hearing may be obtained from:
Boston Conservation Commission
by calling this telephone number **617.635.3850**
This is the applicant ☐, representative ☐, or other ☑ (specify): **Boston Conservation Commission**

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

NOTE: Notice of the public hearing, including its date, time, and place, will be posted in the Boston City Offices not less than forty-eight (48) hours in advance.

NOTE: You also may contact your local Conservation Commission or the nearest Department of Environmental Protection (MassDEP) Regional Office for more information about this application or the Wetlands Protection Act. To contact MassDEP, call: Northeast Region: 978.694.3200

NOTE: To preserve your appeal rights you must submit comments/concerns in writing.

1 Westinghouse Plaza 100-Foot Abutters List

Owner	Addressee	Mailing Address	City, State	Zip Code
15-17 KNIGHT STREET		15 -17 KNIGHT ST	HYDE PARK MA	02136
493 DUDLEY STREET LLC	C/O 493 DUDLEY STREET LLC	103 CLAYTON STREET	DORCHESTER MA	02122
ACADEMY OF PACIFIC RIM	C/O ACADEMY OF PACIFIC RIM	1 WESTINGHOUSE PL	HYDE PARK MA	02136
AGUDELO SYLVIE	C/O SYLVIE AGUDELO	1 WESTINGHOUSE PZ #C:215	HYDE PARK MA	02136
ALLEN CAROLE SEIFRICK	C/O CAROLE SEIFRICK ALLEN	1 WESTINGHOUSE PZ #C:211	HYDE PARK MA	02136
ANDREEV LEONID S	C/O LEONID S ANDREEV	1 WESTINGHOUSE PZ #C-325	HYDE PARK MA	02136
BAHLMANN NICOLE	C/O NICOLE BAHLMANN	1 WESTINGTONHOUSE PZ #C-311	HYDE PARK MA	02136
BAKER DOROTHY	C/O DOROTHY BAKER	1 WESTINGHOUSE PZ #C-209	HYDE PARK MA	02136
BAKER MALCOLM E		8-10 DAMON PL	HYDE PARK MA	02136
BENAULT REALTY TRUST	C/O JOSEPH GREEN TS	19 ARDMORE RD	DEDHAM MA	02026
BETHONEY DARLENE A	C/O DARLENE A BETHONEY	31 READVILLE ST	HYDE PARK MA	02136
BOVA STEPHEN M	C/O STEPHEN M BOVA	1 WESTINGHOUSE PZ #C-202	HYDE PARK MA	02136
CALIENDO CARL V JR	C/O CARL V CALIENDO JR	1 WESTINGHOUSE PZ #C-313	HYDE PARK MA	02136
CALLAHAN LAURIE TS	C/O LAURIE CALLAHAN TS	1 WESTINGHOUSE PZ #C-339	HYDE PARK MA	02136
CASE PATRICIA	C/O PATRICIA CASE	1 WESTINGHOUSE PZ #C-323	HYDE PARK MA	02136
CHRISTIAN CHARLES M	C/O CHARLES M CHRISTIAN	1 WESTINGHOUSE PZ #206	HYDE PARK MA	02136
CITY OF BOSTON		RESERVATION RD	HYDE PARK MA	02136
CLIFFORD JOHN P	C/O JOHN P CLIFFORD	53 READVILLE ST	HYDE PARK MA	02136
CONSTANTINE THADDEUS B	C/O THADDEUS B CONSTANTINE	1 WESTINGHOUSE PZ #C-207	HYDE PARK MA	02136
COWAN DONALD	C/O DONALD COWAN	1 WESTINGHOUSE PZ #C-S4	HYDE PARK MA	02136
CROWLEY JOHN A	C/O JOHN A CROWLEY	1 WESTINGHOUSE PZ #C-213	HYDE PARK MA	02136
DALLAL MONIQUE J	C/O MONIQUE J DALLAL	ONE WESTINGHOUSE PZ C-218	HYDE PARK MA	02136
DALY MARY ELLEN TS		1560 RIVER ST	HYDE PARK MA	02136
DBL REALTY LLC		11 KNIGHT ST	HYDE PARK MA	02136
DELVAL PATRICK HENRY JAMES	C/O PATRICK HENRY JAMES DEVAL	1 WESTINGHOUSE PZ #C-219	HYDE PARK MA	02136
DIAZ JORGE	C/O JORGE DIAZ	39 READVILLE ST #39	HYDE PARK MA	02136
DISTASO NICHOLAS J	C/O NICHOLAS J DISTASO	ONE WESTINGHOUSE PZ # C-217	HYDE PARK MA	02136
DUGGAN TIMOTHY P	C/O TIMOTHY P DUGGAN	1 WESTINGHOUSE PZ #C-317	HYDE PARK MA	02136
FOUREAU JEROME M C	C/O JEROME FOUREAU	7 KNIGHT ST APT 2L	HYDE PARK MA	02136
FRAZIER GREGORY	C/O GREGORY FRAZIER	1 WESTINGHOUSE PZ #C-327	HYDE PARK MA	02136
FREED MICHAEL D	C/O MICHAEL D FREED	1 WESTINGHOUSE PZ #C-314	HYDE PARK MA	02136
G GREENE PROPERTIES LLC	C/O G GREENE PROPERTIES LLC	240 LINCOLN ST	BOSTON MA	02134
GABBARD ZACHARY	C/O ZACHARY GABBARD	1 WESTINGHOUSE PZ C:302	HYDE PARK MA	02136
GERAGHTY THOMAS J JR	C/O JOHN E GERAGHTY	P O BOX 52	READVILLE MA	02137

GIANNANGELO ELEANOR ETAL		21 WATERLOO	HYDE PARK MA	02136
GOLDBERG DAVID H	C/O DAVID H GOLDBERG	1 WESTINGHOUSE PZ #C-331	HYDE PARK MA	02136
HACKETT KEVIN	C/O KEVIN HACKETT	1 WESTINGHOUSE PZ #C-332	HYDE PARK MA	02136
HARBAUGH ALLEN	C/O HARBAUGH & SCHATTENKIRK	1 WESTINGHOUSE PZ #C-301	HYDE PARK MA	02136
HARLEN MAURA C		57 READVILLE ST	HYDE PARK MA	02136
HARMON ASHLEY C	C/O ASHLEY C HARMON	1 WESTINGHOUSE PZ #C-321	HYDE PARK MA	02136
HARMON DAVID M	C/O DAVID M HARMON	1 WESTINGHOUSE PZ #C 201	HYDE PARK MA	02136
HILARY GAYLE	C/O GAYLE HILARY	14144 BURBANK BLVD	SHERMAN OAKS CA	91411
HODGE HENRIETTA LEE	C/O HENRIETTA LEE HODGE	339-B S HUNTINGTON AV	JAMAICA PLAIN MA	02130
HOGAN MATTHEW C	C/O MATTHEW C HOGAN	1 WESTINGHOUSE PZ #C-315	HYDE PARK MA	02136
HYDE PARK INDUSTRIAL LLC		42 WINTER ST UNIT #35	PEMBROKE MA	02359
HYDE PARK & RESERVATION CORP	C/O CHARLES E DOW TREAS	333 WASHINGTON ST #203-4	BOSTON MA	02108
JIMENEZ EDGARDO J	C/O EDGARDO J JIMENEZ	1 WESTINGHOUSE PZ #221	HYDE PARK MA	02136
JOHNSON EDWARD	C/O EDWARD JOHNSON	1 WESTINGHOUSE PZ #C-327	HYDE PARK MA	02136
KAYDEN MICHELE	C/O MICHELE KAYDEN	1 WESTINGHOUSE PZ #C-338	HYDE PARK MA	02136
KENNEY THOMAS P	C/O THOMAS P KENNEY	1 WESTINGHOUSE PZ #C-316	HYDE PARK MA	02136
KRUCZYNSKI ANTONI TS		1558 RIVER ST	HYDE PARK MA	02136
LAROCHE GLENN	C/O GLENN LAROCHE	1 WESTINGHOUSE PZ #305	HYDE PARK MA	02136
LAZCANO JESSICA L	C/O JESSICA L LAZCANO	1 WESTINGHOUSE PZ UNIT C-319	HYDE PARK MA	02136
LI HONGWU	C/O HONGWU LI	1 WESTINGHOUSE PZ #C-S10	HYDE PARK MA	02136
LIANG FRED	C/O FRED LIANG	1 WESTINGHOUSE PZ #C-S11	HYDE PARK MA	02136
LIFE STORAGE LP	C/O ACCTNG DEPT STORE #042	6467 MAIN ST	BUFFALO NY	14221
LOFTS AT WESTINGHOUSE		1 WESTINGHOUSE PZ	HYDE PARK MA	02136
LOMBARDI MAN CHIT SUNG	C/O MAN CHIT SUNG LOMBARDI	5 WISTERIA WY	WRENTHAM MA	02093
LOMBARDI RICHARD	C/O RICHARD LOMBARDI	1 WESTINGHOUSE PZ #C:336	HYDE PARK MA	02136
LYNCH BERNARD PATRICK	C/O BERNARD PATRICK LYNCH	1 WESTINGHOUSE PZ #C-322	HYDE PARK MA	02136
LYONS JOSEPH	C/O JOSEPH LYONS	1 WESTINGHOUSE PZ #C-S12	HYDE PARK MA	02136
MACDONALD KATHRYN J	C/O KATHRYN J MACDONALD	1 WESTINGHOUSE PZ #C-335	HYDE PARK MA	02136
MARTINI MICHELLE	C/O MICHELLE MARTINI	1 WESTINGHOUSE PZ #C-334	HYDE PARK MA	02136
MASSACHUSETTS BAY TRANS AUTH		MILTON	HYDE PARK MA	02136
MASSINGER TIMOTHY	C/O TIMOTHY MASSINGER	1 WESTINGHOUSE PZ #C:303	HYDE PARK MA	02136
MCCORMICK ANN	C/O ANN MCCORMICK	1 WESTINGHOUSE PZ #C-214	HYDE PARK MA	02136
MCELROY SHAVORYIA G	C/O SHAVORYIA G MCELROY	49-51 READVILLE ST	HYDE PARK MA	02136
MCKEE MATTHEW	C/O MATTHEW MCKEE	1 WESTINGHOUSE PZ #C-S7	HYDE PARK MA	02136
MOTHER BROOK CONDO	C/O MOTHER BROOK CONDO ASN	1 WESTINGHOUSE PLZ	HYDE PARK MA	02136
MOTHER BROOK LLC	C/O HAMILTON CO/MOTHER BROOK	39 BRIGHTON AV	BOSTON MA	02134
MUELLER MARCUS	C/O MARCUS MUELLER	1 WESTINGHOUSE PZ #C-222	HYDE PARK MA	02136

NEDDER GEORGE	C/O GEORGE NEDDER	35 READVILLE ST	HYDE PARK MA	02136
NEWHALL STREET LLC	C/O NEWHALL STREET LLC	160 TEMPLE ST	WEST ROXBURY MA	02132
OCONNELL JOHN J III	C/O JOHN J OCONNELL III	1 WESTINGHOUSE PZ #C:307	HYDE PARK MA	02136
OLAVERRIA NICOLE ROMAN	C/O NICOLE ROMAN OLAVERRIA	39 READVILLE ST #41	HYDE PARK MA	02136
ONE 631 HYDE PARK AV LLC	C/O ONE 631 HYDE PARK AV LLC	173 ELLIOT ST	MILTON MA	02186
OXFORD PARTNERS LLC	PEDERSEN CHARLES ST LIQUORS	143 CHARLES ST	BOSTON MA	02114
PALUMBO NICHOLAS VINCENT	C/O NICHOLAS VINCENT PALUMBO	1 WESTINGHOUSE PZ #C-318	HYDE PARK MA	02136
PAOLILLO KEVIN	C/O KEVIN PAOLILLO	1 WESTINGHOUSE PZ # C:S5	HYDE PARK MA	02136
PAOLILLO KEVIN	C/O KEVIN PAOLILLO	1 WESTINGHOUSE PZ #C: S6	HYDE PARK MA	02136
PAPADOPOULOS THOMAS	C/O THOMAS PAPADOPOULOS	1 WESTINGHOUSE PZ #C-308	HYDE PARK MA	02136
PAYNE RICHARD W	C/O RICHARD W PAYNE	2 ESSEX ST	NORFOLK MA	02056
PIENTA CHRISTINA M	C/O CHRISTINA M PIENTA	1 WESTINGHOUSE PZ #C-324	HYDE PARK MA	02136
PLEASANT RUSCITO LLC	C/O PLEASANT RUSCITO LLC	21 MAZZEO DRIVE	RANDOLPH MA	02368
POPE HOLLY SLATER	C/O HOLLY SLATER POPE	1 WESTINGHOUSE PZ #C-329	HYDE PARK MA	02136
PRIME STORAGE HYDE PARK LLC	C/O PRIME STORAGE HYDE PARK LLC	83-85 RAILROAD PLACE	SARATOGA SPRINGS NY	12866
READVILLE COMMONS CONDO TR		39 READVILLE ST	HYDE PARK MA	02136
REED SHELLEY	C/O SHELLEY REED	44 BROOK ST	BROOKLINE MA	02445
RIDLON RICHARD	C/O RICHARD RIDLON	1 WESTINGHOUSE PZ #223	HYDE PARK MA	02136
ROBERTS CRISTIANE	C/O CRISTIANE ROBERTS	1 WESTINGHOUSE PZ # C:304	HYDE PARK MA	02136
ROBERTS RACHEL LEA	C/O RACHEL LEA ROBERTS	1 WESTINGHOUSE PZ #C-312	HYDE PARK MA	02136
RODRIGUEZ JOSE N	C/O JOSE N RODRIGUEZ	1570 RIVER ST	HYDE PARK MA	02136
RONJON REALTY LLC	C/O JOHN M MOSES	1 WESTINGHOUSE PZ	BOSTON MA	02136
ROSS PAMELA J	C/O PAMELA J ROSS	1 WESTINGHOUSE PZ #C-309	HYDE PARK MA	02136
SALERNO ELIZABETH A	C/O ELIZABETH A SALERNO	1 WESTINGHOUSE PZ #C-203	HYDE PARK MA	02136
SAMBUCETI MICHAEL F	C/O MICHAEL F SAMBUCETI	1 WESTINGHOUSE PLAZA UNIT C-32	BOSTON MA	02136
SANTANA ANGEL A	C/O ANGEL A SANTANA	58-60 NEPONSET VALLEY PW	HYDE PARK MA	02136
SCACCIA ANGELO M		59 READVILLE ST	HYDE PARK MA	02136
SCALA GEORGE	C/O GEORGE SCALA	1 WESTINGHOUSE PZ #C-210	HYDE PARK MA	02136
SCHWARTZ ERICA	C/O ERICA SCHWARTZ	1 WESTINGHOUSE PLZ C-212	HYDE PARK MA	02136
SILVA ADILSON	C/O ADILSON SILVA	1 WESTINGHOUSE PZ #C-320	HYDE PARK MA	02136
STELLAR MEETING ROOM LLC	C/O JUDY LAWRENCE	1 WESTINGHOUSE PZ #C-337	HYDE PARK MA	02136
SUTHERLAND KEVIN M	C/O KEVIN SUTHERLAND	27 GARFIELD ST	CAMBRIDGE MA	02138
TANNER RHONDA C	C/O RHONDA C TANNER	1 WESTINGHOUSE PZ #C-310	HYDE PARK MA	02136
TIPTON LARRY	C/O LARRY TIPTON	1 WESTINGHOUSE PZ #C-330	HYDE PARK MA	02136
TIR NA NOG LLC	C/O TIR NA NOG LLC	1 WESTINGHOUSE PZ	HYDE PARK MA	02136
TUTTLE LINDA	C/O LINDA TUTTLE	48 BUICK ST	WATERTOWN MA	02472
WAGNER CHRISTOPHER	C/O CHRISTOPHER WAGNER	1 WESTINGHOUSE PZ # C: 326	HYDE PARK MA	02136

WALKER BRIAN	C/O BRIAN WALKER	1 WESTINGHOUSE PZ #C-306	HYDE PARK MA	02136
WAREHOUSE K LLC	C/O WAREHOUSE K LLC	204 COMMONWEALTH AV	BOSTON MA	02116
WESTINGHOUSE PZ HYDE PK LLC	WESTINGHOUSE PZ HYDE PK LLC	42 WINTER ST #35	PEMBROKE MA	02359
WHITE EAN	C/O EAN WHITE	1 WESTINGHOUSE PZ #C-216	HYDE PARK MA	02136
WHITE EAN	C/O EAN WHITE	1 WESTINGHOUSE PZ #C-S9	HYDE PARK MA	02136
WHITE VERONICA M	C/O VERONICA M WHITE	1 WESTINGHOUSE PZ #C-205	HYDE PARK MA	02136
WHITLEY MALIKA	C/O MALIKA WHITLEY	15-17 KNIGHT ST #15	HYDE PARK MA	02136
WIRTH CHRISTINE M	C/O CHRISTINE M WIRTH	1 WESTINGHOUSE PZ #C-S2	HYDE PARK MA	02136

APPENDIX C

FILING FEE INFORMATION

LUCAS
ENVIRONMENTAL, LLC

CALCULATED FILING FEE STATEMENT

The proposed project is located at 1 Westinghouse Plaza (Units 3& 5) in Boston, Massachusetts. Proposed activities are included under Category 3(b) under the Wetlands Filing Fee Calculation Worksheet.

Category 3(b): *Construction of each building for any commercial, industrial, institutional, or apartment/condominium/townhouse-type development, any part of which is in a buffer zone or resource area. Any activities associated with the construction of said building, including associated site preparation, and construction of retention/detention basins, septic systems, parking lots, utilities, point source discharges, package sewage treatment plants, and roadways and driveways other than those roadways and driveways reviewable under 310 CMR 10.53(3)(e), shall not be subject to additional fees if all said activities are reviewed under a single Notice of Intent*. The fee is $1,050.00 per activity under the WPA. Activities within Riverfront Area in addition to another Resource Area or buffer zone, the fee per activity should be multiplied by 1.5.

Wetlands Protection Act Fees:

Category 3(b) = 1.5 x $1,050.00 = $1,575.00
State Share of WPA Filing Fee: ($1,575.00/2) - $12.50 = $775.00
Town Share of WPA Filing Fee: Included in Local Fees per Boston Conservation Commission

Local Fees:

Maximum Fee = $1,500.00 per local requirement

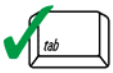
Check Payable to: City of Boston for $1,500.00
Check Payable to: Commonwealth of Massachusetts for $775.00

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:

1 Westinghouse Plaza, Units 3 & 5	Boston
a. Street Address	b. City/Town
22528	$775.00
c. Check number	d. Fee amount

2. Applicant Mailing Address:

Bryan	Blake
a. First Name	b. Last Name

BIV - 1WH Unit 3, LLC & BIV - 1WH Unit 5, LLC c/o The Seyon Group
c. Organization

118 Newbury Street, 3rd Floor
d. Mailing Address

Boston	MA	02116
e. City/Town	f. State	g. Zip Code

857.350.4583		bblake@seyon.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
Category 3(b) - Commercial Redevelopment	1.5	$1,050.00	$1,575.00

Step 5/Total Project Fee: $1,575.00

Step 6/Fee Payments:

Total Project Fee:	$1,575.00 a. Total Fee from Step 5
State share of filing Fee:	$775.00 b. 1/2 Total Fee **less $**12.50
City/Town share of filling Fee:	$1,500.00 Per BCC c. 1/2 Total Fee **plus** $12.50

C. Submittal Requirements

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

Department of Environmental Protection
Box 4062
Boston, MA 02211

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

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

HOLD TO LIGHT TO VIEW TRUE WATERMARK IN PAPER - HEAT SENSITIVE RED LOCK DISAPPEARS WHEN HEATED

22527

R. J. O'CONNELL & ASSOCIATES, INC.
80 MONTVALE AVE., SUITE 201
STONEHAM, MA 02180

BOSTON PRIVATE
WEALTH ▫ TRUST ▫ PRIVATE BANKING
5-234/110

CHECK DATE 4/1/19

PAY One thousand five hundred and 00/100

TO City of Boston

AMOUNT $1,500.00

Security features. Details on back.

OK OK

AUTHORIZED SIGNATURE

⑈022527⑈ ⑆011000234⑆ 000405545 7⑈

HOLD TO LIGHT TO VIEW TRUE WATERMARK IN PAPER - HEAT SENSITIVE RED LOCK DISAPPEARS WHEN HEATED

22528

R. J. O'CONNELL & ASSOCIATES, INC.
80 MONTVALE AVE., SUITE 201
STONEHAM, MA 02180

BOSTON PRIVATE
WEALTH ▫ TRUST ▫ PRIVATE BANKING
5-234/110

CHECK DATE 4/1/19

PAY Seven hundred seventy five and 00/100

TO Commonwealth of Massachusetts

AMOUNT $775.00

Security features. Details on back.

OK OK

AUTHORIZED SIGNATURE

⑈022528⑈ ⑆011000234⑆ 000405545 7⑈

SITE PLAN FOR SITE IMPROVEMENTS AT
1 WESTINGHOUSE PLAZA UNITS 3 AND 5 - HYDE PARK, MA

LOCUS MAP
(NOT TO SCALE)

DRAWING INDEX			
DRAWING DATE	LAST REVISION	DRAWING	DRAWING DESCRIPTION
04/02/2019	04/02/2019	C-0	COVER SHEET
04/02/2019	04/02/2019	EX-1	EXISTING CONDITIONS PLAN
04/02/2019	04/02/2019	C-1	OVERALL SITE PLAN
04/02/2019	04/02/2019	C-2	PARKING AND TRAFFIC CONTROL PLAN
04/02/2019	04/02/2019	C-3	GRADING AND DRAINAGE PLAN
04/02/2019	04/02/2019	C-4	MISCELLANEOUS DETAILS

SUBMITTED FOR CONSERVATION ORDER OF CONDITIONS

RJOC

RJO'CONNELL & ASSOCIATES, INC.
CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
80 MONTVALE AVENUE, SUITE 201 STONEHAM, MA 02180
PHONE: 781.279.0180 RJOCONNELL.COM

PREPARED FOR:

BIV-1WH UNIT 3, LLC AND BIV-1WH UNIT 5, LLC
c/o THE SEYON GROUP
118 NEWBURY STREET, 3RD FLOOR
BOSTON, MA 02116
PH: 857-239-8599

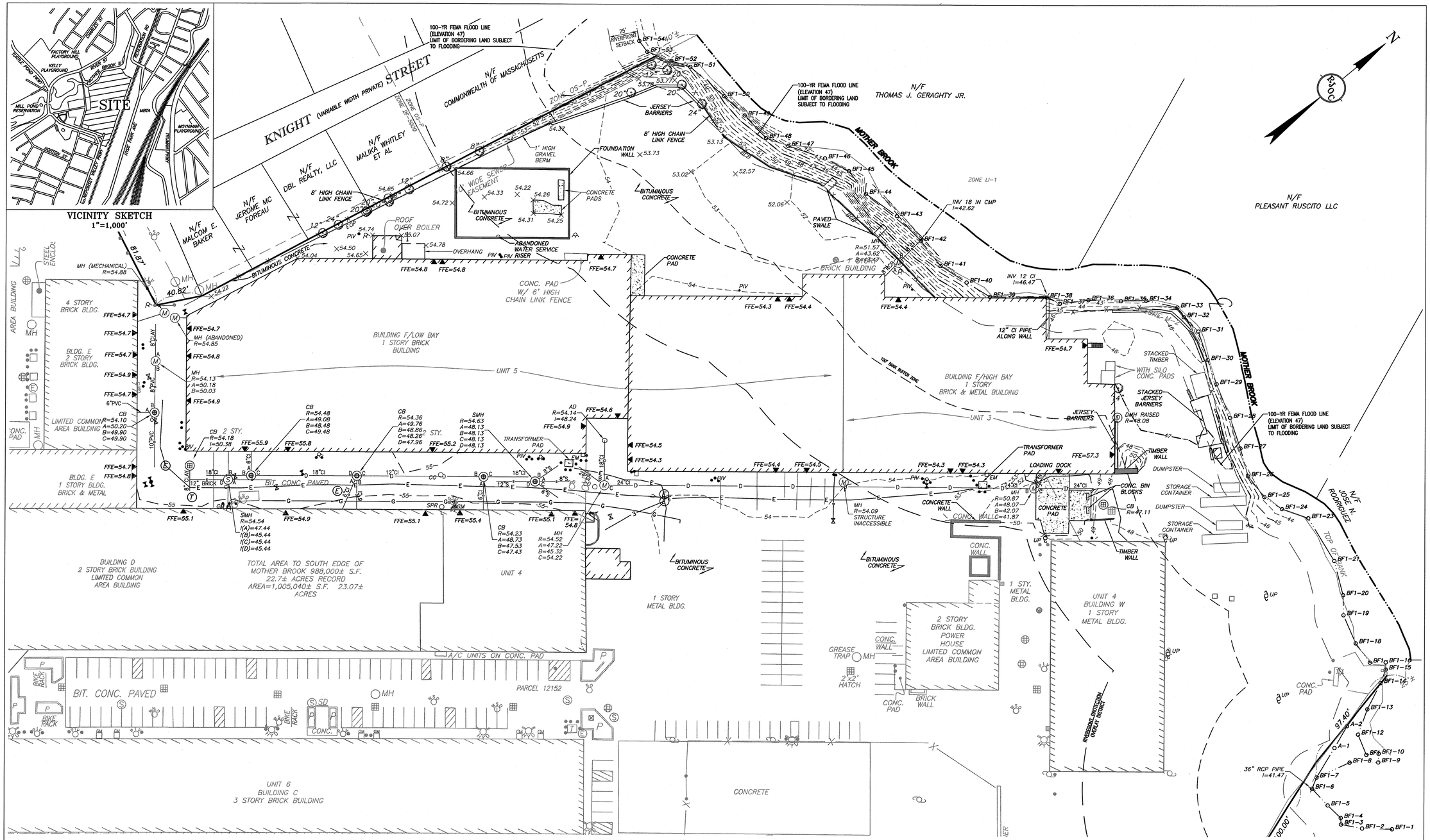
DESIGN TEAM

PROPERTY MANAGER
MADISON MARQUETTE
43 BROAD STREET, SUITE C404
HUDSON, MA 01749
ATTN: MARC LAVOIE, VICE PRESIDENT
PHONE: 978-407-5248

WETLAND SCIENTIST:
LUCAS ENVIRONMENTAL, LLC
500 A WASHINGTON ST
QUINCY, MA 02169
ATTN: CHRISTOPHER LUCAS, PWS
PHONE: (617) 405-4140

DRAWING NUMBER:
C-0

PROJECT NUMBER:
18087



NOTES

1. UNDERGROUND UTILITIES SHOWN ARE FROM OBSERVED SURFACE INDICATIONS, SUBSURFACE INDICATIONS, AND COMPILED FROM AVAILABLE RECORD PLANS OF UTILITY COMPANIES AND PUBLIC AGENCIES AND ARE APPROXIMATE ONLY. AS OF THE DATE OF THIS SURVEY, NO INFORMATION REGARDING RECORD UTILITIES HAS BEEN PROVIDED BY ELECTRIC, TELEPHONE, WATER AND GAS PROVIDERS. BEFORE CONSTRUCTION CALL "DIG SAFE" 811.
2. THIS PLAN WAS PREPARED FROM AN ACTUAL SURVEY MADE ON THE GROUND USING TOTAL STATION METHODS BETWEEN 12/03/2018 AND 12/04/2018.
3. THE HORIZONTAL DATUM IS NORTH AMERICAN DATUM OF 1983 (NAD '83) THE VERTICAL DATUM IS NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) DATUM WAS ESTABLISHED USING RTK GPS METHODS.
4. THE POSITIONAL ACCURACY OF THE DATA AND PHYSICAL IMPROVEMENTS ON THIS PLAN MAY BE APPROXIMATE. ANY USE OF ELECTRONIC DATA CONTAINED IN AUTOCAD VERSIONS OF THIS PLAN TO GENERATE COORDINATES OR DIMENSIONS NOT SHOWN ON THE PLAN IS NOT AUTHORIZED.
5. CONTOUR INTERVAL IS ONE FOOT (1').
6. INFORMATION SHOWN IN SCREENED LINE TYPES IS TAKEN FROM PLAN REFERENCE #3.

DIG SAFE
BEFORE YOU DIG CALL 811

PLAN REFERENCES

PLAN BOOK AND PAGES REFERENCE THE SUFFOLK COUNTY REGISTRY OF DEEDS

1. PLAN BOOK 2006 PAGE 644
2. PLAN BOOK 2009 PAGE 008
3. CONDOMINIUM SITE PLAN, MOTHER BROOK CONDOMINIUM, UNIT 3 BOSTON, MA DATED SEPTEMBER 12, 2011, PREPARED BY HARRY R. FELDMAN, INC.

LEGEND

PROPERTY LINE	UP	UTILITY POLE	CC	CONCRETE CURB
ABUTTING PROPERTY LINE	LP	LIGHT POLE	VGC	VERTICAL GRANITE CURB
EASEMENT LINE		ELECTRIC HAND HOLE	BCB	BITUMINOUS CONC. CURB
SEWER LINE	E	CABLE MANHOLE	HC	HANDICAP
EXISTING DRAIN LINE	S	SEWER MANHOLE	HPDE	HIGH DENSITY POLYETHYLENE
WATER LINE	D	DRAIN MANHOLE	CONC.	CONCRETE
GAS LINE	CB	CATCH BASIN	LSA	LANDSCAPE AREA
ELECTRIC LINE		WATER VALVE		DOOR
TELEPHONE LINE		FIRE HYDRANT		SIGN
OVERHEAD WIRES	SPR	SPRINKLER CONNECTION	8 / SC	PARKING COUNT/COMPACT NUMBER
GUARDRAIL	PIV	POST INDICATOR VALVE		DECIDUOUS TREE
CHAIN LINK FENCE		BOLLARD		CONIFEROUS TREE
	GM	GAS METER		
		GAS VALVE		
	RD	ROOF DRAIN		
	AD	AREA DRAIN		
	ICV	IRRIGATION CONTROL VALVE		

40 0 20 40 80
GRAPHIC SCALE IN FEET

THIS PLAN IS THE RESULT OF AN ON THE GROUND SURVEY PERFORMED BETWEEN 12/03/2018 AND 12/04/2018

COMMONWEALTH OF MASSACHUSETTS SCOTT M. L'ITALIEN NO. 50815 REGISTERED PROFESSIONAL LAND SURVEYOR

PROFESSIONAL LAND SURVEYOR FOR RJ O'CONNELL & ASSOCIATES, INC — 4/2/19 DATE

RJOC

NO.	REVISION	DATE

Record Owner:
BIV - 1WH UNIT 3, LLC & BIV - 1WH UNIT 5, LLC
C/O THE SEYON GROUP
118 NEWBURY STREET
3RD FLOOR
BOSTON, MA 02116

Location:
1 WESTINGHOUSE PLAZA
UNITS 3 + 5
HYDE PARK, 01749

PREPARED BY:
RJO'CONNELL & ASSOCIATES, INC.
CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
80 MONTVALE AVENUE, SUITE 201 STONEHAM, MA 02180
PHONE: 781.279.0180 RJOCONNELL.COM

PREPARED FOR:
BIV-1WH UNIT 3, LLC AND
BIV-1WH UNIT 5, LLC
c/o THE SEYON GROUP
118 NEWBURY STREET, 3RD FLOOR
BOSTON, MA 02116
PHONE: 857-350-4583

PROJECT NAME:
1 WESTINGHOUSE PLAZA UNITS 3 AND 5
HYDE PARK, MA

SEAL:
COMMONWEALTH OF MASSACHUSETTS SCOTT M. L'ITALIEN NO. 50815 REGISTERED PROFESSIONAL LAND SURVEYOR
4/2/19

DRAWN BY:	RJK
REVIEWED BY:	SML
SCALE:	1" = 40'
FIELD CREW:	AA / RJK / DPB
FIELD BOOK:	FIELD BOOK 30 PG 37
DATE:	04/02/2019

DRAWING NAME:
EXISTING CONDITIONS PLAN

DRAWING NUMBER:
EX-1

PROJECT NUMBER:
18087

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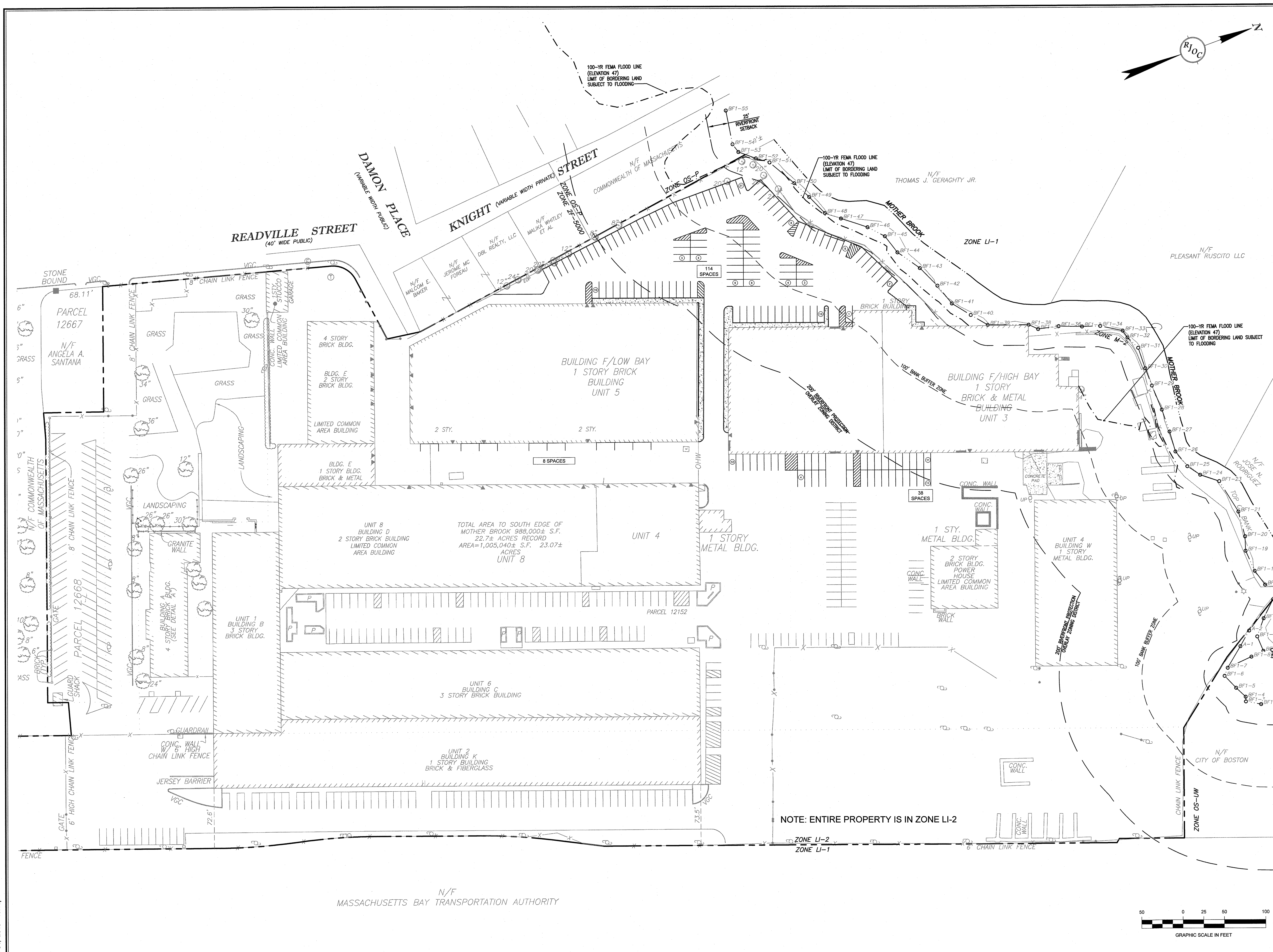

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RJOC

NO.	REVISION	DATE

NO.	REVISION	DATE

PREPARED BY:

RJO'CONNELL & ASSOCIATES, INC.
CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
80 MONTVALE AVENUE, SUITE 201 STONEHAM, MA 02180
PHONE: 781.279.0180 RJOCONNELL.COM

PREPARED FOR:

BIV-1WH UNIT 3, LLC AND
BIV-1WH UNIT 5, LLC
c/o THE SEYON GROUP

118 NEWBURY STREET, 3RD FLOOR
BOSTON, MA 02116
PHONE: 857-350-4583

PROJECT NAME:

1 WESTINGHOUSE PLAZA UNITS 3 AND 5

HYDE PARK, MA

SEAL:

COMMONWEALTH OF MASSACHUSETTS JOHN J. STOY CIVIL No. 42797 REGISTERED PROFESSIONAL ENGINEER

4-2-19

DESIGNED BY: BJM
DRAWN BY: WJH
REVIEWED BY: BJM
SCALE: 1"=50'

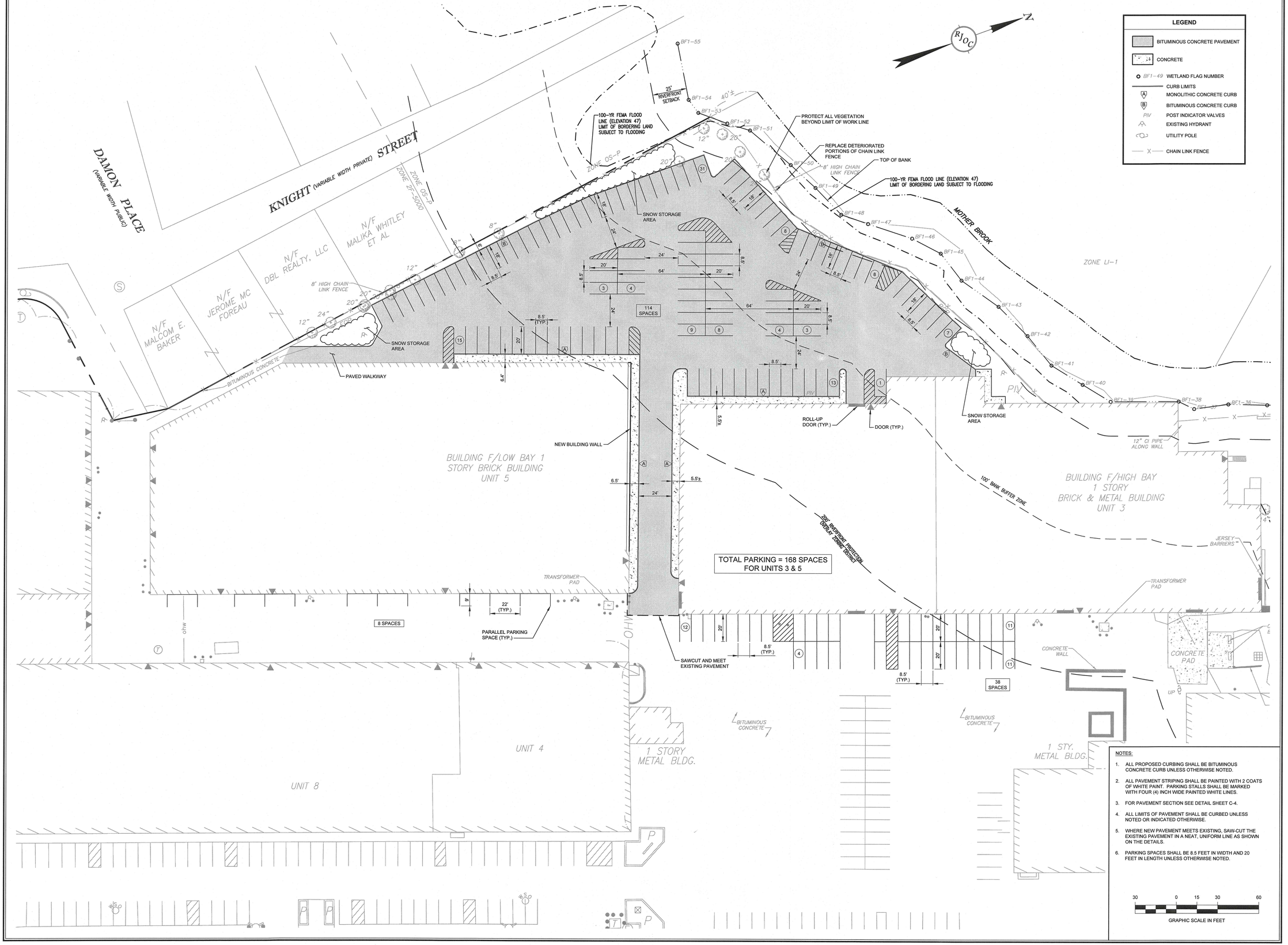
DATE: 04/02/2019

DRAWING NAME:

OVERALL SITE PLAN

DRAWING NUMBER: **C-1**

PROJECT NUMBER: 18087



RJOC

NO.	REVISION	DATE

NO.	REVISION	DATE

PREPARED BY:
RJO'CONNELL & ASSOCIATES, INC.
CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
80 MONTVALE AVENUE, SUITE 201 STONEHAM, MA 02180
PHONE: 781.279.0180 RJOCONNELL.COM

PREPARED FOR:

BIV-1WH UNIT 3, LLC AND
BIV-1WH UNIT 5, LLC
c/o THE SEYON GROUP

118 NEWBURY STREET, 3RD FLOOR
BOSTON, MA 02116
PHONE: 857-350-4583

PROJECT NAME:

1 WESTINGHOUSE PLAZA UNITS 3 AND 5

HYDE PARK, MA

SEAL:

COMMONWEALTH OF MASSACHUSETTS
JOHN J. STOY
CIVIL
No. 42797
REGISTERED PROFESSIONAL ENGINEER
4-2-19

DESIGNED BY:	BJM
DRAWN BY:	WJH
REVIEWED BY:	BJM
SCALE:	1" = 30'
DATE:	04/02/2019

DRAWING NAME:

PARKING AND TRAFFIC CONTROL PLAN

DRAWING NUMBER:

C-2

PROJECT NUMBER: 18087

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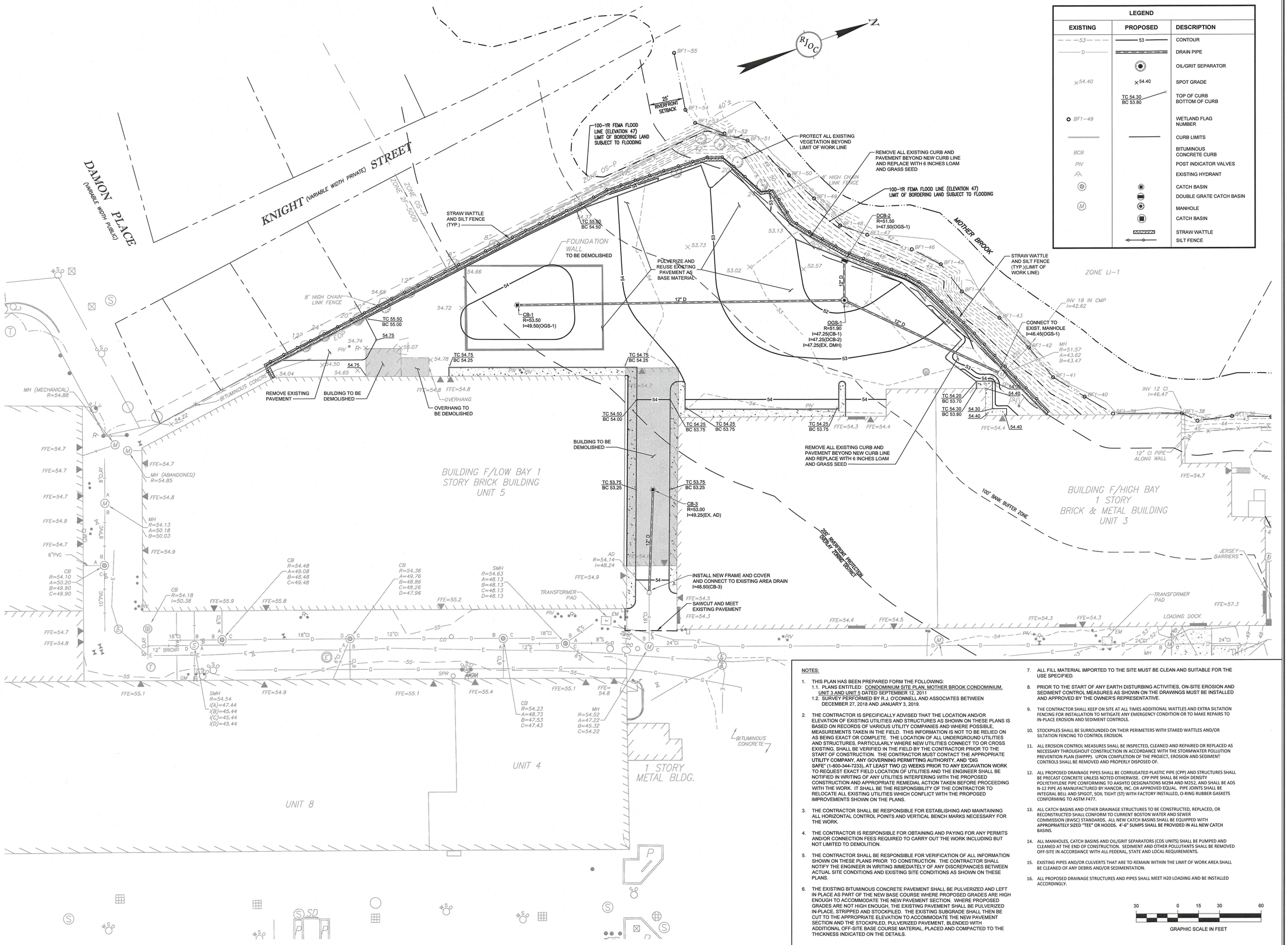

NOTES:

1. THIS PLAN HAS BEEN PREPARED FORM THE FOLLOWING:
   1.1. PLANS ENTITLED: CONDOMINIUM SITE PLAN, MOTHER BROOK CONDOMINIUM, UNIT 3 AND UNIT 5 DATED SEPTEMBER 12, 2011
   1.2. SURVEY PERFORMED BY R.J. O'CONNELL AND ASSOCIATES BETWEEN DECEMBER 27, 2018 AND JANUARY 3, 2019.
2. THE CONTRACTOR IS SPECIFICALLY ADVISED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES, PARTICULARLY WHERE NEW UTILITIES CONNECT TO OR CROSS EXISTING, SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY, ANY GOVERNING PERMITTING AUTHORITY, AND "DIG SAFE" (1-800-344-7233), AT LEAST TWO (2) WEEKS PRIOR TO ANY EXCAVATION WORK TO REQUEST EXACT FIELD LOCATION OF UTILITIES AND THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL HORIZONTAL CONTROL POINTS AND VERTICAL BENCH MARKS NECESSARY FOR THE WORK.
4. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND PAYING FOR ANY PERMITS AND/OR CONNECTION FEES REQUIRED TO CARRY OUT THE WORK INCLUDING BUT NOT LIMITED TO DEMOLITION.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL INFORMATION SHOWN ON THESE PLANS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING IMMEDIATELY OF ANY DISCREPANCIES BETWEEN ACTUAL SITE CONDITIONS AND EXISTING SITE CONDITIONS AS SHOWN ON THESE PLANS.
6. THE EXISTING BITUMINOUS CONCRETE PAVEMENT SHALL BE PULVERIZED AND LEFT IN PLACE AS PART OF THE NEW BASE COURSE WHERE PROPOSED GRADES ARE HIGH ENOUGH TO ACCOMMODATE THE NEW PAVEMENT SECTION. WHERE PROPOSED GRADES ARE NOT HIGH ENOUGH, THE EXISTING PAVEMENT SHALL BE PULVERIZED IN-PLACE, STRIPPED AND STOCKPILED. THE EXISTING SUBGRADE SHALL THEN BE CUT TO THE APPROPRIATE ELEVATION TO ACCOMMODATE THE NEW PAVEMENT SECTION AND THE STOCKPILED, PULVERIZED PAVEMENT, BLENDED WITH ADDITIONAL OFF-SITE BASE COURSE MATERIAL, PLACED AND COMPACTED TO THE THICKNESS INDICATED ON THE DETAILS.
7. ALL FILL MATERIAL IMPORTED TO THE SITE MUST BE CLEAN AND SUITABLE FOR THE USE SPECIFIED.
8. PRIOR TO THE START OF ANY EARTH DISTURBING ACTIVITIES, ON-SITE EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN ON THE DRAWINGS MUST BE INSTALLED AND APPROVED BY THE OWNER'S REPRESENTATIVE.
9. THE CONTRACTOR SHALL KEEP ON SITE AT ALL TIMES ADDITIONAL WATTLES AND EXTRA SILTATION FENCING FOR INSTALLATION TO MITIGATE ANY EMERGENCY CONDITION OR TO MAKE REPAIRS TO IN-PLACE EROSION AND SEDIMENT CONTROLS.
10. STOCKPILES SHALL BE SURROUNDED ON THEIR PERIMETERS WITH STAKED WATTLES AND/OR SILTATION FENCING TO CONTROL EROSION.
11. ALL EROSION CONTROL MEASURES SHALL BE INSPECTED, CLEANED AND REPAIRED OR REPLACED AS NECESSARY THROUGHOUT CONSTRUCTION IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP). UPON COMPLETION OF THE PROJECT, EROSION AND SEDIMENT CONTROLS SHALL BE REMOVED AND PROPERLY DISPOSED OF.
12. ALL PROPOSED DRAINAGE PIPES SHALL BE CORRUGATED PLASTIC PIPE (CPP) AND STRUCTURES SHALL BE PRECAST CONCRETE UNLESS NOTED OTHERWISE. CPP PIPE SHALL BE HIGH DENSITY POLYETHYLENE PIPE CONFORMING TO AASHTO DESIGNATIONS M294 AND M252, AND SHALL BE ADS N-12 PIPE AS MANUFACTURED BY HANCOR, INC. OR APPROVED EQUAL. PIPE JOINTS SHALL BE INTEGRAL BELL AND SPIGOT, SOIL TIGHT (ST) WITH FACTORY INSTALLED, O-RING RUBBER GASKETS CONFORMING TO ASTM F477.
13. ALL CATCH BASINS AND OTHER DRAINAGE STRUCTURES TO BE CONSTRUCTED, REPLACED, OR RECONSTRUCTED SHALL CONFORM TO CURRENT BOSTON WATER AND SEWER COMMISSION (BWSC) STANDARDS. ALL NEW CATCH BASINS SHALL BE EQUIPPED WITH APPROPRIATELY SIZED "TEE" OR HOODS. 4'-6" SUMPS SHALL BE PROVIDED IN ALL NEW CATCH BASINS.
14. ALL MANHOLES, CATCH BASINS AND OIL/GRIT SEPARATORS (CDS UNITS) SHALL BE PUMPED AND CLEANED AT THE END OF CONSTRUCTION. SEDIMENT AND OTHER POLLUTANTS SHALL BE REMOVED OFF-SITE IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REQUIREMENTS.
15. EXISTING PIPES AND/OR CULVERTS THAT ARE TO REMAIN WITHIN THE LIMIT OF WORK AREA SHALL BE CLEANED OF ANY DEBRIS AND/OR SEDIMENTATION.
16. ALL PROPOSED DRAINAGE STRUCTURES AND PIPES SHALL MEET H20 LOADING AND BE INSTALLED ACCORDINGLY.

30 0 15 30 60
GRAPHIC SCALE IN FEET

RJOC

NO.	REVISION	DATE

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c/o THE SEYON GROUP
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PHONE: 857-350-4583

PROJECT NAME:
1 WESTINGHOUSE PLAZA UNITS 3 AND 5
HYDE PARK, MA

SEAL:
COMMONWEALTH OF MASSACHUSETTS
JOHN J. BTCP
CIVIL
No. 42797
REGISTERED PROFESSIONAL ENGINEER
4-2-19

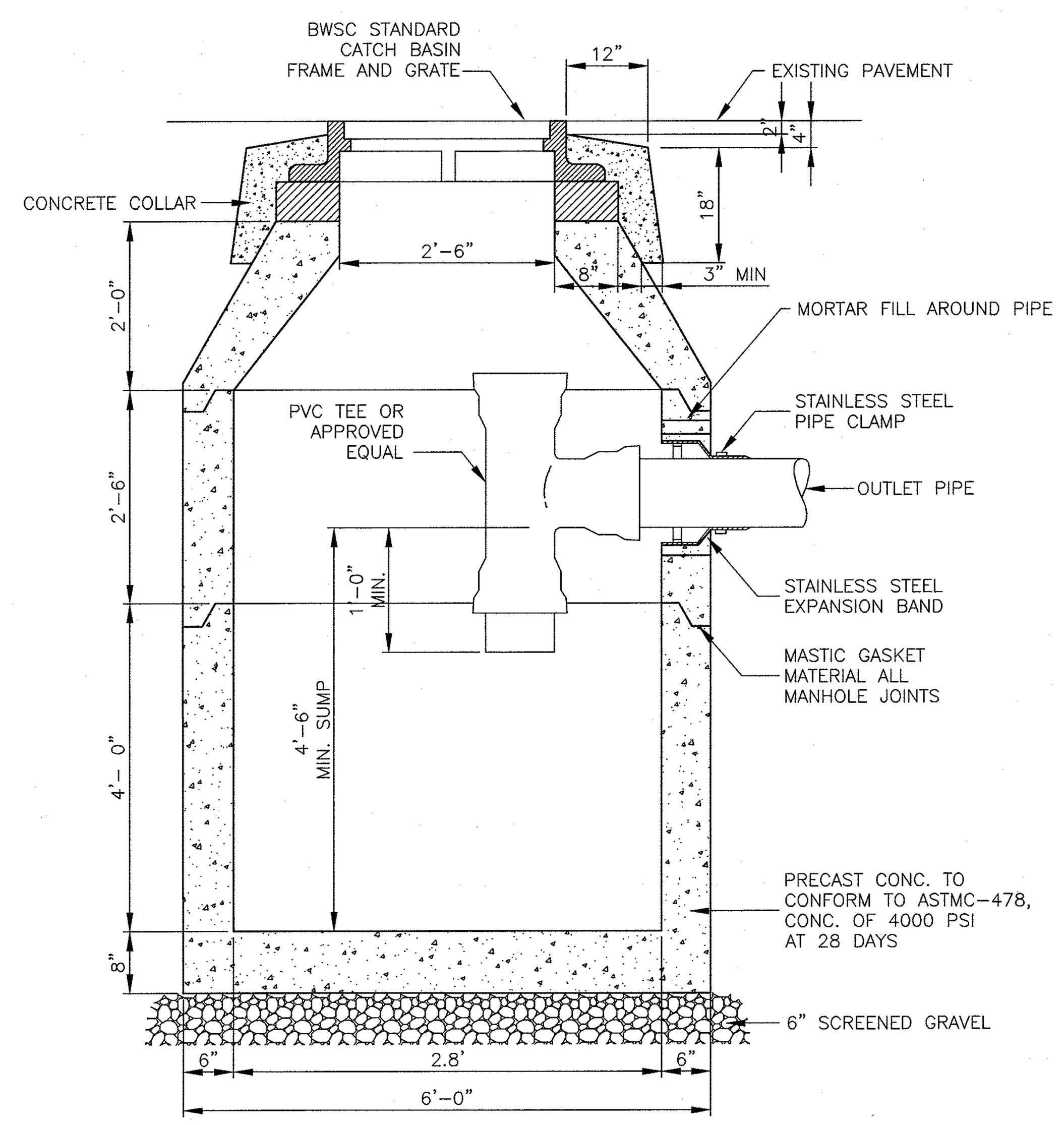
DESIGNED BY:	BJM
DRAWN BY:	WJH
REVIEWED BY:	BJM
SCALE:	1"=30'
DATE:	04/02/2019

DRAWING NAME:
GRADING AND DRAINAGE PLAN

DRAWING NUMBER:
C-3

PROJECT NUMBER:
18087

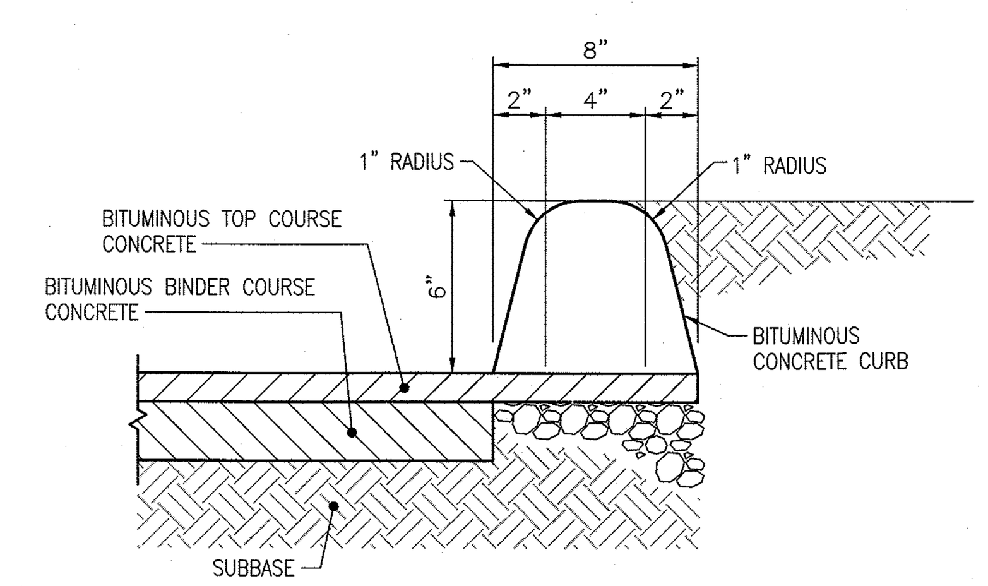
Drawing name: G:\MA\Hyde Park\PMRG\I Westinghouse\Main\18087_C-3 Grading & Drainage Plan.dwg
Apr 04, 2019 - 18:15pm



Boston Water and Sewer Commission 980 HARRISON AVE., BOSTON, MA 02119 (617) 989-7000 www.bwsc.org	CATCH BASIN WITH OIL TRAP OUTLET Scale: Not To Scale	DATE: June 30, 2012	DETAIL NO. B-01g

NOTE:

1. BITUMINOUS CONCRETE FOR CURBING SHALL BE CLASS I CONFORMING TO THE APPLICABLE REQUIREMENTS FOR DENSE MIX IN SECTION M3.11.03, TABLE A, OF THE MASSDOT STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES.
2. THE BITUMINOUS CONCRETE MIXTURE SHALL BE PLACED AND COMPACTED WITH A MACHINE CAPABLE OF SPREADING THE MIXTURE TRUE TO LINE AND GRADE AND TO THE SHAPE STIPULATED.
3. IF AT ANY TIME BEFORE ACCEPTANCE OF THE WORK ANY SOFT OR IMPERFECT SPOTS DEVELOP IN THE EXPOSED SURFACE OF THE CURB, THAT PORTION OF THE CURB SHALL BE REMOVED AND REPLACED WITH NEW CURBING AT NO COST TO THE OWNER.



BITUMINOUS CONCRETE CURB DETAIL (TYPE B)

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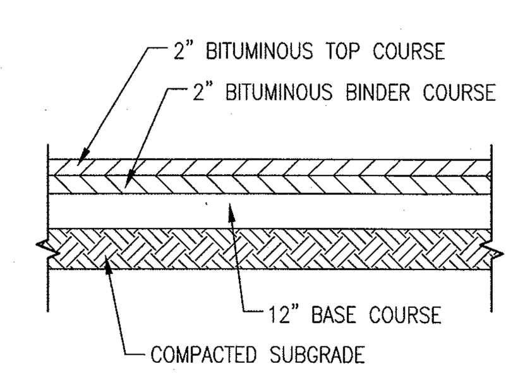


STANDARD DUTY PAVEMENT

PAVEMENT LAYER	STANDARD DUTY PAVEMENT
TOP COURSE BITUMINOUS PAVEMENT SECTION M3.11.00	2 INCHES
BINDER COURSE BITUMINOUS PAVEMENT SECTION M1.11.00	2 INCHES
BASE COURSE SEE NOTE 3	12 INCHES

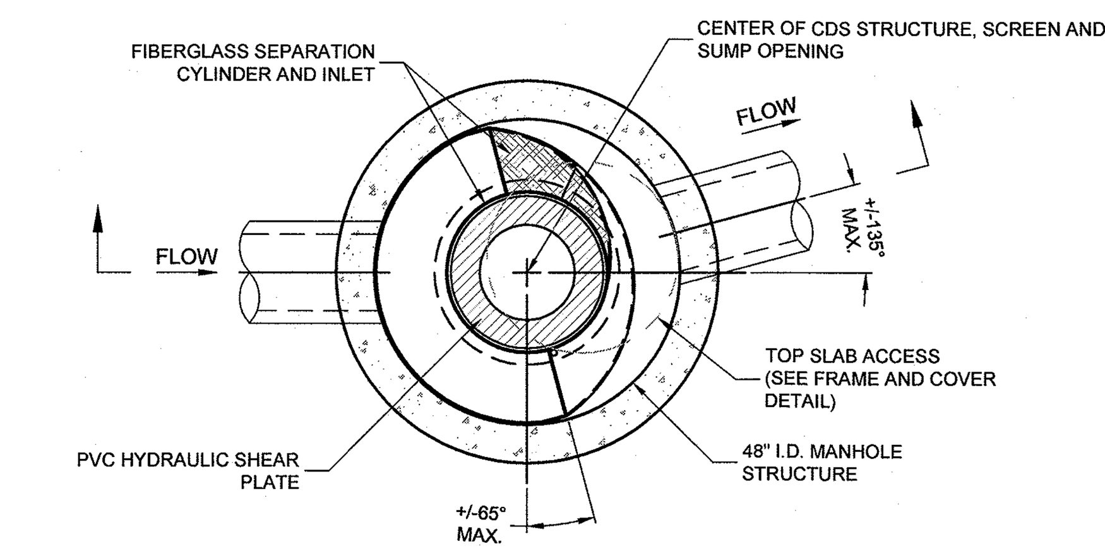
PAVEMENT SECTION TABLE

NOTES:

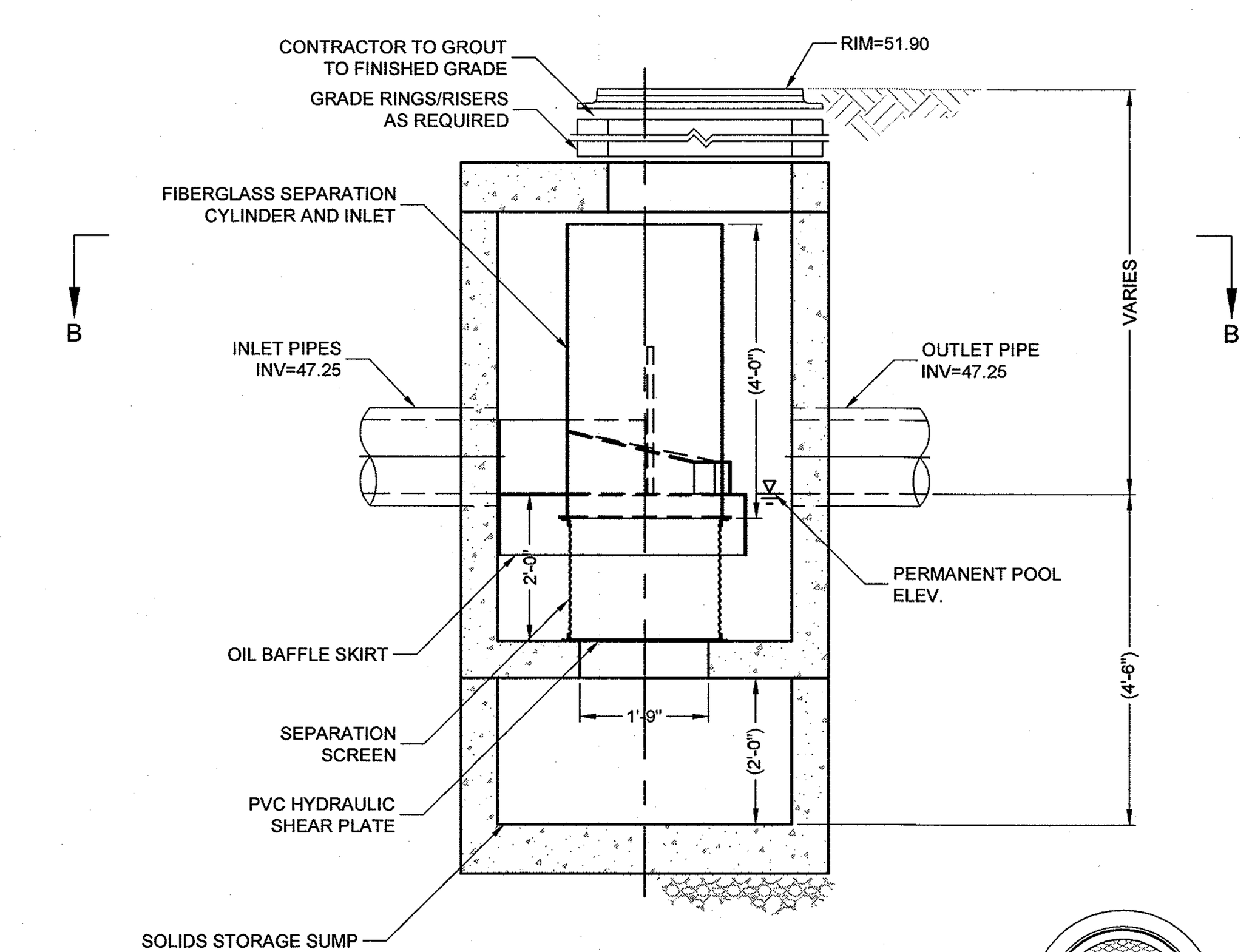
1. BITUMINOUS TOP COURSE SHALL MEET THE COMPOSITION LIMITS IN MASSDOT SECTION M3.11.00 TABLE A (TOP COURSE)
2. BITUMINOUS BINDER COURSE SHALL MEET THE COMPOSITION LIMITS IN MASSDOT SECTION M3.11.00 TABLE A (BINDER COURSE)
3. BASE COURSE MATERIAL SHALL BE MASSDOT SECTION M1.03.0, TYPE B, GRAVEL BORROW.
4. RECLAIMED BITUMINOUS CONCRETE PAVEMENT MAY BE USED AS A BASE COURSE MATERIAL PROVIDED IT MEETS THE REQUIREMENTS OF MASSDOT SECTION M1.11.0.

TYPICAL PAVEMENT DETAIL

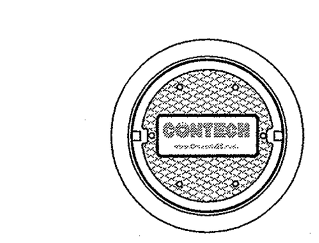
SCALE: N.T.S.



PLAN VIEW B-B
N.T.S.



ELEVATION A-A
N.T.S.



FRAME AND COVER
(DIAMETER VARIES)
N.T.S.

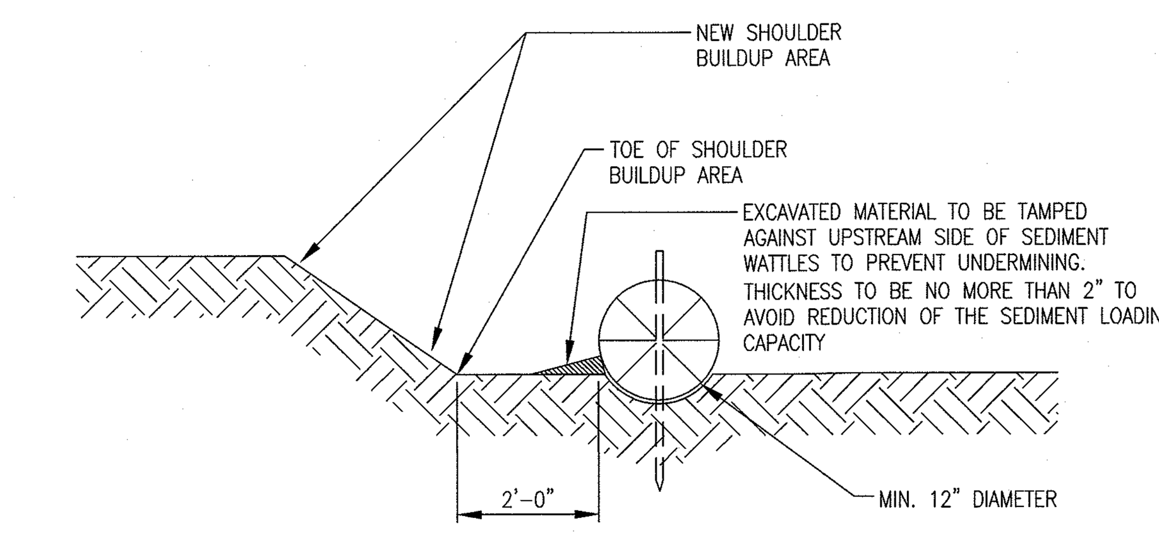
GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. DIMENSIONS MARKED WITH ( ) ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
3. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH CONSTRUCTION PRODUCTS REPRESENTATIVE. www.contech-cpi.com
4. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
5. STRUCTURE SHALL MEET AASHTO HS20 AND CASTINGS SHALL MEET AASHTO M306 LOAD RATING, ASSUMING GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION.
6. PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.

INSTALLATION NOTES
1. SET UNIT ON 6-INCHES OF 3/4" CRUSHED STONE.
2. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
3. CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
4. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
5. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

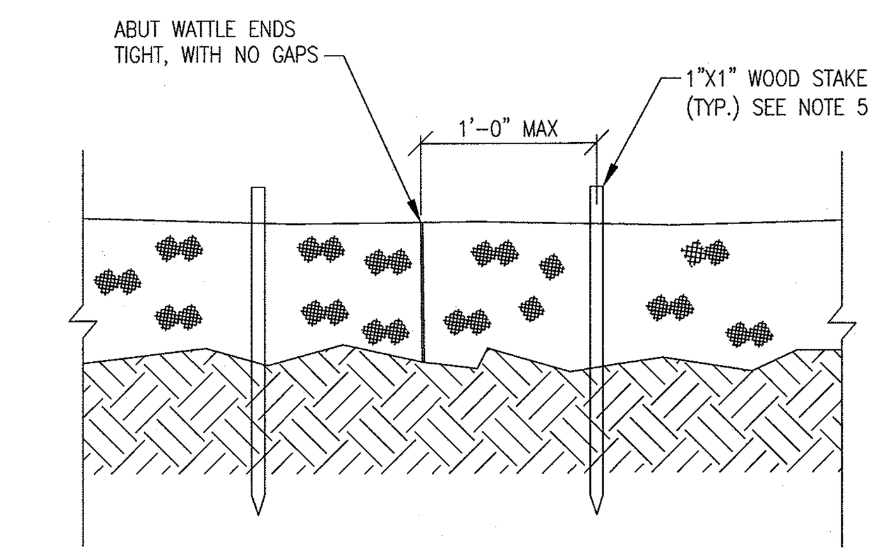
CONTECH®
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

OIL/GRIT SEPARATOR (OGS) CDS2015-4-C

SCALE: N.T.S.



SECTION SEDIMENT WATTLE



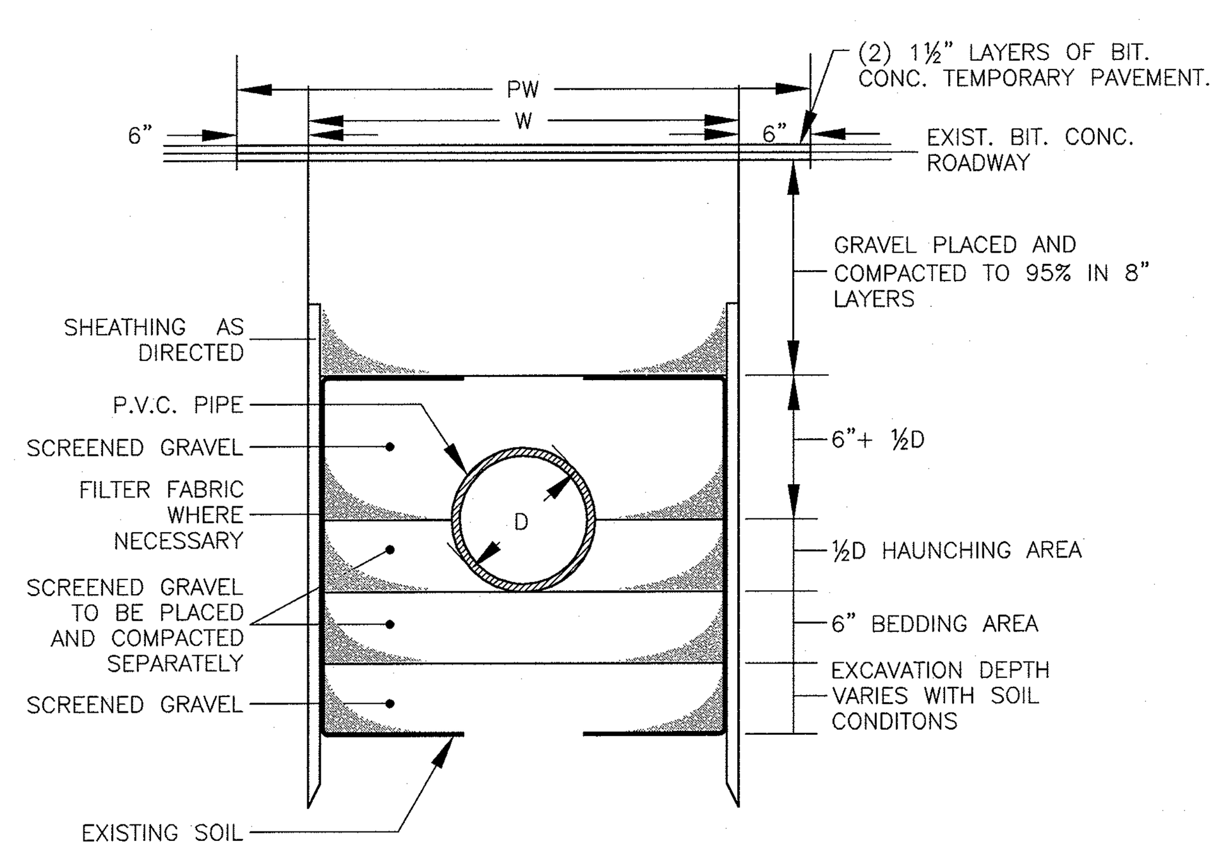
ELEVATION SEDIMENT WATTLES CONNECTION

NOTES:

1. WATTLES SHALL BE A MACHINE-PRODUCED, FLEXIBLE TUBE FILLED WITH WEED FREE FORAGE, COMPACTED RICE STRAW. NETTING SHALL BE SEAMLESS, HIGH-DENSITY, POLYETHYLENE AND ETHYL VINYL ACETATE CONTAINING ULTRA VIOLET INHIBITORS.
2. SEDIMENT WATTLES ARE TO BE INSTALLED BEFORE CONSTRUCTION COMMENCES AND/OR AS DIRECTED BY THE ENGINEER. SIZE, INSTALLATION AND MAINTENANCE SHALL BE PER THE MANUFACTURER'S SPECIFICATIONS FOR PERIMETER PROTECTION AND AS FILED CONDITIONS WARRANT.
3. TRENCHES TO BE CONSTRUCTED ALONG AND PARALLEL TO THE CONTOURS. TRENCH DEPTH TO BE $\frac{1}{3}$ THE THICKNESS OF THE SEDIMENT WATTLE. PLACE EXCAVATED MATERIAL ON UPHILL SIDE OF TRENCH.
4. LOCATE SEDIMENT WATTLES AS INDICATED ON PLANS OR AS DIRECTED BY THE ENGINEER.
5. SEDIMENT WATTLES TO BE IN CONTINUOUS CONTACT WITH TRENCH BOTTOM AND SIDES. NO DAYLIGHT SHOULD BE SEEN UNDER THE WATTLE. DO NOT OVERLAP THE ENDS ON TOP OF EACH OTHER.
6. STAKES TO PENETRATE SOIL OF TRENCH BOTTOM 12" MINIMUM. STAKES TO BE EXPOSED 3" MAXIMUM ABOVE THE TOP OF WATTLE. SPACE STAKES 4'-0" O.C. MAX., 1'-0" MAX. AT WATTLE ENDS. A 20" DIAMETER WATTLE MAY NEED TO BE MADE FROM 2-3 ROLLED EXCELSIOR OR STRAW BLANKETS.
7. REPAIR ANY RILLS OR GULLIES PROMPTLY.
8. THE INSTALLATION AND MAINTENANCE OF SEDIMENT WATTLE BMP'S SHALL NOT NEGATIVELY IMPACT TRAFFIC SAFETY.

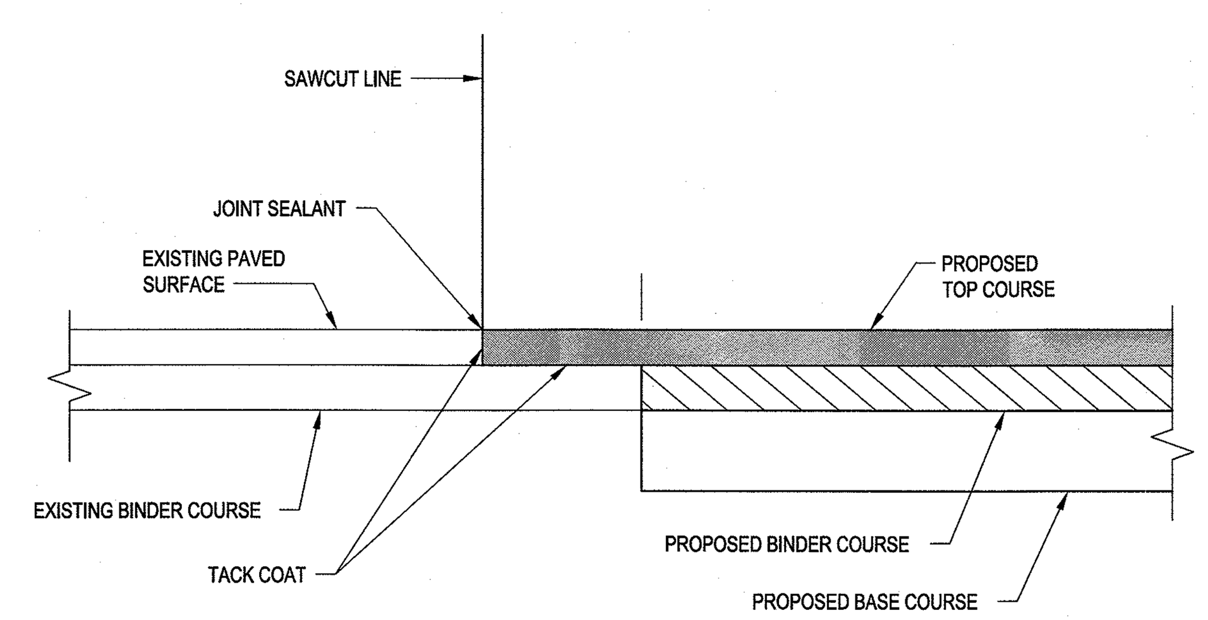
WATTLE EROSION AND SILTATION BARRIER

SCALE: N.T.S.



W = MAXIMUM TRENCH WIDTH
PW = MAXIMUM PAVING WIDTH = W+1'-0"
D = OUTSIDE DIAMETER
UNSHEATHED TRENCH: W = D+2' (3'-0"MIN.)
SHEATHED TRENCH: W = D+2'+ SHEATHING WIDTH:
4'-0"MIN. W/O WALERS
5'-0"MIN. W/WALERS
TRENCH BOX OR HYDRAULIC SHORING:
W = D+2'+ [WALL SHIELD WIDTH ± 8"] + 1' FOR TRENCH BOX

Boston Water and Sewer Commission 980 HARRISON AVE., BOSTON, MA 02119 (617) 989-7000 www.bwsc.org	TRENCH DETAIL FOR PVC PIPE Scale: Not To Scale	DATE: June 30, 2012	DETAIL NO. C-4

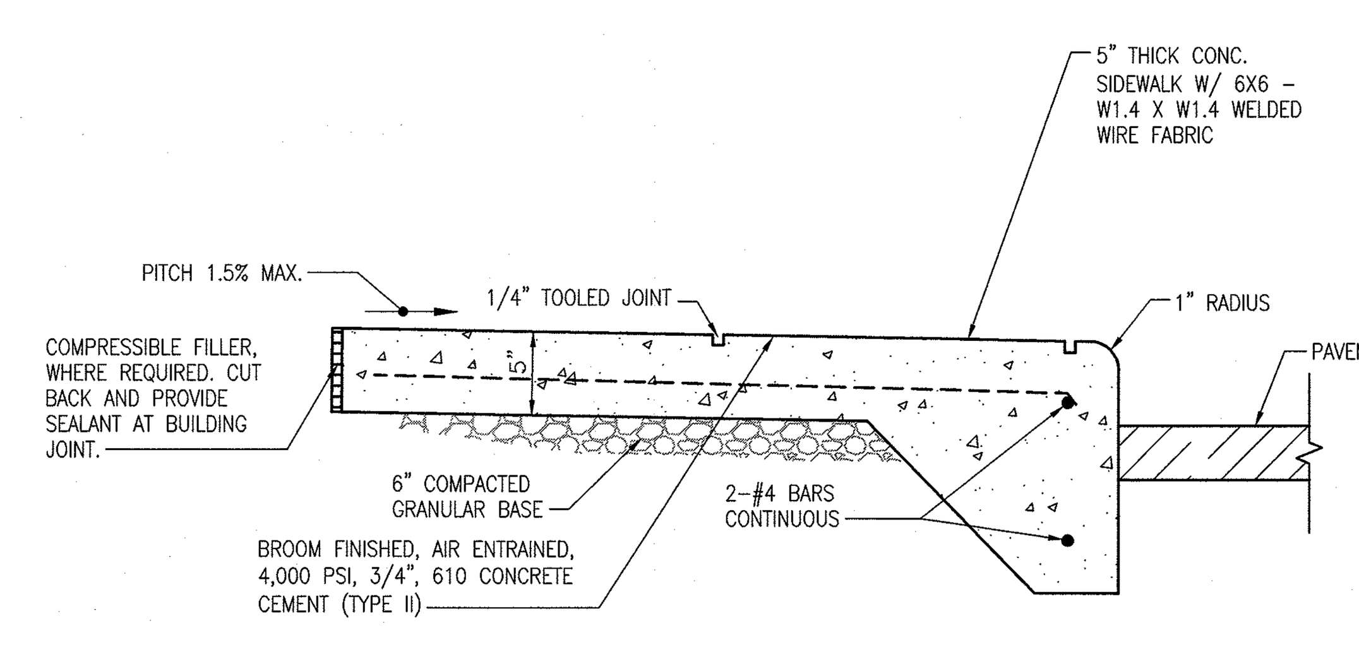


NOTES:

1. WHERE NEW PAVEMENT ABUTS EXISTING PAVEMENT, JOINTS SHALL BE SEALED USING A HOT-APPLIED RUBBERIZED JOINT SEALANT CONFORMING TO REQUIREMENTS OF ASTM D6690 AND FEDERAL SPECIFICATIONS SS-S-1401C. SEALANT SHALL FORM A RESILIENT AND ADHESIVE SEAL PREVENTING INFILTRATION OF MOISTURE.
2. TACK COAT SHALL BE EMULSIFIED ASPHALT RS-1 CONFORMING TO MASSDOT SECTION M3.03.0 AND AASHTO-M140.

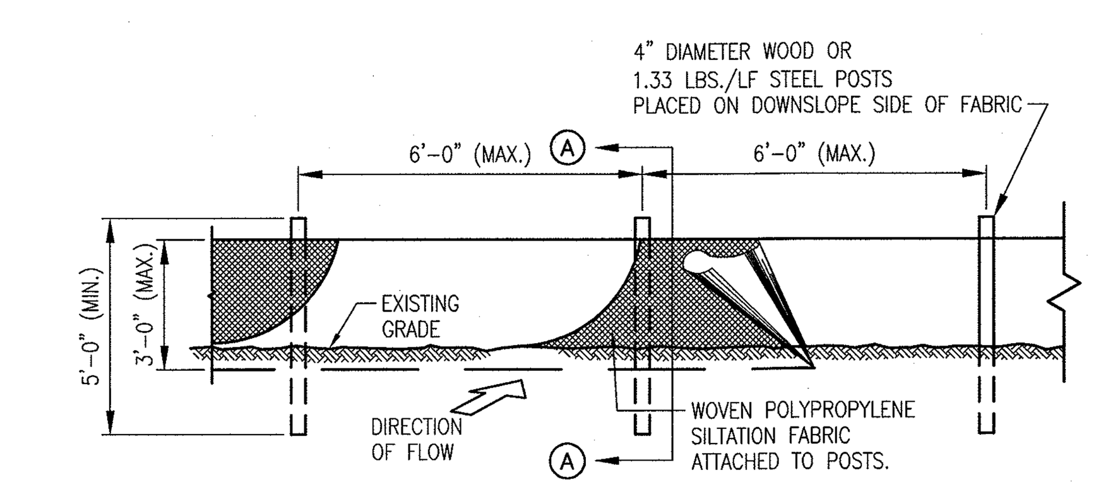
TYPICAL MATCH EXISTING PAVEMENT DETAIL

SCALE: N.T.S.

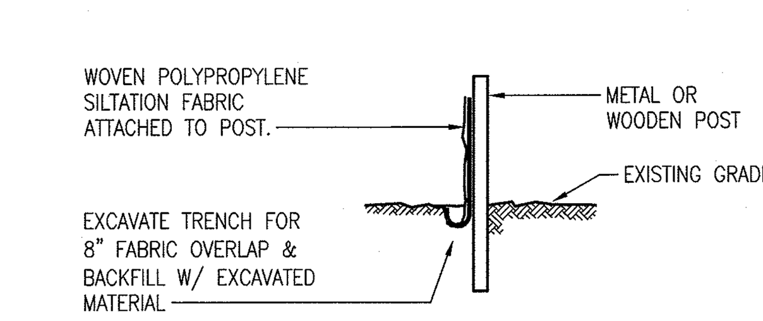


MONOLITHIC CONCRETE CURB AND SIDEWALK DETAIL (TYPE A)

SCALE: N.T.S.



ELEVATION



SECTION A-A

NOTE:

IN AREAS WHERE ANCHOR TRENCH CANNOT BE DUG, FABRIC WILL BE LAID ON SURFACE AND COVERED WITH A MINIMUM OF 6" DEPTH OF SOIL.

TYPICAL SILTATION FENCE DETAIL

SCALE: N.T.S.

RJOC

NO.	REVISION	DATE

NO.	REVISION	DATE

PREPARED BY:
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BIV-1WH UNIT 5, LLC
c/o THE SEYON GROUP
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PHONE: 857-350-4583

PROJECT NAME:
1 WESTINGHOUSE PLAZA UNITS 3 AND 5
HYDE PARK, MA

SEAL:
COMMONWEALTH OF MASSACHUSETTS
JOHN J. STOY
CIVIL
No. 42797
REGISTERED PROFESSIONAL ENGINEER
[illegible]
4-2-19

DESIGNED BY: BJM
DRAWN BY: WJH
REVIEWED BY: BJM
SCALE: AS SHOWN
DATE: 04/02/2019

DRAWING NAME:
MISELLANEOUS DETAILS

DRAWING NUMBER:
C-4

PROJECT NUMBER: 18087

Drawing name: G:\MA\Hyde Park\PMRG\I Westinghouse\Main\18087_C-4 Miscellaneous Details.dwg
Apr 02, 2019 - 16:50pm

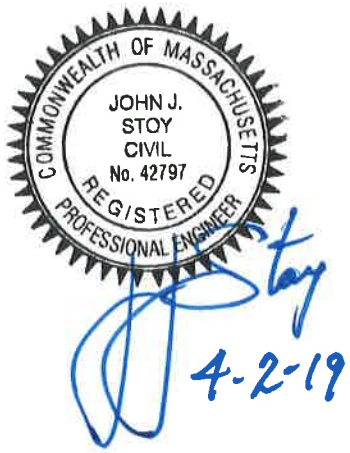
RJOC

Stormwater Management Report

Unit 3 & Unit 5
Westinghouse Plaza
Hyde Park, Massachusetts

Prepared for:
BIV – 1WH Unit 3, LLC & BIV – 1WH Unit 5, LLC
c/o The Seyon Group
118 Newbury Street, 3rd Floor
Boston, MA 02116

Prepared by:
R.J. O'Connell & Associates, Inc.
80 Montvale Ave, Suite 201
Stoneham, MA 02180



Date:
April 2, 2019

STORMWATER REPORT
Westinghouse Plaza
Hyde Park, MA

`TABLE OF CONTENTS

I. STORMWATER MANAGEMENT PLAN NARRATIVE

STORMWATER MANAGEMENT PLAN
Westinghouse Plaza
Hyde Park, MA

STORMWATER MANAGEMENT REPORT

1.0 INTRODUCTION

RJ O'Connell & Associates, Inc. on behalf of BIV – 1WH Unit 3, LLC & BIV – 1WH Unit 5, LLC, (c/o The Seyon Group) has prepared this stormwater report for the proposed pavement repair of a portion of 1 Westinghouse Plaza in Hyde Park, Massachusetts (see Figure 1, USGS Site Locus Map). The Applicant is the owner of condominium units 3 & 5 in Westinghouse Plaza. A portion of the existing paved area on site behind Units 3 and 5 has become deteriorated and will be rehabilitated and renovated to its original condition and provide parking for approximately 114 vehicles. A portion of the existing Unit 5 building will be demolished to provide better access to the rear paved yard for parking. This study presents a comparative analysis of pre-redevelopment, hydrologic conditions to post-redevelopment conditions and demonstrates that the proposed, pavement repair condition will be a significant improvement over existing conditions in terms of stormwater runoff control and treatment.

2.0 SITE LOCATION AND EXISTING CONDITIONS

The project is located on a 23+/- acre site at Westinghouse Plaza in the Hyde Park neighborhood of Boston, Massachusetts. The project site is in the Westinghouse Plaza Local Industrial (LI-2) Subdistrict and is currently occupied by the Mother Brook Condominium (a commercial / industrial condominium). The applicant owns Units 3 and 5 which consist of on-story, brick, industrial building with a low bay and a high bay and the area around the building is completely paved. The uses in these condominium buildings include the manufacture and fabrication of structural steel and similar type industrial uses. Units 3 & 5 condominiums include the paved area behind (west side of) the buildings. The paved area is approximately 1.2 acres.

The property is bounded by Mother Brook on the north, units 4 and 8 on the east, building E to the south and private residences along Knight Street to the west.

The paved area behind the building has been used for years to store steel beams and girders and equipment for the manufacture of steel components. The pavement is completely deteriorated.

Stormwater runoff from this area sheet flows across the pavement and discharges through openings in the curbing and through paved swales directly into Mother Brook. There is no water quality treatment of the stormwater.

As indicated on Figure 2, Flood Insurance Rate Map 25025CO1571 effective 3/16/2016, none of the proposed work is located within the 100-year flood zone.

3.0 PROPOSED PROJECT

The proposed project includes renovating and rehabilitating the existing paved area behind the

building. The existing pavement will be reclaimed by pulverizing and blending it with the underlying base material. Grading of the renovated area will follow existing grades and drain toward new deep-sump catch basins with hoods on their outlet pipes. The catch basins will discharge to an oil/particle separator before connecting to an existing manhole, to which a roof drain from the building currently connects, and outlets to the Mother Brook. The lot will then be paved with 2 courses of bituminous concrete. The renovated paved area will provide parking for approximately 114 vehicles and will result in an increase of approximately 3,000 +/- square feet of pervious, landscaped space. To provide improved access to the new parking area, a 30 ft wide portion of the existing building between the low and high bay buildings will be demolished and an access drive with 5 ft wide sidewalks on each side of the drive will be constructed.
A new catch basin will be installed to drain the access drive and will discharge to an existing 24-inch drain in the front (east side) of the building to which runoff from the building's roof currently discharges.
A stormwater management system has been designed that improves upon current conditions in terms of peak flow control and water quality. The stormwater system is consistent with the objectives of Massachusetts Stormwater Management Policy and its standards for a re-development project. Runoff control, water quality improvement and groundwater recharge will be accomplished by implementing the following drainage improvements:

- Collect storm runoff in deep sump catch basins with hoods and pass it through hydrodynamic Continuous Deflection Separation (CDS) particle separators for treatment of Total Suspended Solids (TSS).
- Increase landscape/open area on the site over existing conditions resulting in reduced peak rates of stormwater discharged from the site and increased groundwater recharged under redeveloped conditions.
- Implement a Construction Period Pollution Protection Plan (CPPPP) to control erosion, sedimentation and other construction related impacts during construction.
- Implement an Operation and Maintenance (O&M) Plan for the proposed stormwater management system that describes the various components of the system, identifies inspection and maintenance tasks, and provides a schedule to follow which will ensure the proper, long-term, post-construction performance of the system.
- Implement a Long Term Pollution Prevention Plan (LTPPP) to prevent illicit discharges to the stormwater management system.

With the above measures in place, runoff will be reduced, runoff water quality significantly improved, and groundwater recharge increased over existing conditions resulting in an overall benefit to Mother Brook.

4.0 COMPLIANCE WITH THE MA DEP STORMWATER STANDARDS

The renovation and re-paving of the existing paved area will include a new stormwater management system to meet the following standards to the maximum extent practicable and improve existing conditions.

STORMWATER MANAGEMENT PLAN
Westinghouse Plaza
Hyde Park, MA

Standard 1: No new stormwater conveyances may discharge untreated directly to or cause erosion in wetlands or waters of the Commonwealth.

Stormwater runoff from the parking area will be collected in catch basins with deep sumps and hooded outlets and further treated by hydrodynamic CDS particle separators. No new stormwater conveyances discharging untreated stormwater directly to or causing erosion in wetlands or waters of the Commonwealth are proposed.

Standard 2: Stormwater management systems shall be designed so that post-development peak discharge rates do not exceed pre-development peak discharge rates.

With the increase in pervious, landscaped area on site, peak rates of stormwater discharged from the site under post-redevelopment conditions will be reduced compared to pre-development rates.

Standard 3: Loss of annual recharge to groundwater shall be eliminated or minimized through the use of infiltration measures including environmentally sensitive site design, low impact development techniques, stormwater best management practices, and good operation and maintenance. At a minimum, the annual recharge from the post-development site shall approximate the annual recharge from pre-development conditions based on soil type. This standard is met when the stormwater management system is designed to infiltrate the required recharge volume as determine in accordance with the Massachusetts Stormwater Handbook.

With the increase in pervious, landscaped area on site, annual groundwater recharge is increased under post-redevelopment conditions

Standard 4: Stormwater management systems shall be designed to remove 80% of the average annual post-construction load of Total Suspended Solids (TSS).

A redevelopment project is required to meet the pretreatment requirements of Standard 4 (44% TSS removal). By installing catch basins with deep sumps and hooded outlets and hydrodynamic, CDS particle separators, this standard will be met.

Standard 5: For land uses with higher potential pollutant loads, source control and pollution prevention shall be implemented in accordance with the Massachusetts Stormwater Handbook to eliminate or reduce the discharge of stormwater runoff from such land uses to the maximum extent practicable.

The project is not a high- intensity- use and is therefore not classified as a land use with higher pollutant loads. However, a detailed source control and pollution prevention plan that includes measures that eliminate or minimize any discharges that have the potential to generate high concentrations of pollutants has been developed.

Standard 6: Stormwater discharges within the Zone II or Interim Wellhead Protection Area of a public water supply, and stormwater discharges near or to any other critical area, require

the use of the specific source control and pollution prevention measures and the specific structural stormwater best management practices determined by the Department to be suitable for managing discharges to such areas, as provided in the Massachusetts Stormwater Handbook.

This standard does not apply since the site is not located within a Zone II or Interim Wellhead Protection Area of a public water supply and does not discharge stormwater to any other critical area.

Standard 7: A redevelopment project is required to meet the following Stormwater Management Standards only to the maximum extent practicable: Standard 2, Standard 3, and the pretreatment and structural best management practice requirements of Standards 4, 5, and 6. Existing stormwater discharges shall comply with Standard 1 only to the maximum extent practicable. A redevelopment project shall also comply with all other requirements of the Stormwater Management Standards and improve existing conditions.

The site qualifies as a redevelopment project. As such, all standards shall be met to the maximum extent practicable.

Standard 8: A plan to control construction-related impacts including erosion, sedimentation and other pollutant sources during construction and land disturbance activities (construction period erosion, sedimentations, and pollution prevention plan) shall be developed and implemented.

A Construction Period Pollution Prevention Plan addressing erosion, sedimentation and other pollutant source control during construction, has been developed and is included in Appendix B.

Standard 9: A long-term operation and maintenance plan shall be developed and implemented to ensure that stormwater management systems function as designed.

An Operation and Maintenance Plan has been developed that outlines inspection and maintenance requirements to insure the long-term, post-construction operation of the stormwater management system and is included in Appendix A.

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

An Illicit Discharge Compliance Statement verifying that no illicit discharges exist on site is included in Section 3 of the Operations and Maintenance Plan in Appendix A.

5.0 SOILS

The soil survey of Suffolk County, Massachusetts by the Natural Resources Conservation Service (NRCS) characterized the underlying soils on site as Urban land, wet substratum.

6.0 EXISTING AND PROPOSED DRAINAGE PATTERNS

The existing and proposed drainage patterns remain unchanged. The total area of the watershed analyzed is 1.16 acres and consists of a single catchment area based on the property line, topography, the existing and proposed drainage systems and their point of discharge from the site, which was the Point of Analysis (POA) of the study (see Existing and Proposed Catchment Plans, CP-1 and CP-2). Runoff from the renovated paved area on site will be collected by the proposed, on-site drainage system that discharge to an existing manhole (POA), located at the northeast corner of the site. Flow exits this manhole in a 18-inch pipe and outlets to the Mother Brook.

7.0 PEAK FLOW RATE MITIGATION

Peak rates of stormwater runoff discharged from the site under existing and proposed conditions were determined for the 2, 10, 25 and 100-year storms at the point of analysis (POA). The drainage analysis was performed using the Rational Method for calculating estimated peak rates of runoff for both pre and post-redeveloped conditions at the POA. Calculations are included in Section III.

Table 1 below summarizes peak pre to post-redevelopment rates of discharge at the Point of Analysis.

Table 1: Peak Rates of Discharge (c.f.s.)

Point of Analysis	2-year storm event		10-year storm event		25-year Storm event		100-year storm event	
	Pre (cfs)	Post (cfs)	Pre (cfs)	Post (cfs)	Pre (cfs)	Post (cfs)	Pre (cfs)	Post (cfs)
POA	3.39	3.24	5.13	4.90	6.47	6.19	9.26	8.85

8.0 GROUNDWATER RECHARGE

Because the amount of landscaped/open space area on site is increased by approximately 3,000 square feet under redevelopment as compared to existing conditions, annual recharge of groundwater will be increased under proposed conditions.

9.0 WATER QUALITY

The redevelopment program includes suitable measures to treat stormwater runoff from paved

areas prior to discharging it off site. Through the use of structural and non-structural BMPs, the water quality of runoff from the proposed parking area will undergo treatment to the maximum extent practicable. The following BMP's were selected to remove at least 44% of the average annual post-construction load of Total Suspended Solids (TSS) from stormwater runoff . Refer to the TSS Removal Calculation Worksheet below.

- Street Sweeping
  Sweeping of the access driveways into the site will be performed quarterly to reduce sediments and trash before they can enter catch basins.

- Catch Basins
  Stormwater runoff will be collected in catch basins with deep sumps and hooded outlets to capture sediment and coarse particles and prevent hydrocarbons and other floatable debris from entering the drainage system.

- Continuous Deflection Separation (CDS) Particle Separators
  Stormwater runoff from the paved parking area collected in catch basins will then be directed to a particle separator for additional treatment. CDS particle separators are underground structures that employ a helical flow pattern which enhances trapping and containment of pollutants and provides effective removal of settleable solids and floating debris from stormwater runoff.

Table 3: TSS Removal Calculation Worksheet

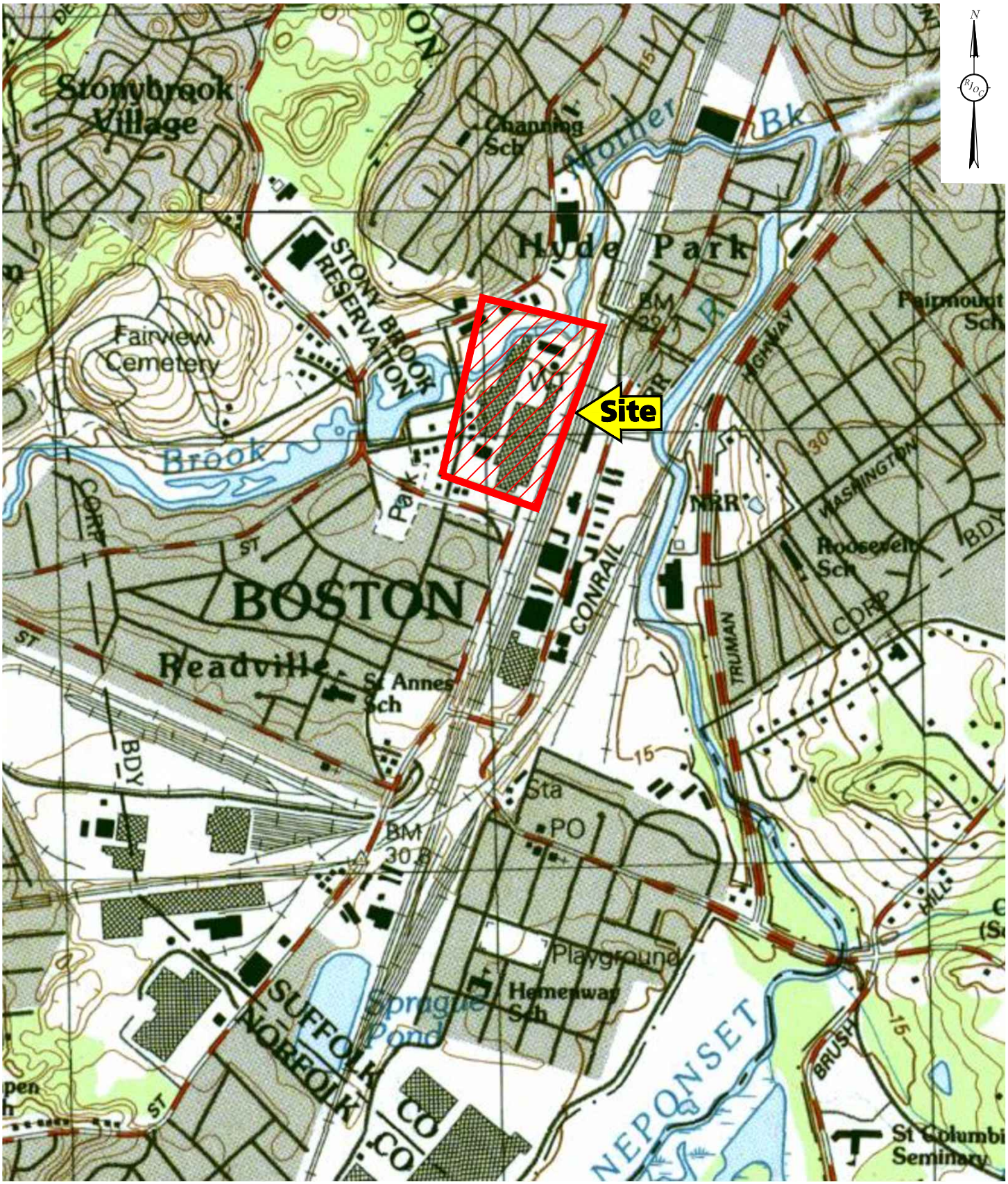
TSS Removal Treatment Train Sweeping - Catch Basins – Particle Separators – Infiltration System				
BMP (A)	**TSS Removal Rate (B)**	**Starting TSS Load (C)**	**Amount Removed (BxC) (D)**	**Remaining Load (C-D) (E)**
Pavement Sweeping	0.05	1.0	0.05	0.95
Deep Sump Catch Basin	0.25	0.95	024	0.71
Hydrodynamic Particle Separator	0.25	0.71	0.18	0.53
Total TSS Removal = Summation of (D) =			**0.47 or 47%**	

10.0 SUMMARY

This drainage analysis calculates peak rates of stormwater runoff from the site for both the

existing and proposed conditions. As shown in the calculations and in the summary table of peak rates of discharges, the increase in pervious/landscaped area in the redeveloped site will reduce peak rates of stormwater discharge from the site and increase groundwater recharge under proposed as compared to existing conditions. The proposed drainage improvements to pre-treat runoff from the parking area, through the use of structural and non-structural BMPs, will result in a reduction in annual stormwater pollutant loads discharged from the site to Mother Brook and significantly improve the water quality of runoff under proposed as compared to existing conditions. These proposed measures represent a substantial improvement over existing conditions and satisfies the requirements and objectives of the Massachusetts Stormwater Management Policy.

II. FIGURES



No.	REVISION	DATE

Designed by:	HAA
Drawn by:	HAA
Checked by:	BJM
Scale:	1"=1,000'
Date:	12/6/2018

Prepared by:
RJO'CONNELL & ASSOCIATES, INC.
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STONEHAM, MA 02180
781-279-0180 / FAX: 781-279-0173

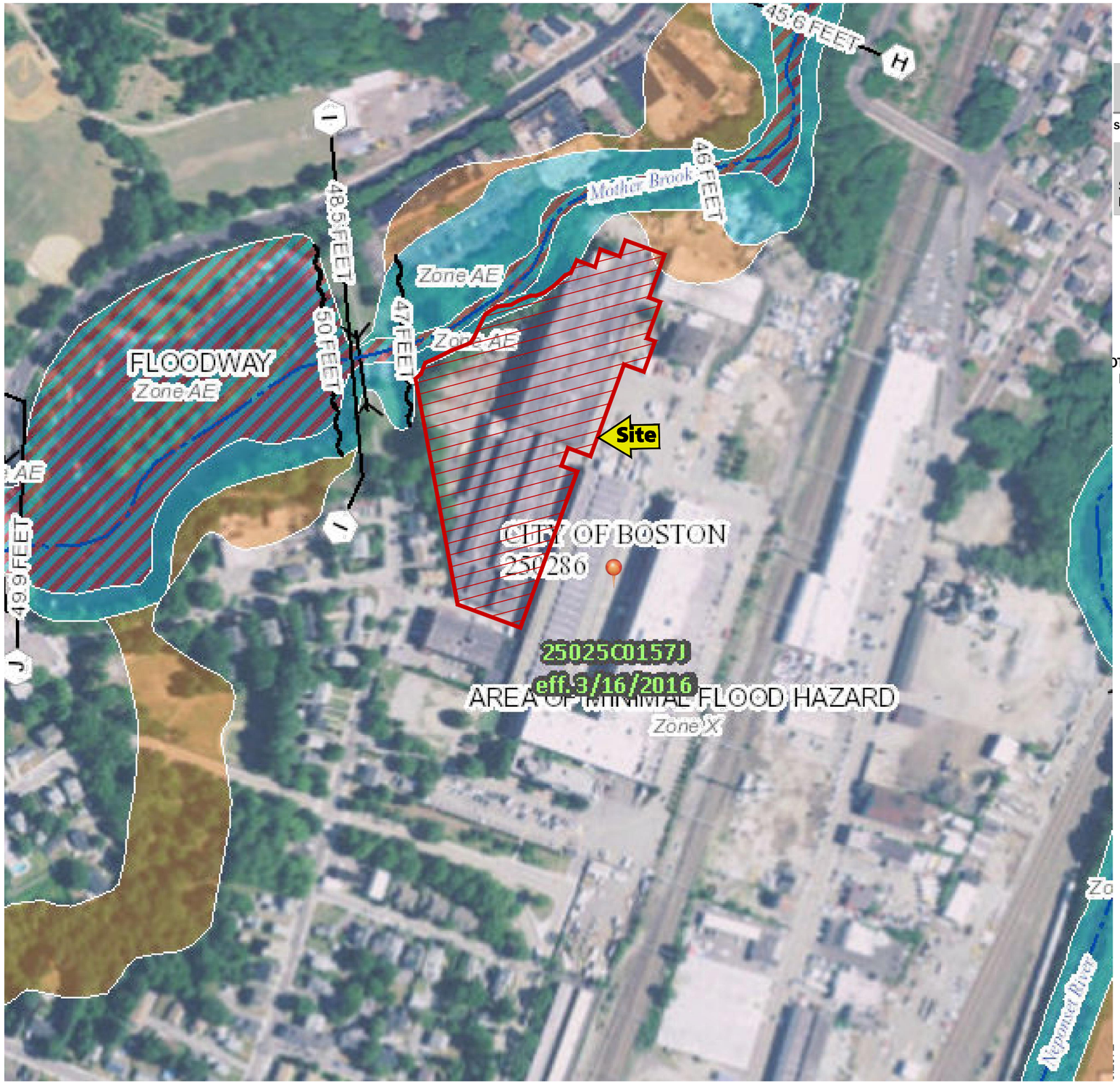
Project Name:
1 WESTINGHOUSE PLAZA
HYDE PARK, MA

Drawing Name:
USGS SITE LOCUS MAP

Drawing No.:
FIG-1

Project No.: 18087

Drawing name: G:\MA\Hyde Park\PMRG\1 Westinghouse\Reports\Stormwater Report\Figures\18087_FIGURE 1-USGS.dwg
Dec 06, 2018 - 13:05pm



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 / 17.5 — Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Transect
- 513 — 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

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 12/6/2018 at 2:16:40 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.

No.	Revision	Date

Designed by:	HAA
Drawn by:	HAA
Checked by:	BJM
Scale:	1"=500'
Date:	03/26/2019

Prepared For:
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118 NEWBURY STREET
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PHONE: 857-350-4583

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Project Name:
UNITS 3 & 5
1 WESTINGHOUSE PLAZA
HYDE PARK, MA

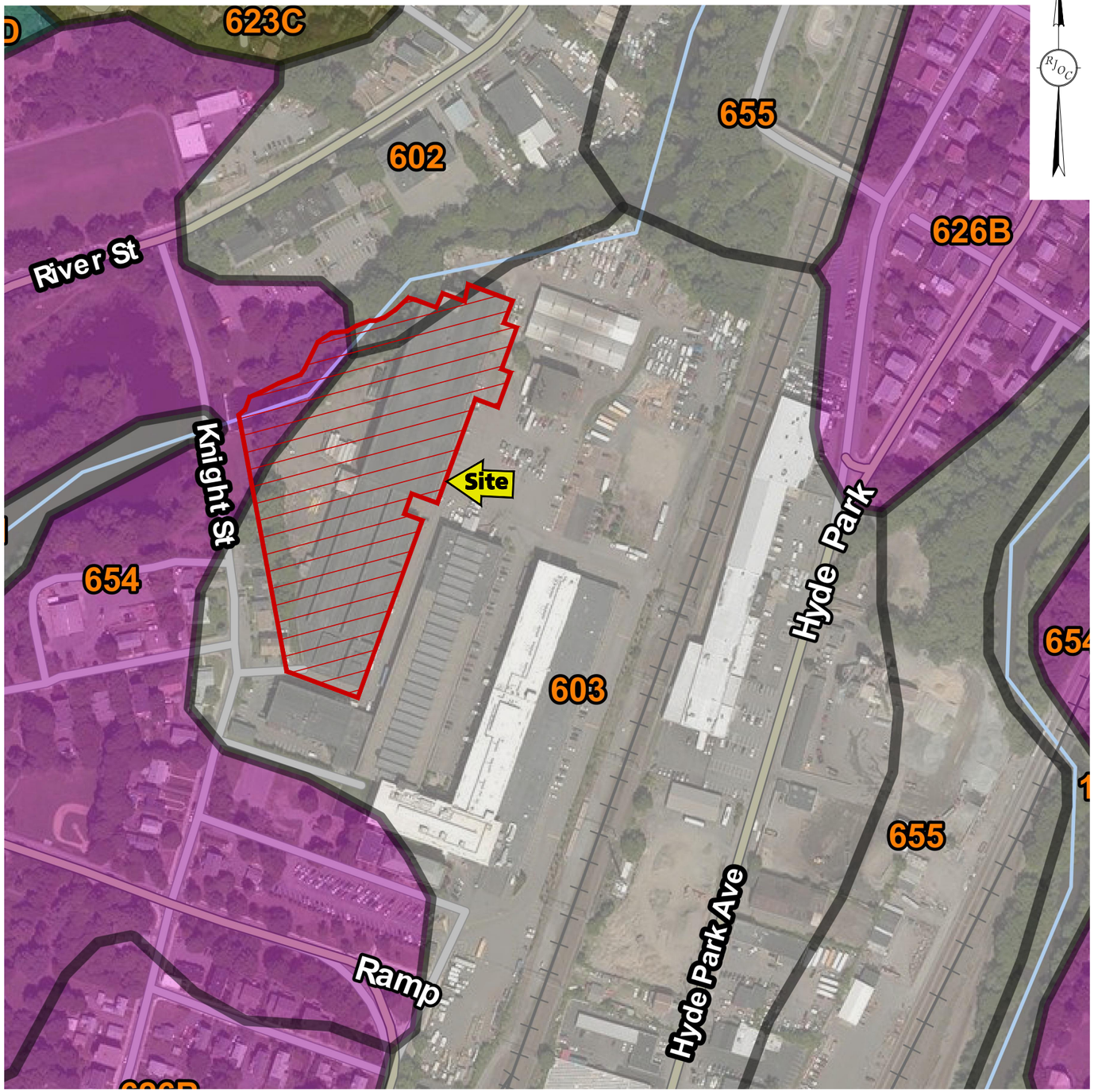
Drawing Name:
FLOOD INSURANCE RATE MAP

Drawing No.:
FIG-2

Project No.: 18087

Drawing name: G:\MA\Hyde Park\PMRC\ Westinghouse\Reports\Stormwater Report\Figures\18087_FIGURE 2-FIRM Map.dwg
Mar 26, 2019 - 15:51pm

Map unit symbol	Map unit name	Rating
1	Water	
305D	Paxton fine sandy loam, 15 to 25 percent slopes	C
602	Urban land, 0 to 15 percent slopes	
603	Urban land, wet substratum, 0 to 3 percent slopes	
623C	Woodbridge-Urban land complex, 3 to 15 percent slopes	C/D
626B	Merrimac-Urban land complex, 0 to 8 percent slopes	A
654	Udorthents, loamy	A
655	Udorthents, wet substratum	
Totals for Area of Interest		



	Date
	Revision
	No.

Designed by:	HAA
Drawn by:	HAA
Checked by:	BJM
Scale:	1"=500'
Date:	03/26/2019

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Project Name:

**UNITS 3 & 5
1 WESTINGHOUSE PLAZA
HYDE PARK, MA**

Drawing Name:

NRCS WEB SOIL SURVEY MAP

Drawing No.:

FIG-3

Project No.: 18087

Drawing name: G:\MA\Hyde Park\PMRG\ Westinghouse\Reports\Stormwater Report\Figures\18087_FIGURE 3_B-Soil Survey.dwg
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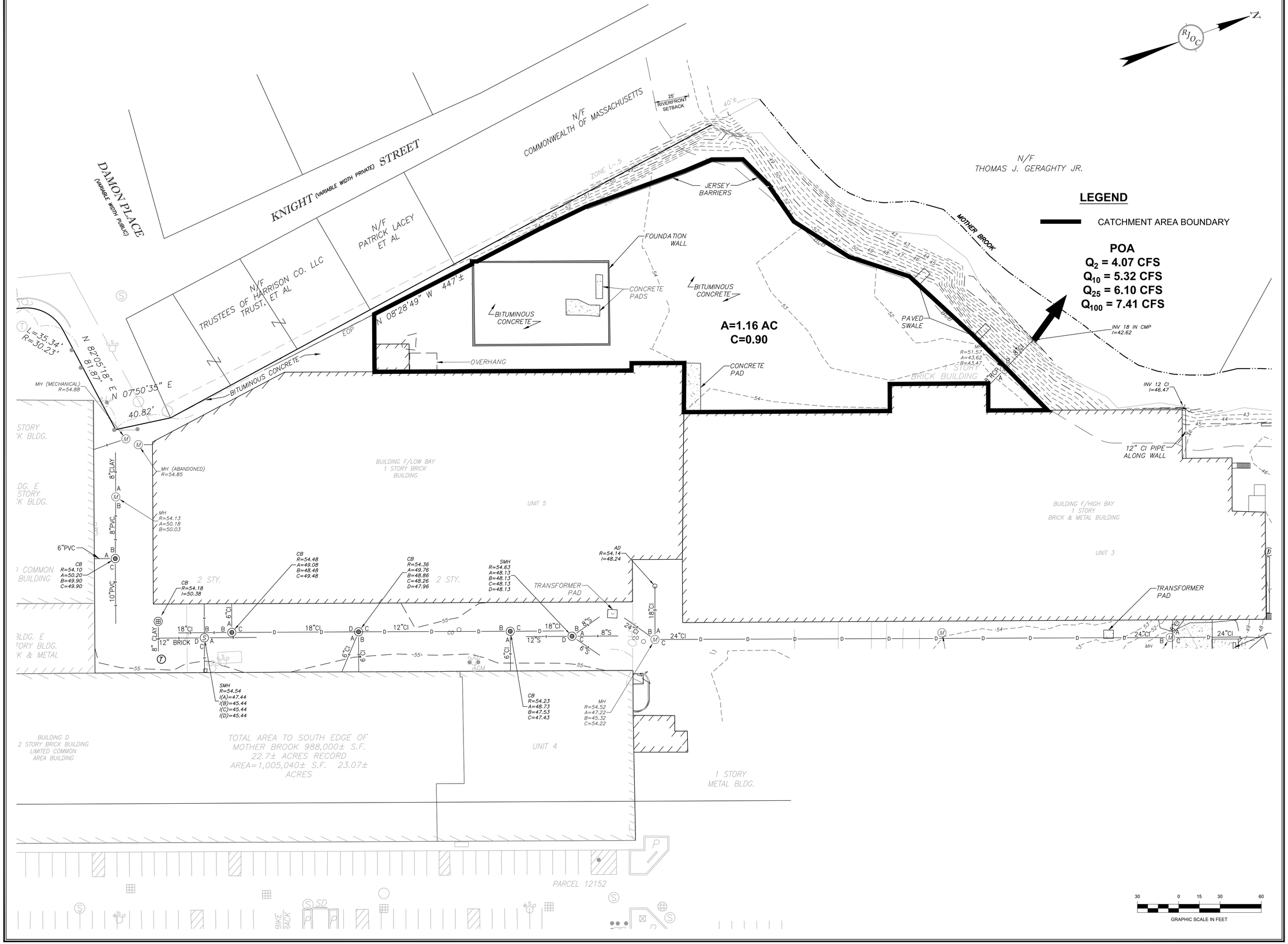

RJOC

NO.	REVISION	DATE

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BIV-1WH UNIT 5, LLC
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PHONE: 857-350-4583

PROJECT NAME:

1 WESTINGHOUSE PLAZA UNITS 3 AND 5

HYDE PARK, MA

SEAL:

DESIGNED BY:	JJS
DRAWN BY:	WJH
REVIEWED BY:	JJS
SCALE:	1"=30'
DATE:	03/26/2019

DRAWING NAME:

EXISTING CATCHMENT PLAN

DRAWING NUMBER:

CP-1

PROJECT NUMBER:

18087

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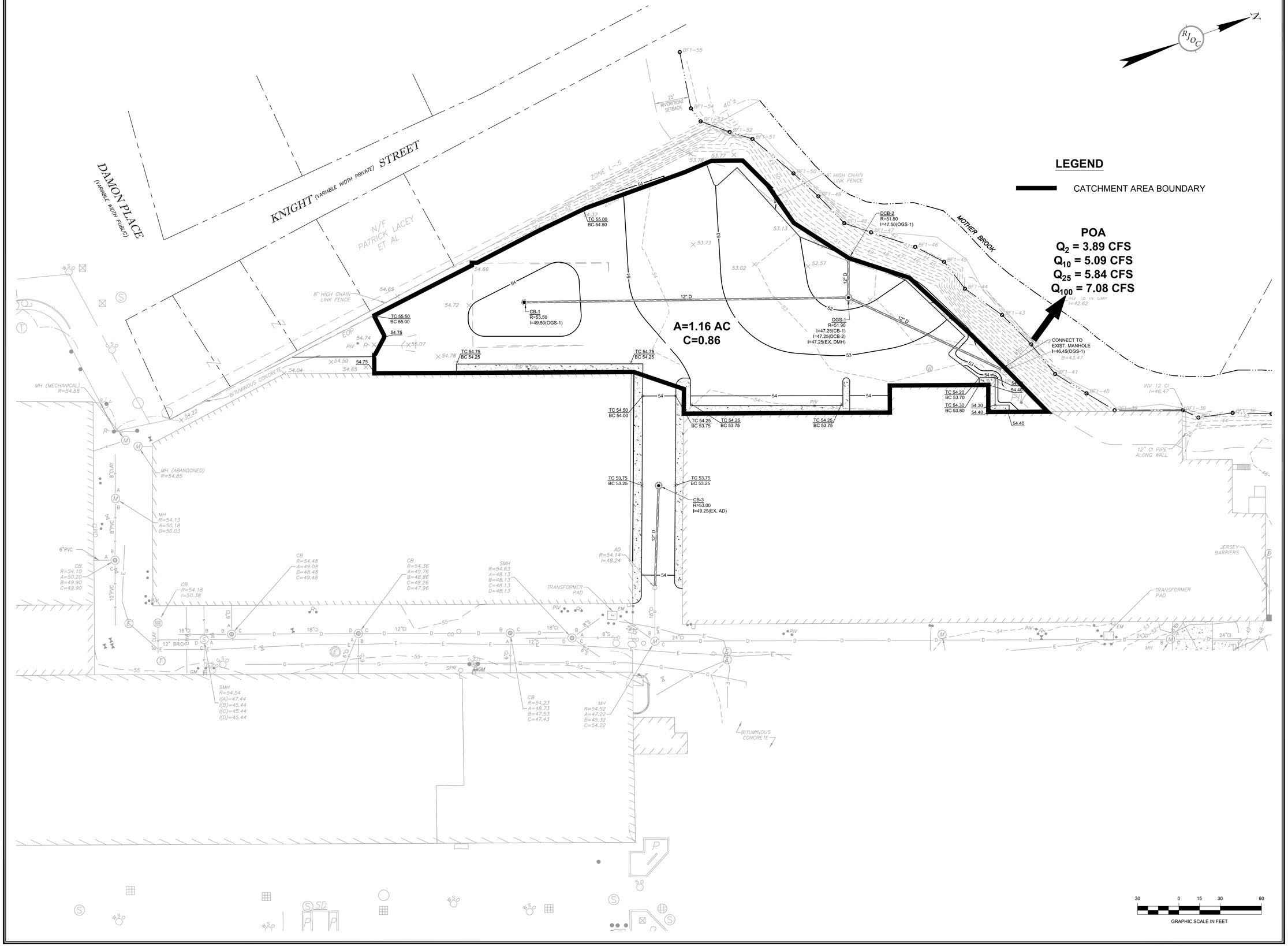

RJOC

NO.	REVISION	DATE
NO.	REVISION	DATE

PREPARED BY:

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BIV-1WH UNIT 5, LLC
c/o THE SEYON GROUP

118 NEWBURY STREET, 3RD FLOOR
BOSTON, MA 02116
PHONE: 857-350-4583

PROJECT NAME:

1 WESTINGHOUSE PLAZA UNITS 3 AND 5

HYDE PARK, MA

SEAL:

DESIGNED BY:	JJS
DRAWN BY:	WJH
REVIEWED BY:	JJS
SCALE:	1"=30'
DATE:	03/26/2019

DRAWING NAME:

PROPOSED CATCHMENT PLAN

DRAWING NUMBER:

CP-2

PROJECT NUMBER:

18087

Drawing name: G:\MA\Hyde Park\PMRG\I Westinghouse\Reports\Stormwater Report\Figures\18087_CP-2 Proposed Catchment Plan.dwg
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III. DRAINAGE CALCULATIONS

STORM DRAINAGE METHODOLOGY
RECOMMENDED RUNOFF COEFFICIENTS
INTENSITY–DURATION–FREQUENCY CURVE FOR BOSTON, MA
PRE-REDEVELOPED CALCULATIONS
POST-REDEVELOPED CALCULATIONS

STORM DRAINAGE METHODOLOGY

FOR

UNITS 3 AND 5

WESTINGHOUSE PLAZA REDEVELOPMENT

HYDE PARK, MASSACHUSETTS

Methodology:

Storm runoff calculated using the Rational Formula, Q=CiA where:

Q = peak rate of runoff, in acre-inches per hour, which is approximately equal to cubic feet per second (cfs).

C = coefficient of runoff. (See Table 10.7)

I = average intensity of rainfall in inches per hour for a storm duration equal to the time of concentration, Tc, and the selected storm frequency.

A = tributary drainage area, in acres, to the point of analysis.

Tc= time of concentration: The time of concentration is the time required for runoff to travel from the hydraulically most distant point of the tributary drainage area to the point of analysis (POA).

- The intensity – duration – frequency (IDF) curve (see Fig. 10-4) for Boston, MA obtained from the Massachusetts Highway Design Manual was used to determine rainfall intensities.

- Runoff from storms of regional 2 year, 10 year, 25 year and 100 year frequency were calculated for pre and post-redevelopment conditions.

- Minimum time of concentration, Tc=6 minutes.

Table 10.7
RECOMMENDED RUNOFF COEFFICIENTS (C) FOR RATIONAL METHOD (For Surface Type)

Character of Surface	Runoff Coefficients
Pavement	
Asphaltic and Concrete	0.70 to 0.95
Brick	0.70 to 0.85
Roofs	0.75 to 0.95
Lawns, Sandy Soil	
Flat, 2 Percent	0.05 to 0.10
Average, 2 to 7 Percent	0.10 to 0.15
Steep, 7 Percent	0.15 to 0.20
Lawns, Heavy Soil	
Flat, 2 Percent	0.13 to 0.17
Average, 2 to 7 Percent	0.18 to 0.22
Steep, 7 Percent	0.25 to 0.35

Table 10.8
RECOMMENDED Ca VALUES (Rational Method) (Greater than 10-Year Design Runoff)

Recurrence Interval (Years)	C_a
2 to 10	1.0
25	1.1
50	1.2
100	1.25

Note: The product of $C \times C_a$ should not exceed 1.

Reference: WPCF Manual of Practice No. 9, *Design and Construction of Sanitary and Storm Sewers.*

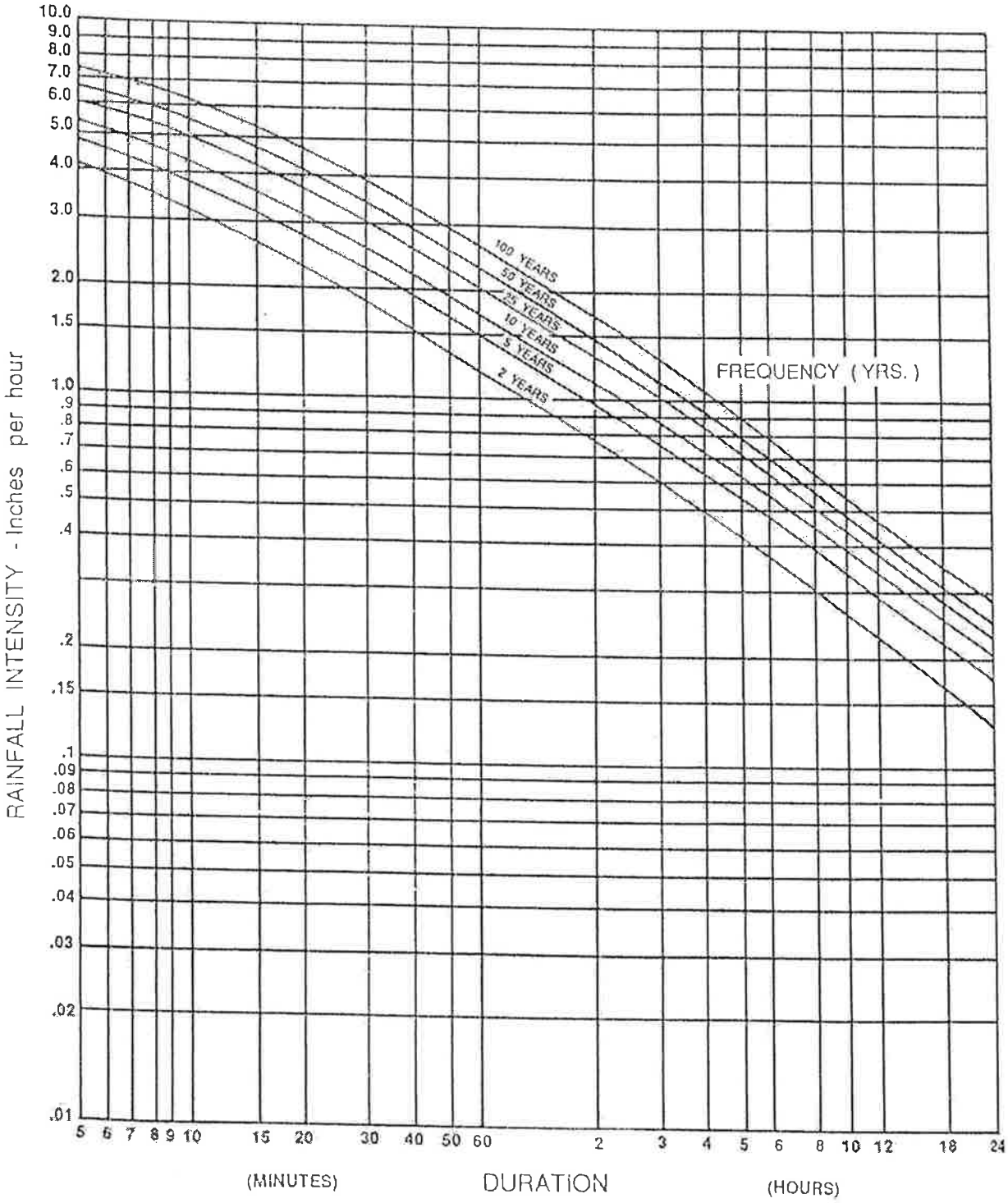


Figure 10-4. Intensity — Duration — Frequency Curve for Boston, MA

Pre-Redeveloped Condition
Catchment 1 to POA-1

2 Year Storm

Area, A = 1.16 acres
Rainfall Intensity, i = 3.9 in./hr.
Coefficient of Runoff, C:

Open/Landscaped Area (C=0.30) = 0.0 Ac
Pavement (C=0.90) = 1.16 Ac

0.0 x 0.30 =	0.00	C = 1.04 / 1.16 = 0.90
1.16 x 0.90 =	1.04	
1.16 Ac	1.04	

Peak Discharge, Q_2 = CiA = 0..90 x 3.9 x 1.16 = 4.07 cfs

10 Year Storm

A =1.16 Ac
i = 5.1 in/hr
C = 0.90

Peak Discharge, Q_{10} = CiA = 0.90 x 5.1 x 1.16 = 5.32 cfs

25 Year

A = 11.16 Ac
i = 5.85 in/hr
C = 0.9

Peak Discharge, Q_{25} = CiA = 0.90 x 5.85 x 1.16 = 6.10 cfs

100 Year

A = 1.16 Ac
i = 7.1 in/hr
C = 0.90

Peak Discharge, Q_{100} = CiA = 0.90 x 7.1 x 1.16 = 7.41 cfs

Post-Redeveloped Condition
Catchment 1 to POA-1

2 Year Storm

Area, A = 1.16 acres
Rainfall Intensity, i = 3.9 in./hr. (see Fig. 10-4)
Coefficient of Runoff, C:

Open/Landscaped Area (C=0.30) = 0.07Ac
Pavement (C=0.90) = 1.09 Ac

0.07 x 0.30 =	0.02	C = 1.00	= 0.86
1.09 x 0.90 =	0.98	1.16	
1.16 Ac	1.00		

Peak Discharge, Q_2 = CiA = 0.86 x 3.9 x 1.16 = 3.89cfs

10 Year Storm

A = 1.16 Ac
i = 5.1 in/hr
C = 0.86

Peak Discharge, Q_{10} = CiA = 0.86 x5.1 x 1.16 = 5.09 cfs

25 Year

A = 1.16 Ac
i = 5.85 in/hr
C = 0.86

Peak Discharge, Q_{25} = CiA = 0.86 x 5.85 x 1.16 = 5.84 cfs

100 Year

A = 1.16 Ac
i = 7.1 in/hr
C = 0.86

Peak Discharge, Q_{100} = CiA = 0.86 x 7.1 x 1.16 = 7.08 cfs

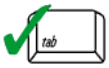
IV. DEP CHECKLIST FOR STORMWATER REPORT

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.

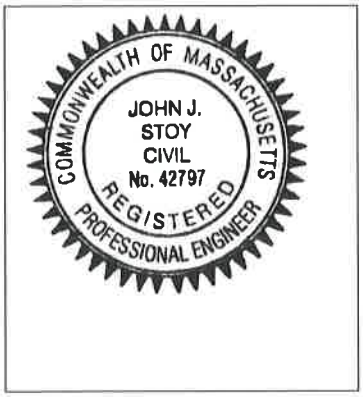
Note: Because stormwater requirements vary from project to project, it is possible that a complete Stormwater Report may not include information on some of the subjects specified in the Checklist. If it is determined that a specific item does not apply to the project under review, please note that the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



Signature and Date 4-2-19

Checklist

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

☐ New development

☒ Redevelopment

☐ Mix of New Development and Redevelopment

Checklist for Stormwater Report

Checklist (continued)

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

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

Standard 1: No New Untreated Discharges

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

Checklist for Stormwater Report

Checklist (continued)

Standard 2: Peak Rate Attenuation

☐ Standard 2 waiver requested because the project is located in land subject to coastal storm flowage and stormwater discharge is to a wetland subject to coastal flooding.

☐ Evaluation provided to determine whether off-site flooding increases during the 100-year 24-hour storm.

☒ Calculations provided to show that post-development peak discharge rates do not exceed pre-development rates for the 2-year and 10-year 24-hour storms. If evaluation shows that off-site flooding increases during the 100-year 24-hour storm, calculations are also provided to show that post-development peak discharge rates do not exceed pre-development rates for the 100-year 24-hour storm.

Standard 3: Recharge

☐ Soil Analysis provided.

☐ Required Recharge Volume calculation provided.

☐ Required Recharge volume reduced through use of the LID site Design Credits.

☐ Sizing the infiltration, BMPs is based on the following method: Check the method used.

☐ Static ☐ Simple Dynamic ☐ Dynamic 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.

V. APPENDIX

APPENDIX A – OPERATIONS AND MAINTENANCE PLAN

INCLUDING: LONG TERM POLLUTION PREVENTION PLAN
ILLICIT DISCHARGE STATEMENT
SNOW MANAGEMENT AND DISPOSAL PLAN
PUBLIC SAFETY FEATURES

Operations and Maintenance Plan

Unit 3 and Unit 5
Westinghouse Plaza
Hyde Park, Massachusetts

Prepared for:
BIV – 1WH UNIT 3, LLC & BIV – 1WH UNIT 5, LLC
c/o The Seyon Group
118 Newbury Street, 3rd Floor
Boston, MA 02116

Prepared by:
R.J. O'Connell & Associates, Inc.
80 Montvale Ave, Suite 201
Stoneham, MA 02180

Date:
April 2, 2019

TABLE OF CONTENTS

Operations and Maintenance Plan

INTRODUCTION

This Operations and Maintenance Plan has been prepared to ensure that the stormwater management system implemented at Unit 3 & Unit 5 Westinghouse Plaza functions as designed and to develop and carry out suitable practices for source control and pollution prevention. It consists of six sections:

Section 1 - Stormwater Management System-Operations and Maintenance, which describes the various components of the stormwater management system, identifies the inspection and maintenance tasks to be undertaken after construction is complete and a schedule for implementing these tasks to insure the proper, long-term operation of the system.

Section 2 - Long Term Pollution Prevention Plan which identifies and implements suitable measures, practices and procedures for source control and pollution prevention.

Section 3- Illicit Discharge Statement.

Section 4- Snow Management and Disposal Plan which describes how snow removal will be managed and deicing operations performed.

Section 5- Public Safety Features which lists features of the stormwater management system to insure the safety of the public.

SECTION 1 – STORMWATER MANAGEMENT SYSTEM- OPERATION AND MAINTENANCE

The objectives of the stormwater management system are to effectively control and treat stormwater runoff from the site in accordance with the Massachusetts Stormwater Management Policy. To accomplish this objective, the following Best Management Practices (BMP's) are included in the stormwater management system:

<u>Pre-treatment BMP's</u>

- Sweeping of paved surface areas to remove solids and reduce suspended solids in surface runoff.
- Catch basins with deep sumps and hoods to reduce the discharge of sediment and pollutants.
- CDS particle separators for removal of TSS, oil and grease.

To insure the ongoing and proper functioning of the on-site stormwater management/BMP facilities, this Operations and Maintenance Plan has been developed.

In consideration of the foregoing, it is the ongoing responsibility of the Landowner, his successors and assignees to adequately maintain the on-site stormwater management/BMP facilities. Adequate maintenance is herein defined as good working condition so that these facilities are performing their design functions.

Based on this, the Landowner, his successors and assignees are required to create a Pollution Prevention Team (PPT) that will be responsible for implementing the Operations and Maintenance Plan.
Upon transfer of ownership of the property, the Landowner is required to notify the new owner of the presence of the stormwater management system and the requirements of this Operations and Maintenance Plan.

Property Information

Address: 1 Westinghouse Plaza
Units 3 and 5
Hyde Park, MA 02136

Landowner and Pollution Prevention Team Leader

Owners Name: BIV-1WH Unit 3, LLC & BIV-1WH Unit 5, LLC, c/o The Seyon Group
Team Leader: Bryan Blake
Title: Managing Partner
Office Phone: 857-239-8599
Email: bblake@seyon.com

Responsibilities: Coordinate all aspects of the Operations and Maintenance Plan, coordinate and hire the other Pollution Prevention team members in order to conduct inspections, keep all records, coordinate with contractors for maintenance and repairs of the stormwater management system.

Spill Prevention & Control Contractor

The following contacts shall be notified only in those instances identified within 310 CMR 40 Massachusetts Contingency Plan Subpart C.

Primary Contact: Clean Harbors
Office Phone: 800-645-8265

Emergency Contact:
Company Name: The Seyon Group
Contact Name: Bryan Blake
Emergency Phone: 857-239-8599

Consultant Contact:
Company Name: TBD.
Contact Name: TBD
Phone: TBD

Department of Environmental Protection (DEP) Contact
Spill Emergency Coordinator
Contact Name: Emergency Response Program
Phone: 617-792-7653

Municipal Contacts
City of Boston Conservation Commission
Contact Name: Amelia Croteau
Phone: 617-635-3850

Other Pollution Prevention Team Members

Member: Qualified Engineering and/or Environmental Consulting Firm(s)
Responsibilities: Conduct scheduled inspections, maintain records, advise the Team Leader of maintenance needs, ensure inspection maintenance and repairs are completed, keep and maintain all records and inspection reports.

Company Name(s): TBD
Address:
Office Phone:

Team Member Training

The Pollution Prevention Team Leader will coordinate an annual in-house training session with the qualified Engineering and/or Environmental Consulting Firm to discuss the Operations and Maintenance Plan, ongoing inspection and maintenance and preventative maintenance procedures.

Annual training session will generally include the following:

- Discuss the Operations and Maintenance Plan
    - What it is- identify potential sources of stormwater pollution and methods of reducing or eliminating that pollution
    - What it contains- emphasize good housekeeping measures and the location of potential pollution sources.
    - Pollution Prevention Team- introduce the team and individual responsibilities, explain that the operations of the Mall's stormwater management system and that it must be continuously monitored and encourage input and assistance from all.
- Review and explain the storm drainage system, how it works and its components, note the receiving resource area in which the storm drainage system discharges into and the role each one of these BMPs play.
- Emphasize the importance of maintaining current and up-to-date inspection reports and maintenance records of BMPs. Documentation shall include any changes to the O&M Plan's procedures to accommodate changes and revisions to BMPs.

The components of the stormwater management system must be inspected, monitored and maintained in accordance with the following in order to ensure that the on-site stormwater management/BMP facilities for Westinghouse Plaza Units 3 and 5 function as designed. Routine inspection and proper maintenance of these individual components is essential to providing the long-term enhancement of both the quality and quantity of the runoff from the properties.

Catch Basins:

Stormwater runoff from pavement areas is directed to catch basins via site grading. Catch basins are equipped with deep (4'-6") sumps and a hood on their outlet pipe. The sumps capture sediment and coarse particles and the hoods prevent hydrocarbons and other floatable debris from entering the drainage system. To ensure proper functioning of the catch basins, each will be inspected and maintained as follows:

Inspection: Quarterly and after major storm events (2.0 inches or more in a 24-hour period). Structural damage and other malfunctions are to be noted and reported. Basins shall also be inspected during every major rain event to ensure the grates are not clogged and are functioning properly.

Maintenance: Clean when the sump is half full by a licensed contractor. Sediment and hydrocarbons will be properly handled and legally disposed of off site in accordance with local, state and federal guidelines and regulations. Any structural damage to catch basins and/or castings will be repaired upon discovery.

CDS Particle Separator:

The hydrodynamic particle separator is a precast concrete structure designed to remove debris, sediment, oil, and grease from incoming stormwater runoff, thereby preventing the transfer of pollutants downstream. The screening capability of the units allows for 100% removal of floatables and neutrally buoyant materials. Particle separators will be inspected and maintained as follows:

Inspection: Quarterly, and the level of accumulated pollutants and indications of vector infestation are to be noted and reported.

Maintenance: Jet vacuumed by a licensed contractor at least semi-annually or as recommended by the manufacturer. Accumulated sediment and hydrocarbons will be disposed of in accordance with applicable local, state, and federal guidelines and regulations. Particle separators will also be cleaned when observed sediment depth is at 80% of the sump capacity.

Curbing:

Because portions of the site are graded to direct runoff toward curbing, it is important for the curbing to be in good working order and to delineate the edge of pavement from grass and landscaped areas.

Inspection: Twice per year to ensure structural condition.

Maintenance: Repair/replace as needed.

Sweeping and Site Clean-Up:

Routine sweeping of paved areas is an effective method to provide important nonpoint source pollution control and will be performed by mechanical sweepers. Most stormwater pollutants travel with the suspended solids contained in the stormwater runoff and regular sweeping will help reduce a portion of this load. Sweeping, especially during the period immediately following winter snowmelt (March/April) when road sand and other debris has accumulated on the pavement, will capture a peak sediment load before spring rains wash residual sand from winter applications into nearby resource areas.

Inspection: Paved areas will be inspected for litter on a weekly basis and picked up and disposed of immediately.

Maintenance: All parking areas, sidewalks, driveways and other impervious surfaces (except roofs) will be swept clean of sand, litter, trash, etc. on a monthly basis. A log of lot sweeping and lot cleanup will be kept. Housekeeping concerns noted by store leadership, PPT members, guests and others will be noted and acted upon. Separate cleanup services will be conducted at least twice a year, once between November 14 and December 15 (after leaf fall) and once during the month of April (after snow melt). Additional cleanup services will be conducted as necessary.

Please refer to Appendix A for the Inspection Forms which are to be used by the Pollution Prevention Team member responsible for conducting the scheduled inspections.

SECTION 2 – LONG TERM POLLUTION PREVENTION PLAN (LTPPP)

A. MATERIALS COVERED

The following materials or substances are expected to be present onsite after construction:

Cleaning solvents	Petroleum based products
Detergents	Pesticides/Insecticides
Paints/Solvents	Fertilizers/Herbicides
Acids	Contaminated Soil
Solid Waste	

B. MATERIALS MANAGEMENT PRACTICES

The following are the material management practices that will be used to reduce the risk of spills or other accidental exposure of materials and substances to stormwater runoff. The Pollution Prevention Team Leader will be responsible for ensuring that these procedures are followed:

1. Good Housekeeping

   The following good housekeeping practices will be followed onsite after construction:

   a) An effort will be made to store only enough products required to do the job.
   b) All materials stored onsite will be stored in a neat, orderly manner and, if possible, under a roof or in a containment area. At a minimum, all containers will be stored with their lids on when not in use. Drip pans shall be provided under all dispensers.
   c) Products will be kept in their original containers with the original manufacturer's label in legible condition.
   d) Substances will not be mixed with one another unless recommended by the manufacturer.
   e) Whenever possible, all of a product will be used up before disposing of the container.
   f) Manufacturer's recommendations for proper use and disposal will be followed.
   g) A Pollution Prevention Team Member will be responsible for daily inspections to ensure proper use and disposal of materials.

2. Hazardous Substances

   These practices will be used to reduce the risks associated with hazardous substances. Material Safety Data Sheets (MSDS's) for each product with

hazardous characteristics that is used on the properties will be obtained and used for the proper management of potential wastes that may result from these products. An MSDS will be posted in the immediate area where such product is stored and/or used and another copy of each MSDS will be maintained on-site, in the management office. Each employee who must handle a hazardous substance will be instructed on the use of MSDS sheets and the specific information in the applicable MSDS for the product he/she is using, particularly regarding spill control techniques.

a) Products will be kept in original containers with the original labels in legible condition.
b) Original labels and MSDS's will be procured and used for each product.
c) If surplus product must be disposed of, the manufacturer's and local/state/federal required methods for proper disposal must be followed.

3. Hazardous Waste

It is imperative that all hazardous waste be properly identified and handled in accordance with all applicable hazardous waste standards, including the storage, transport and disposal of the hazardous wastes. There are significant penalties for the improper handling of hazardous wastes. It is important that the Pollution Prevention Team Leader seeks appropriate assistance in making the determination of whether a substance or material is a hazardous waste. For example, hazardous waste may include certain hazardous substances, as well as pesticides, paints, paint solvents, cleaning solvents, contaminated soils, and other materials, substances or chemicals that have been discarded (or are to be discarded) as being out-of-date, contaminated, or otherwise unusable. The Pollution Prevention Team Leader is responsible for ensuring that all Pollution Prevention Team Members are instructed as to these hazardous waste requirements and also that the requirements for handling and disposal are being followed.

4. Product Specific Practices

The following product specific practices will be followed on the job site:

a) Petroleum Products

Petroleum products will be stored in tightly sealed containers which are clearly labeled. Petroleum storage tanks shall be located a minimum of 100 linear feet from wetland resource areas, drainage ways, inlets and surface waters unless stored within a building. Any petroleum storage tanks stored onsite will be located within a containment area that is designed with an impervious surface between the tank and the ground. The secondary containment must be designed to provide a containment volume that is equal to 110% of the volume of the largest tank. Drip pans shall be provided for all dispensers. Any asphalt substances used onsite will be applied according

to the manufacturer's recommendations. The location of any fuel tanks and/or equipment storage areas must be identified on the Erosion Control Plan by the Contractor once the locations have been determined.

b) Fertilizers, Herbicides, Pesticides, and Insecticides

Fertilizers, herbicides, pesticides, and insecticides will be applied only in the minimum amounts recommended by the manufacturer. Once applied, they will be worked so as to limit exposure to storm water. Storage will be in a covered shed. The contents of any partially used bags or containers will be transferred to a sealable plastic bin to avoid spills.

Use only organic, phosphorus-free, slow-release fertilizers on site. Phosphorus-containing fertilizers can be used in minimal concentrations/amounts where soil tests conclude that its absence is prohibiting plant establishment.

c) Paints, Paint Solvents, and Cleaning Solvents

All containers will be tightly sealed and stored when not in use. Excess paint and solvents will not be discharged to the storm sewer system but will be properly disposed of according to manufacturer's instructions or state and federal regulations.

5. Solid Waste

All waste materials will be collected and stored in an appropriately covered container and/or securely contained metal dumpster rented from a local waste management company which must be a licensed solid waste management company. The dumpster will comply with all local and state solid waste management regulations.

All trash and debris from the site will be deposited in dumpsters. The dumpsters will be emptied a minimum of once per week or more often if necessary. All personnel will be instructed regarding the correct procedures for waste disposal.

All waste dumpsters and roll-off containers will be located in an area where the likelihood of the containers contributing to storm water discharges is negligible.

6. Contaminated Soils

Any contaminated soils (resulting from spills of hazardous substances or oil will be contained and cleaned up immediately in accordance with the procedures given in the Materials Management Plan and in accordance with applicable state and federal regulations. If there is a release, it should be reported as a spill, if it otherwise meets the requirements for a reportable spill.

C. SPILL PREVENTION AND RESPONSE PROCEDURES

The Pollution Prevention Team Leader will train all personnel in the proper handling and cleanup of spilled hazardous substances or oil. No spilled hazardous substances or oil will be allowed to come in contact with storm water discharges. If such contact occurs, the storm water discharge will be contained on site until appropriate measures in compliance with state and federal regulations are taken to dispose of such contaminated storm water. It shall be the responsibility of the Pollution Prevention Team Leader to be properly trained, and to train all personnel in spill prevention and clean up procedures.

1. In order to prevent or minimize the potential for a spill of hazardous substances or oil to come into contact with storm water, the following steps will be implemented:

    a) All hazardous substances or oil (such as pesticides, petroleum products, fertilizers, detergents, acids, paints, paint solvents, cleaning solvents, etc.) will be stored in a secure location, with their lids on, preferably under cover, when not in use.
    b) The minimum practical quantity of all such materials will be kept on site.
    c) A spill control and containment kit (containing, for example, absorbent materials, acid neutralizing powder, brooms, dust pans, mops, rags, gloves, goggles, plastic and metal trash containers, etc.) will be provided on site.
    d) Manufacturer's recommended methods for spill cleanup will be clearly posted and site personnel will be trained regarding these procedures and the location of the information and cleanup supplies.
    e) It is the Pollution Prevention Team Leader's responsibility to ensure that all hazardous waste on site is disposed of properly by a licensed hazardous material disposal company. The Pollution Prevention Team Leader is responsible for not exceeding hazardous waste storage requirements mandated by the EPA or state and local authority.

2. In the event of a spill of hazardous substances or oil, the following procedures must be followed:

    a) All measures must be taken to contain and abate the spill and to prevent the discharge of the hazardous substance or oil to storm water or off-site. (The spill area must be kept well ventilated and personnel must wear appropriate protective clothing to prevent injury from contact with the hazardous substances.)
    b) For spills of less than five (5) gallons of material, proceed with source control and containment, clean-up with absorbent materials or other applicable means unless an imminent hazard or other circumstances dictate that the spill should be treated by a professional emergency response contractor.
    c) For spills greater than five (5) gallons of material immediately contact the MA DEP Hazardous Waste Incident Response Group at (617) 792-7653, and an approved emergency response contractor. Provide information on the type of

material spilled, the location of the spill, the quantity spilled, and the time of the spill to the emergency response contractor or coordinator, and proceed with prevention, containment and/or clean-up if so desired.

d) If there is a Reportable Quantity (RQ) release, then the National Response Center will be notified immediately at (800) 424-8802; within 14 days a report will be submitted to the EPA regional office describing the release, the date and circumstances of the release and the steps taken to prevent another release. This Pollution Prevention Plan must be updated to reflect any such steps or actions taken and measures to prevent the same from reoccurring.

3. The Pollution Prevention Team Leader will be the spill prevention and response coordinator. He/she will designate the individuals who will receive spill prevention and response training. These individuals will each become responsible for a particular phase of prevention and response. The names of these personnel will be posted in the material storage area and in the management office.

SECTION 3 - ILLICIT DISCHARGE STATEMENT

Certain types of discharges are allowable under the U.S. Environmental Protection Agency Construction General Permit, and it is the intent of this LTPPP to allow such discharges. These types of discharges will be allowed under the conditions that no pollutants will be allowed to come in contact with the water prior to, or after its discharge. The control measures which have been outlined previously in this LTPPP will be strictly followed to ensure that no contamination of these non-storm water discharges takes place. Illicit discharges, if they exist currently, will be contained and eliminated in the manner specified by local, state and federal regulations, and will be prohibited in the proposed development.

_____

SECTION 4 - SNOW MANAGEMENT AND DISPOSAL PLAN

Snow management will be overseen by a full-time Property Manager who will implement this plan and be authorized to utilize additional resources should unusual events occur. The Snow Management Contractor (SMC) shall be responsible for maintaining all roads, driveways, parking lots, sidewalks and pedestrian access areas for clear and safe travel. The SMC shall report directly to the Property Manager and maintain communication via cell phones 24 hours per day, 7 days per week. All drives, entrances and exits are the top priority. During extreme events, the priority will be to clear and maintain proper access for employees and public safety vehicles. The next priority is parking areas, sidewalks, and delivery areas. Snow will not be piled around light bases and handicap parking areas shall be cleared frequently.

The anti-icing operations typically precede snow plowing and will be provided when conditions warrant. Within 12 months of new concrete walks, pads, or other features being constructed , no salt shall be placed on those surfaces. After the materials have cured for 12 months, a combination of calcium chloride de-icers and sand ("washed", fine to medium grade) shall be utilized. Parking areas shall receive spot treatment only when and where needed in a similar manner. The sand/calcium chloride mixture shall consist of 20 parts calcium chloride to 80 parts sand.

Snow plowing shall commence upon accumulation of two inches ("2") or more. Snow shall be deposited in Snow Storage Area as depicted on the Site Layout Plan, as prepared by R.J. O'Connell & Associates. During extreme events, excess snow will be removed off-site if necessary. The SMC shall keep existing catch basins open for drainage or water resulting from melting.

Once the storm is over, the SMC shall monitor all areas on-site for icy spots and snowdrifts. If needed, an application of sand and calcium chloride will be applied to all pavement areas so that the riding surface remains drivable.

Deicing chemicals will be kept in original containers with the original product label in legible condition. When not in use, deicing materials will be stored in a neat, orderly manner under cover with their container lids on.

SECTION 5 - PUBLIC SAFETY FEATURES

The following measures have been incorporated into the stormwater management system to insure the safety of the public:

- Storm drain manholes and catch basins provided with heavy duty covers and/or grates and designed to withstand H20 loading.

- Control and collect stormwater runoff through positive drainage and curbing directing it toward drainage inlet structures.

- Maintenance of peak rates of runoff from the site under post-development conditions as compared to pre-developed conditions.

- Development and implementation of an Operations and Maintenance Plan to insure the proper functioning of the stormwater management system and a Long Term Pollution Prevention Plan identifying potential pollution sources and suitable practices to control and prevent them from impacting the environment and/or the public's health and safety.

- Treatment of stormwater runoff from paved surfaces to remove 44% of the average annual post-construction load of Total Suspended Solids (TSS).

Appendix A
Westinghouse Plaza
Maintenance and Inspection Forms

Unit 3 & 5
Westinghouse Plaza
Operation and Maintenance Plan
Activity Guide

The table below is a list of the minimum inspection and maintenance activities the Pollution Prevention Team needs to conduct for the Stormwater Operations and Management Plan and who is responsible for the activity. The Activity Guide is provided to assist the Pollution Prevention Team Leader and ensure that the activities are being conducted as scheduled.

Timing	**Activity**	**Responsible Party**
Weekly	Inspect lot/land	PPT
Monthly	Parking lot sweeping	PPT Contractor
Quarterly	Inspect catch basins Inspect and Clean CDS Particle Separators	PPT/ Contractor PPT Contractor
Semi-Annually	Inspect Curbing	PPT
Annually	Pollution Prevention Team training Comprehensive annual stormwater evaluation and inspection report	PPT Leader PPT Leader
March/April	Spring clean-up,	PPT Contractor
Between November 14 and December 15	Fall clean-up	PPT Contractor

Unit 3 & 5
Westinghouse Plaza
Operations and Maintenance Plan
Comprehensive Annual Evaluation and Inspection Report

Once a year, the Pollution Prevention Team Leader must inspect and evaluate all aspects and provisions of the Opeations and Maintenance Plan, complete the following report and keep a copy on file at the site.

Inspector/Reviewers:_____

Date of Inspection/Review: _____

Note any changes to the Plan in the space below and in the appropriate section of the Plan.

1. Review the Pollution Prevention Team list and update if necessary. Does the Pollution Prevention Team list need updating:
   (circle one) Yes No

2. Review the Operations and Maintenance Plan (O&M Plan). Are there sections of the O&M Plan that need updating?
   (circle one) Yes No

3. Review Monthly and Weekly Checklists. Update these as necessary

   - Are there any updates needed to Spill and Leak History and/or the checklists?
   (circle one) Yes No

4. Review site drawings and update if necessary
   - Are there updates needed to any of the drawings? (circle one) Yes No
   -

Requested Changes (attach revisions)

Unit 3 & 5
Westinghouse Plaza
Operations and Maintenance Plan
Annual Training Signoff Sheet

For each Operations and Maintenance Plan training session, the Team Leader should keep records of all attending Team Members using the signoff sheet below, as well as the training agenda, notes, etc.

Training Date: _____	**Topic**:
Trainer: _____	
Team Member Name	**Team Member Signature**

Unit 3 & 5
Westinghouse Plaza
Operations and Maintenance Plan
Weekly Inspection Checklist

The site will be checked each week for trash and debris by a member of the Pollution Prevention Team. If any trash or debris is observed in the specified area, write "yes" in the 2nd column and note the problem and corrective measures taken in the appropriate space. Make a new copy of this checklist each week.

Date: _____ **Checklist completed by**: _____

GROUNDS AREA TO CHECK	TRASH OR DEBRIS PRESENT?	DESCRIPTION OF PROBLEM	CORRECTIVE MEASURES TAKEN
Parking Lot & Roadways			
Landscaped Areas			
Perimeter of Property			

Unit 3 & 5
Westinghouse Plaza
Operations and Maintenance Plan
Monthly Inspection Checklist

The following will be checked each month for sources of pollutants by a member of the Pollution Prevention Team. If the condition in the "check for" column is observed, note the problem and corrective measures taken in the appropriate space. Make a new copy of the checklist each month.

Date: _____ **Checklist completed by**: _____

LOCATION	CHECK FOR…	DESCRIPTION OF PROBLEM (IF PRESENT)	CORRECTIVE MEASURES TAKEN
Parking Lot and Paved Areas	Spillage and Trash, Sweep		
Perimeter of Site	Trash		
Outside Storage Areas (grease, etc.)	Spillage		

Unit 3 & 5
Westinghouse Plaza
Operations and Maintenance Plan
Quarterly Inspection Checklist

The following will be checked each quarter for sources of pollutants by a member of the Pollution Prevention Team. If the condition in the "check for" column is observed, note the problem and corrective measures taken in the appropriate space. Make a new copy of the checklist each month.

Date: _____ **Checklist completed by**: _____

BMP	CHECK FOR…	DESCRIPTION OF PROBLEM (IF PRESENT)	CORRECTIVE MEASURES TAKEN
Inspect Catch Basins	Trash, oil sheen, hood (securely fastened) excessive sediment		
Inspect and Clean CDS Particle Separators	Trash, oil sheen and excessive sediment		

Unit 3 & 5
Westinghouse Plaza
Operations and Maintenance Plan
Semi-Annually Inspection Checklist

The following will be checked each quarter for sources of pollutants by a member of the Pollution Prevention Team. If the condition in the "check for" column is observed, note the problem and corrective measures taken in the appropriate space. Make a new copy of the checklist each month.

Date: _____ **Checklist completed by**: _____

BMP	ACTION	DESCRIPTION OF PROBLEM (IF PRESENT)	CORRECTIVE MEASURES TAKEN
Clean Catch Basins	Remove trash excessive sediment		
Curbing	Inspect structural condition		

Unit 3 & 5
Westinghouse Plaza
Operations and Maintenance Plan
Annual Inspection Checklist

The following will be checked each quarter for sources of pollutants by a member of the Pollution Prevention Team. If the condition in the "check for" column is observed, note the problem and corrective measures taken in the appropriate space. Make a new copy of the checklist each month.

Date: _____ **Checklist completed by**: _____

BMP	ACTION	DESCRIPTION OF PROBLEM (IF PRESENT)	CORRECTIVE MEASURES TAKEN
Pollution Prevention Team Training	Prepare annual stormwater evaluation and inspection report		

Unit 3 & 5
Westinghouse Plaza
Long Term Pollution Prevention Plan
Spill and Leak History
(____ to _____)

Date	Spill	Leak	Location	Description				Response Procedures	Measures to Prevent Reoccurrence	Reporting Pollution Prevention Team Member
(MM/DD/YY)	*(check one)*		*(as indicated on Site Map)*	*Type of Material*	*Quantity*	*Source, if known*	*Reason*			

OPERATIONS AND MAINTENANCE GUIDELINES

CDS Stormwater Treatment Unit

INTRODUCTION

The CDS unit is an important and effective component of your storm water management program and proper operation and maintenance of the unit are essential to demonstrate your compliance with local, state and federal water pollution control requirements.

The CDS technology features a patented non-blocking, indirect screening technique developed in Australia to treat water runoff. The unit is highly effective in the capture of suspended solids, fine sands and larger particles. Because of its non-blocking screening capacity, the CDS unit is un-matched in its ability to capture and retain gross pollutants such as trash and debris. In short, CDS units capture a very wide range of organic and in-organic solids and pollutants that typically result in tons of captured solids each year such as: Total suspended solids (TSS) and other sedimentitious materials, oil and greases, trash, and other debris (including floatables, neutrally buoyant, and negatively buoyant debris). These pollutants will be captured even under very high flow rate conditions.

CDS units are equipped with conventional oil baffles to capture and retain oil and grease. Laboratory evaluations show that the CDS units are capable of capturing up to 70% of the free oil and grease from storm water. CDS units can also accommodate the addition of oil sorbents within their separation chambers. The addition of the oil sorbents can ensure the permanent removal of 80% to 90% of the free oil and grease from the storm water runoff.

OPERATIONS

The CDS unit is a non-mechanical self-operating system and will function any time there is flow in the storm drainage system. The unit will continue to effectively capture pollutants in flows up to the design capacity even during extreme rainfall events when the design capacity may be exceeded. Pollutants captured in the CDS unit's separation chamber and sump will be retained even when the units design capacity is exceeded.

CDS UNIT INSPECTION

Access to the CDS unit is typically achieved through two manhole access covers – one allows inspection (and clean out) of the separation chamber (screen/cylinder) & sump and another allows inspection (and cleanout) of sediment captured and retained behind the screen.

The unit should be periodically inspected to determine the amount of accumulated pollutants and to ensure that the cleanout frequency is adequate to handle the predicted pollutant load being processed by the CDS unit. The unit should be periodically inspected for indications of vector infestation, as well. The recommended cleanout of

solids within the CDS unit's sump should occur at 75% to 85% of the sump capacity. However, the sump may be completely full with no impact to the CDS unit's performance.

CONTECH Stormwater Solutions (previously CDS Technologies) recommends the following inspection guidelines: For new initial operation, check the condition of the unit after every runoff event for the first 30 days. For ongoing operations, the unit should be inspected after the first six inches of rainfall at the beginning of the rainfall season and at approximately 30-day intervals. The visual inspection should ascertain that the unit is functioning properly (no blockages or obstructions to inlet and/or separation screen), evidence of vector infestation, and to measure the amount of solid materials that have accumulated in the sump, fine sediment accumulated behind the screen, and floating trash and debris in the separation chamber. This can be done with a calibrated dipstick, tape measure or other measuring instrument so that the depth of deposition in the sump can be tracked.

CDS UNIT CLEANOUT

The frequency of cleaning the CDS unit will depend upon the generation of trash and debris and sediments in your application. Cleanout and preventive maintenance schedules will be determined based on operating experience unless precise pollutant loadings have been determined.

Access to the CDS unit is typically achieved through two manhole access covers – one allows cleanout of the separation chamber (screen/cylinder) & sump and another allows cleanout of sediment captured and retained behind the screen. For units possessing a sizable depth below grade (depth to pipe), a single manhole access point would allow both sump cleanout and access behind the screen.

CONTECH Stormwater Solutions Recommends The Following:

> NEW INSTALLATIONS: Check the condition of the unit after every runoff event for the first 30 days. The visual inspection should ascertain that the unit is functioning properly (no blockages or obstructions to inlet and/or separation screen), measuring the amount of solid materials that have accumulated in the sump, the amount of fine sediment accumulated behind the screen, and determining the amount of floating trash and debris in the separation chamber. This can be done with a calibrated "dip stick" so that the depth of deposition can be tracked. Refer to the "Cleanout Schematic" **(Appendix B) f**or allowable deposition depths and critical distances. Schedules for inspections and cleanout should be based on storm events and pollutant accumulation.
>
> ONGOING OPERATION: During the rainfall season, the unit should be inspected at least once every 30 days. The floatables should be removed and the sump cleaned when the sump is 75-85% full. If floatables accumulate more rapidly than the settleable solids, the floatables should be removed using a vactor truck or dip net before the layer thickness exceeds approximately one foot.
>
> Cleanout of the CDS unit at the end of a rainfall season is recommended because of the nature of pollutants collected and the potential for odor generation

from the decomposition of material collected and retained. This end of season cleanout will assist in preventing the discharge of pore water from the CDS ® unit during summer months.

USE OF SORBENTS –The addition of sorbents is **not a requirement** for CDS units to effectively control oil and grease from storm water. The conventional oil baffle within a unit assures satisfactory oil and grease removal. However, the addition of sorbents is a unique enhancement capability unique to CDS units, enabling increased oil and grease capture efficiencies beyond that obtainable by conventional oil baffle systems.

Under normal operations, CDS units will provide effluent concentrations of oil and grease that are less than 15 parts per million (ppm) for all dry weather spills where the volume is less than or equal to the spill capture volume of the CDS unit. During wet weather flows, the oil baffle system can be expected to remove between 40 and 70% of the free oil and grease from the storm water runoff.

CONTECH Stormwater Solutions only recommends the addition of sorbents to the separation chamber if there are specific land use activities in the catchment watershed that could produce exceptionally large concentrations of oil and grease in the runoff, concentration levels well above typical amounts. If site evaluations merit an increased control of free oil and grease then oil sorbents can be added to the CDS unit to thoroughly address these particular pollutants of concern.

Recommended Oil Sorbents

Rubberizer® Particulate 8-4 mesh or OARS ™ Particulate for Filtration, HPT4100 or equal. Rubberizer is supplied by Haz-Mat Response Technologies, Inc. 4626 Santa Fe Street, San Diego, CA 92109 (800) 542-3036. OARS is supplied by AbTech Industries, 4110 N. Scottsdale Road, Suite 235, Scottsdale, AZ 85251 (800) 545-8999.

The amount of sorbent to be added to the CDS separation chamber can be determined if sufficient information is known about the concentration of oil and grease in the runoff. Frequently the actual concentrations of oil and grease are too variable and the amount to be added and frequency of cleaning will be determined by periodic observation of the sorbent. As an initial application, CDS recommends that approximately 4 to 8 pounds of sorbent material be added to the separation chamber of the CDS units per acre of parking lot or road surface per year. Typically this amount of sorbent results in a ½ inch to one (1") inch depth of sorbent material on the liquid surface of the separation chamber. The oil and grease loading of the sorbent material should be observed after major storm events. Oil Sorbent material may also be furnished in pillow or boom configurations.

The sorbent material should be replaced when it is fully discolored by skimming the sorbent from the surface. The sorbent may require disposal as a special or hazardous waste, but will depend on local and state regulatory requirements.

CLEANOUT AND DISPOSAL

A vactor truck is recommended for cleanout of the CDS unit and can be easily accomplished in less than 30-40 minutes for most installations. Standard vactor operations should be employed in the cleanout of the CDS unit. Disposal of material from the CDS unit should be in accordance with the local municipality's requirements. Disposal of the decant material to a POTW is recommended. Field decanting to the storm drainage system is not recommended. Solids can be disposed of in a similar fashion as those materials collected from street sweeping operations and catch-basin cleanouts.

MAINTENANCE

The CDS unit should be pumped down at least once a year and a thorough inspection of the separation chamber (inlet/cylinder and separation screen) and oil baffle performed. The unit's internal components should not show any signs of damage or any loosening of the bolts used to fasten the various components to the manhole structure and to each other. Ideally, the screen should be power washed for the inspection. If any of the internal components is damaged or if any fasteners appear to be damaged or missing, please contact CONTECH at 800.338.2211 to make arrangements to have the damaged items repaired or replaced.

The screen assembly is fabricated from Type 316 stainless steel and fastened with Type 316 stainless steel fasteners that are easily removed and/or replaced with conventional hand tools. The damaged screen assembly should be replaced with the new screen assembly placed in the same orientation as the one that was removed.

CONFINED SPACE

The CDS unit is a confined space environment and only properly trained personnel possessing the necessary safety equipment should enter the unit to perform particular maintenance and/or inspection activities beyond normal procedure. Inspections of the internal components can, in most cases, be accomplished by observations from the ground surface.

VECTOR CONTROL

Most CDS units do not readily facilitate vector infestation. However, for CDS units that may experience extended periods of non-operation (stagnant flow conditions for more than approximately one week) there may be the potential for vector infestation. In the event that these conditions exist, the CDS unit may be designed to minimize potential vector habitation through the use of physical barriers (such as seals, plugs and/or netting) to seal out potential vectors. The CDS unit may also be configured to allow drain-down under favorable soil conditions where infiltration of storm water runoff is permissible. For standard CDS units that show evidence of mosquito infestation, the

application of larvicide is one control strategy that is recommended. Typical larvicide applications are as follows:

SOLID B.t.i. LARVICIDE: ½ to 1 briquet (typically treats 50-100 sq. ft.) one time per month (30-days) or as directed by manufacturer.

SOLID METHOPRENE LARVICIDE (not recommended for some locations): ½ to 1 briquet (typically treats 50-100 sq. ft.) one time per month (30-days) to once every 4-½ to 5-months (150-days) or as directed by manufacturer.

RECORDS OF OPERATION AND MAINTENANCE

CONTECH Stormwater Solutions recommends that the owner maintain annual records of the operation and maintenance of the CDS unit to document the effective maintenance of this important component of your storm water management program. The attached **Annual Record of Operations and Maintenance** form (see **Appendix A**) is suggested and should be retained for a minimum period of three years.

APPENDIX A

ANNUAL RECORDS OF OPERATIONS & MAINTENANCE AND INSPECTION CHECKLISTS

ANNUAL RECORD OF
OPERATION AND MAINTENANCE

OWNER _____
ADDRESS_____
OWNER REPRESENTATIVE_____**PHONE**_____

INSTALLATION:
MODEL DESIGNATION_____ **DATE** _____
SITE LOCATION_____

INSPECTIONS:

DATE/ INSPECTOR	SCREEN/INLET INTEGRITY	FLOATABLES DEPTH	DEPTH TO SEDIMENT (inches)	SEDIMENT VOLUME* (CUYDS)	SORBENT DISCOLORATION

DEPTH FROM COVER TO BOTTOM OF SUMP (SUMP INVERT) _____

DEPTH FROM COVER TO SUMP @ 75% FULL _____

VOLUME OF SUMP @ 75% FULL =_____**CUYD**

VOLUME/INCH DEPTH _____**CUFT/IN OF SUMP**

VOLUME/FOOT DEPTH_____**CUYD/FT OF SUMP**

***Calculate Sediment Volume = (Depth to Sump Invert – Depth to Sediment)*(Volume/inch)**

OBSERVATIONS OF FUNCTION: _____
_____
_____

CLEANOUT:

DATE	VOLUME FLOATABLES	VOLUME SEDIMENTS	METHOD OF DISPOSAL OF FLOATABLES, SEDIMENTS, DECANT AND SORBENTS

OBSERVATIONS:
_____
_____
_____
_____

SCREEN MAINTENANCE:
DATE OF POWER WASHING, INSPECTION AND OBSERVATIONS:
_____
_____

CERTIFICATION:_____ **TITLE:**_____ **DATE:**_____

INSPECTION CHECKLIST

1. During the rainfall season, inspect and check condition of unit at east once every 30 days ☐
2. Ascertain that the unit is funcioning properly (no blockages or obstructions to inlet and/or separation screen) ☐
3. Measure amount of solid material s that have accumulated in the sump (Unit should be cleaned when the sump is 75-85% full) ☐
4. Measure amount of fine sediment accumulated behind the screen ☐
5. Measure amount of floating trash and debris in the separation chamber ☐

MAINTENANCE CHECKLIST

1. Cleanout unit at the end and beginning of the rainfall season ☐
2. Pump down unit (at least once a year) and thoroughly inspect separation chamber, separation screen and oil baffle ☐
3. No visible signs of damage or loosening of bolts to internal components observed * ☐

*** If there is any damage to the internal components or any fasteners are damaged or missing please contact CONTECH (800.338.1122).**

APPENDIX B – STORMWATER POLLUTION PREVENTION PLAN

Construction Period Pollution Prevention Plan

Unit 3 & Unit 5
Westinghouse Plaza
Hyde Park, Massachusetts

Prepared for:
BIV-1WH Unit 3, LLC & BIV-1WH Unit 5, LLC
c/o The Seyon Group.
118 Newbury Street, 3rd Floor
Boston, MA 02116

Prepared by:
R.J. O'Connell & Associates, Inc.
80 Montvale Ave, Suite 201
Stoneham, MA 02180

Date:
April 2, 2019

Contents

SECTION 1: SITE EVALUATION, ASSESSMENT, AND PLANNING

1.1 Project/Site Information

Project/Site Name: Proposed Redevelopment

Project Street/Location: 1Westinghouse Plaza, Units 3 & 5

City: Hyde Park State: MA ZIP Code:02136

County or Similar Subdivision: Suffolk County

Latitude/Longitude (Use **one** of three possible formats, and specify method)

Latitude:	Longitude:
1. 42 º 14’ 47' N (degrees, minutes, seconds)	1. 71º 07’47” W (degrees, minutes, seconds)
2. _ _ º _ _. _ _’ N (degrees, minutes, decimal)	2. _ _ º _ _. _ _’ W (degrees, minutes, decimal)
3. _ _ . _ _ _ _ º N (decimal)	3. _ _ . _ _ _ _ º W (decimal)

Method for determining latitude/longitude:

☐ USGS topographic map (specify scale: _____) ☐ EPA Web site ☐ GPS

☒ Other (please specify): Google Earth

Is the project located in Indian country? ☐ Yes ☒ No

If yes, name of Reservation, or if not part of a Reservation, indicate "not applicable."_____

Is this project considered a federal facility? ☐ Yes ☒ No

NPDES project or permit tracking number*: N/A

**(This is the unique identifying number assigned to your project by your permitting authority after you have applied for coverage under the appropriate National Pollutant Discharge Elimination System (NPDES) construction general permit.)*

1.2 Contact Information/ Responsable Parties

Operator:

The Seyon Group
118 Newbury Street, 3rd Floor
Boston, MA 02116

This Plan was Prepared by:

R.J. O'Connell & Associates, Inc.
John Stoy
80 Montvale Avenue – Suite 201
Stoneham, MA 02180
Phone: 781-279-0180 ext. 123
Email: john.stoy@rjoconnell.com

1.3 Nature and Sequence of Construction Activity

General Scope:
The proposed redevelopment project includes renovating and rehabilitating the existing paved area behind Unit 5 of Westinghouse Plaza. The existing pavement will be reclaimed by pulverizing and blending it with the underlying base material. Grading of the area will follow existing grades and drain toward new, deep-sump catch basins equipped with hoods on their outlets. Catch basins will discharge to an oil/particle separator before connecting to an existing manhole that outlets to Mother Brook. The parking lot will then be paved with 2 courses of bituminous concrete. The renovated parking area will provide parking for 114 vehicles. A 30 ft. wide portion of the building between the low and high bays will be demolished to provide access to the renovated parking area.

What is the function of the construction activity?
☐ Residential ☒ Commercial ☐ Industrial ☐ Road Construction ☐ Linear Utility
☐ Other (please specify):
Estimated Project Start Date: Spring 2019
Estimated Project Completion Date: Autumn 2019

1.4 Construction Site Estimates

Total site area: ± 23 acres
Construction site area to be disturbed: ± 1.25 acres

1.5 Potential Sources of Pollution

Potential Sources of Sediment to Stormwater Runoff:
Potential sources of sediment that could affect the quality of stormwater discharges from the construction site include track-out sediment from trucks leaving the site, runoff from stockpiles containing sediment, and sediment from exposed ground surfaces resulting from earth-disturbing activities.

Potential Pollutants and Sources Other Than Sediment to Stormwater:
Potential pollutants and sources other than sediment to stormwater include litter, debris, runoff from vehicle washing operations that could be exposed to stormwater, and construction vehicle chemicals such as diesel fuel, hydraulic fluids and other petroleum products.

1.6 Endangered Species Certification

Are endangered or threatened species and critical habitats on or near the project area?

☐ Yes ☒ No

1.7 Historic Preservation

Are there any historic sites on or near the construction site?

☐ Yes ☒ No

1.8 Maps and Figures

See Appendix A – Figures for USGS Site Locus Plan, and FEMA Flood Insurance Rate Map. See Appendix B under separate cover for site development plans.

SECTION 2: EROSION AND SEDIMENT CONTROL BMPS

2.1 Minimize Disturbed Area and Protect Natural Features and Soil

Contractor staging areas, stockpile areas, refueling areas, concrete wash-out areas, etc. will be located outside the 100-foot wetland buffer zones.

2.2 Erosion & Sediment Control During Construction Activities

The following erosion and sediment control measures shall be implemented prior to and during construction or on as needed basis.

- Prior to any construction activity, wattles shall be installed at the limits of the work area as shown on the plans. Erosion and sediment controls may be installed in stages,but must be in place prior to disturbance of soils within the area draining them.
- Install sedimentation filter bags in all existing catch basins within the construction area until the structures are abandoned or the area has received permanent stabilization treatment.
- Erosion controls must remain in place during demolition, and grading activities. Cuts and fills shall be performed in such a manner that runoff will continue to be directed toward erosion and sediment controls measures installed on-site.

- The Contractor shall minimize the area of disturbed soil and efforts shall be made to limit the time of exposure of disturbed areas.

- Erosion control measures shall be routinely inspected and cleaned, repaired or replaced as necessary. The Owner and/or Owner's representative will monitor the measures for proper maintenance and operation throughout the construction period. Documentation will be maintained and kept up-to-date by the Contractor on all inspections and repairs performed in accordance with this Construction Pollution Prevention Plan requirements. Copies of all inspection reports must be kept on file at the on-site construction office.

- Where construction activities have permanently ceased or have temporarily been suspended for more than seven days, or when final grades are reached in any portion of the site, stabilization practices shall be implemented within three days. Areas which remain disturbed but inactive for at least thirty days shall receive temporary seeding in accordance with the DEP Erosion and Sedimentation Control Guidelines, May 2003, the EPA Erosion and Sediment Control Inventory of Current Practices, April 1990 and all local municipal regulations.

- Stockpiled soil shall be surrounded on their perimeters with wattles and/or siltation fences to prevent and/or control siltation and erosion. Tops of stockpiles shall be covered in such a manner that stormwater does not infiltrate the materials and thereby render the same unsuitable for fill use.

- Any dewatering activities in which water will be released to a resource area as defined under M.G.L. Chapter 131 Section 40 or to a storm drain shall use a settling pond or similar device to remove sediment before water is released.

- Wattle dikes shall be installed around all existing & proposed catch basins located in areas subject to stormwater run-off from the proposed construction, or as directed by the Owner/Owner's Represenative. No sediment shall be allowed to enter the on-site drainage system at any time.

- Dust control shall be employed during construction as necessary. Dust control methods shall consist of dampening the ground with water, or an emulsion soil stabilizer if water does not provide adequate dust control.

Structural Practices:

Structural practices which will be used on this site to divert stormwater runoff away from exposed soils, store stormwater runoff, and discharge stormwater from the site include but are not limited to the following; silt fences, wattles, drainage swales, catch basins, permanent seeding and landscaping treatments (including permanent mulches, as applicable), and structural surfaces such as pavements. The site work drawings show and detail the locations of these structural practices.

2.3 Control Stormwater Flowing onto and through the Project

BMP Description: Sedimentation filter bag	
Installation Schedule:	At commencement of construction activities
Maintenance and Inspection:	Once weekly and within 24 hours of the end of a rainfall event that is 0.25 inches or greater. Sediment to be removed when bag is half full
Responsible Staff:	CPPPP Contact and /or their responsible designee

BMP Description: Existing Catch Basins with Inverted Hooded Outlets	
Installation Schedule:	Upon completion of construction
Maintenance and Inspection:	Catch basins shall be cleaned upon completion of construction.
Responsible Staff:	CPPPP Contact and /or their responsible designee

2.4 Stabilize Soils

BMP Description: Mulch, hay or seeding for temporary vegetation of disturbed or exposed Areas	
Installation Schedule:	As needed. No areas shall be left disturbed for longer than necessary to complete the work associated with that area
Maintenance and Inspection:	Once weekly and within 24 hours of the end of a rainfall event that is 0.25 inches or greater
Responsible Staff:	CPPPP Contact and /or their responsible designee

2.5 Protect Storm Drain Inlets

BMP Description: Sedimentation filter bag	
Installation Schedule:	At commencement of construction activities
Maintenance and Inspection:	Once weekly and within 24 hours of the end of a rainfall event that is 0.25 inches or greater. Sediment to be removed when bag is half full.
Responsible Staff:	CPPPP Contact and /or their responsible designee

2.7 Retain Sediment On-Site

BMP Description: Sedimentation filter bag	
Installation Schedule:	At commencement of construction activities
Maintenance and Inspection:	Inspect daily and within 24 hours of the end of a rainfall event that is 0.25 inches or greater. Sediment bag to be removed and replaced when bag is half full.
Responsible Staff:	CPPPP Contact and /or their responsible designee

SECTION 3: GOOD HOUSEKEEPING BMPS

3.1 Material Handling and Waste Management

BMP Description: Solid waste containers / dumpsters.	
Installation Schedule:	At commencement of construction activities
Maintenance and Inspection:	Trash to be picked up on a daily basis, dumpsters emptied when full. Cover to be put on dumpster when full to prevent trash from blowing throughout site.
Responsible Staff:	CPPPP Contact and /or their responsible designee

3.2 Establish Proper Construction Material Staging Areas

BMP Description: Wattles or haybales around all stockpile areas of construction and excavated material	
Installation Schedule:	At the commencement of construction activities
Maintenance and Inspection:	Once weekly and within 24 hours of the end of a rainfall event that is 0.25 inches or greater
Responsible Staff:	CPPPP Contact and /or their responsible designee

3.3 Designate Washout Areas

BMP Description: Equipment washing shall occur only within drainage areas with temporary sedimentation basins. Designated washout areas shall be flagged off and washing shall occur only in these areas. Areas shall be contained to prevent the discharge of soaps, detergents or solvents used in vehicle washing.	
Installation Schedule:	At the commencement of construction activities
Maintenance and Inspection:	Once weekly and within 24 hours of the end of a rainfall event that is 0.25 inches or greater. Washout spoil to be disposed of in on-site containers on a daily basis.
Responsible Staff:	CPPPP Contact and /or their responsible designee

3.4 Establish Proper Equipment/Vehicle Fueling and Maintenance Practices

BMP Description: Fueling operations, including the service and storage of equipment associated with fueling, shall not occur within drainage areas with temporary sedimentation basins and a minimum of 100 feet from the edge of any resource area onsite.	
Installation Schedule:	At the commencement of construction activities
Maintenance and Inspection:	Once weekly and within 24 hours of the end of a rainfall event that is 0.25 inches or greater
Responsible Staff:	CPPPP Contact and /or their responsible designee

3.5 Control Equipment/Vehicle Washing

BMP Description: Vehicle washing shall occur only within drainage areas with temporary sedimentation basins.	
Installation Schedule:	At the commencement of construction activities
Maintenance and	Once weekly and within 24 hours of the end of a rainfall event

Inspection:	that is 0.25 inches or greater
Responsible Staff:	CPPPP Contact and /or their responsible designee

3.6 Spill Prevention and Control Plan

A spill contingency plan will be implemented during construction, including the following provisions:

- Equipment necessary to quickly attend to inadvertent spills will be stored on-site in a secure but accessible location. Such equipment will include:

  1. safety goggles
  2. chemically resistant gloves and overshoe boots
  3. water and chemical fire extinguishers
  4. sand and shovels
  5. suitable absorbent materials
  6. storage containers
  7. first aid equipment

- Spills or leaks will be treated properly in accordance with material type, volume of spillage and location of the spill. Mitigation will include:

  1. preventing further spillage
  2. containing the spilled material to the smallest practical area
  3. removing spilled material immediately in a safe and environmentally sound manner and in accordance with all applicable codes
  4. mitigating any damage to the environment

- For spills of less than 5 gallons of material, proceed with source control and containment and clean up with absorbent materials or other applicable means, unless an imminent hazard or other circumstances dictate that the spill should be treated by a professional response contractor.

- Spills of toxic or hazardous materials of any type will be reported to the appropriate federal, state and/or local government agency, regardless of the size of the spill. Spills of amounts that exceed reportable quantities of certain substances specifically mentioned in federal regulations 40 CFR 110, 40 CFR 117 and 40 CFR 302 must be immediately reported to the EPA National Response Center, telephone 1-800-424-8802.

3.7 Any Additional BMPs

BMP Description: Adequate sanitation facilities for on-site construction crews	
Installation Schedule:	At the commencement of construction activities
Maintenance and Inspection:	As required. Portable facilities shall be emptied and cleaned on a weekly basis.
Responsible Staff:	CPPPP Contact and /or their responsible designee

BMP Description: Dust control through watering	
Installation Schedule:	As required throughout earthwork operations
Maintenance and Inspection:	As required
Responsible Staff:	CPPPP Contact and /or their responsible designee

3.8 Allowable Non-Stormwater Discharge Management

BMP Description: All measures used to mitigate sedimentation shall be used to control water associated with dust control activities and uncontaminated excavation dewatering.	
Installation Schedule:	As outlined in above measures
Maintenance and Inspection:	Once weekly and within 24 hours of the end of a rainfall event that is 0.25 inches or greater
Responsible Staff:	CPPPP Contact and /or their responsible designee

SECTION 4: CONSTRUCTION PERIOD POLLUTION PREVENTION AND SEDIMENTATION PLAN FORMS AND LOGS

4.1 Construction Site Inspection Report
Proposed Redevelopment
1 Westinghouse Plaza, Units 3 & 5
Hyde Park, MA

General Information			
Project Name	Proposed Development		
NPDES Tracking No.		**Location**	Westinghouse Plaza Unit 3 & 5 Hyde Park, MA
Date of Inspection		**Start/End Time**	
Inspector's Name(s)			
Inspector's Title(s)			
Inspector's Contact Info.			
Inspector's Qualifications			
Describe Present Phase of Construction			
Type of Inspection: ❑ Regular ❑ Pre-storm event ❑ During storm event ❑ Post-storm event			
Weather Information			
Has there been a storm event since the last inspection? ❑Yes ❑No **If yes, provide:** Storm Start Date & Time: Storm Duration (hrs): Approximate Amount of Precipitation (in):			
Weather at time of this inspection? ❑ Clear ❑Cloudy ❑ Rain ❑ Sleet ❑ Fog ❑ Snowing ❑ High Winds ❑ Other: Temperature:			
Have any discharges occurred since the last inspection? ❑Yes ❑No **If yes, describe:**			
Are there any discharges at the time of inspection? ❑Yes ❑No **If yes, describe:**			

	BMP	BMP Installed?	BMP Maintenance Required?	Corrective Action Needed and Notes
1	Catch Basin Filter Bag	❑Yes ❑No	❑Yes ❑No	
2	Straw Wattles	❑Yes ❑No	❑Yes ❑No	
3	Check Dams	❑Yes ❑No	❑Yes ❑No	
4	Diversion Swales	❑Yes ❑No	❑Yes ❑No	
5	Sedimentation Basins	❑Yes ❑No	❑Yes ❑No	
6	Construction Entrance	❑Yes ❑No	❑Yes ❑No	
7	Street Sweeping	❑Yes ❑No	❑Yes ❑No	
8	Slope Stabilization	❑Yes ❑No	❑Yes ❑No	
9				
10				

Overall Site Issues

Below are some general site issues that should be assessed during inspections. Customize this list as needed for conditions at your site.

	BMP/Activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
1	Are all slopes and disturbed areas not actively being worked properly stabilized?	❑Yes ❑No	❑Yes ❑No	
2	Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs?	❑Yes ❑No	❑Yes ❑No	
3	Are perimeter controls and sediment barriers adequately installed (keyed into substrate) and maintained?	❑Yes ❑No	❑Yes ❑No	
4	Are discharge points and receiving waters free of any sediment deposits?	❑Yes ❑No	❑Yes ❑No	
5	Are storm drain inlets properly protected?	❑Yes ❑No	❑Yes ❑No	
6	Is the construction exit preventing sediment from being tracked into the street?	❑Yes ❑No	❑Yes ❑No	
7	Is trash/litter from work areas collected and placed in covered dumpsters?	❑Yes ❑No	❑Yes ❑No	
8	Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	❑Yes ❑No	❑Yes ❑No	
9	Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?	❑Yes ❑No	❑Yes ❑No	
10	Are materials that are potential stormwater contaminants stored inside or under cover?	❑Yes ❑No	❑Yes ❑No	
11	Are non-stormwater discharges (e.g., wash	❑Yes ❑No	❑Yes ❑No	

	BMP/Activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
	water, dewatering) properly controlled?			
12		❑Yes ❑No	❑Yes ❑No	

Non-Compliance

Describe any incidents of non-compliance not described above:

CERTIFICATION STATEMENT

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

Print name and title: _____

Signature:_____ Date:_____

Corrective Action Log

Project Name: Proposed Redevelopment – Westinghouse Plaza, Units 3 & 5, Hyde Park, MA
CPPPP Contact:

Inspection Date	Inspector Name(s)	Description of BMP Deficiency	Corrective Action Needed (including planned date/responsible person)	Date Action Taken/Responsible person

Construction Period Pollution Prevention and Sedimentation Plan Amendment Log

Project Name: Proposed Redevelopment – Westinghouse Plaza, Units 3 & 5, Hyde Park, MA
CPPPP Contact:

Amendment No.	Description of the Amendment	Date of Amendment	Amendment Prepared by [Name(s) and Title]

Subcontractor Certifications/Agreements

SUBCONTRACTOR CERTIFICATION
STORMWATER POLLUTION PREVENTION PLAN

Project Number: _____

Project Title: _____

Operator(s): _____

As a subcontractor, you are required to comply with the Stormwater Pollution Prevention Plan (SWPPP) for any work that you perform on-site. Any person or group who violates any condition of the SWPPP may be subject to substantial penalties or loss of contract. You are encouraged to advise each of your employees working on this project of the requirements of the SWPPP. A copy of the SWPPP is available for your review at the office trailer.

Each subcontractor engaged in activities at the construction site that could impact stormwater must be identified and sign the following certification statement:

I certify under the penalty of law that I have read and understand the terms and conditions of the SWPPP for the above designated project and agree to follow the BMPs and practices described in the SWPPP.

This certification is hereby signed in reference to the above named project:

Company: _____

Address: _____

Telephone Number: _____

Type of construction service to be provided: _____

_____

_____

Signature: _____

Title: _____

Date: _____

Grading and Stabilization Activities Log

Project Name: Proposed Redevelopment – Westinghouse Plaza, Units 3 & 5, Hyde Park, MA
CPPPP Contact:

Date Grading Activity Initiated	Description of Grading Activity	Date Grading Activity Ceased (Indicate Temporary or Permanent)	Date When Stabilization Measures are Initiated	Description of Stabilization Measure and Location

CPPPP Training Log

Stormwater Pollution Prevention Training Log

Project Name: **Proposed Redevelopment – Westinghouse Plaza**
Project Location: **Westinghouse Plaza, Units 3 & 5, Hyde Park, MA**

Instructor's Name(s):

Instructor's Title(s):

Course Location: _____ Date: _____

Course Length (hours): _____

Stormwater Training Topic: *(check as appropriate)*

- ❑ **Erosion Control BMPs**
- ❑ **Emergency Procedures**
- ❑ **Sediment Control BMPs**
- ❑ **Good Housekeeping BMPs**
- ❑ **Non-Stormwater BMPs**

Specific Training Objective:_____

_____

Attendee Roster: *(attach additional pages as necessary)*

No.	Name of Attendee	Company
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Delegation of Authority Form

Delegation of Authority

I, _____ (name), hereby designate the person or specifically described position below to be a duly authorized representative for the purpose of overseeing compliance with environmental requirements, including the Construction General Permit, at the _____ construction site. The designee is authorized to sign any reports, stormwater pollution prevention plans and all other documents required by the permit.

_____ (name of person or position)
_____ (company)
_____ (address)
_____ (city, state, zip)
_____ (phone)

By signing this authorization, I confirm that I meet the requirements to make such a designation as set forth in _____ (Reference State Permit), and that the designee above meets the definition of a "duly authorized representative" as set forth in _____ (Reference State Permit).

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

Name: _____

Company: _____

Title: _____

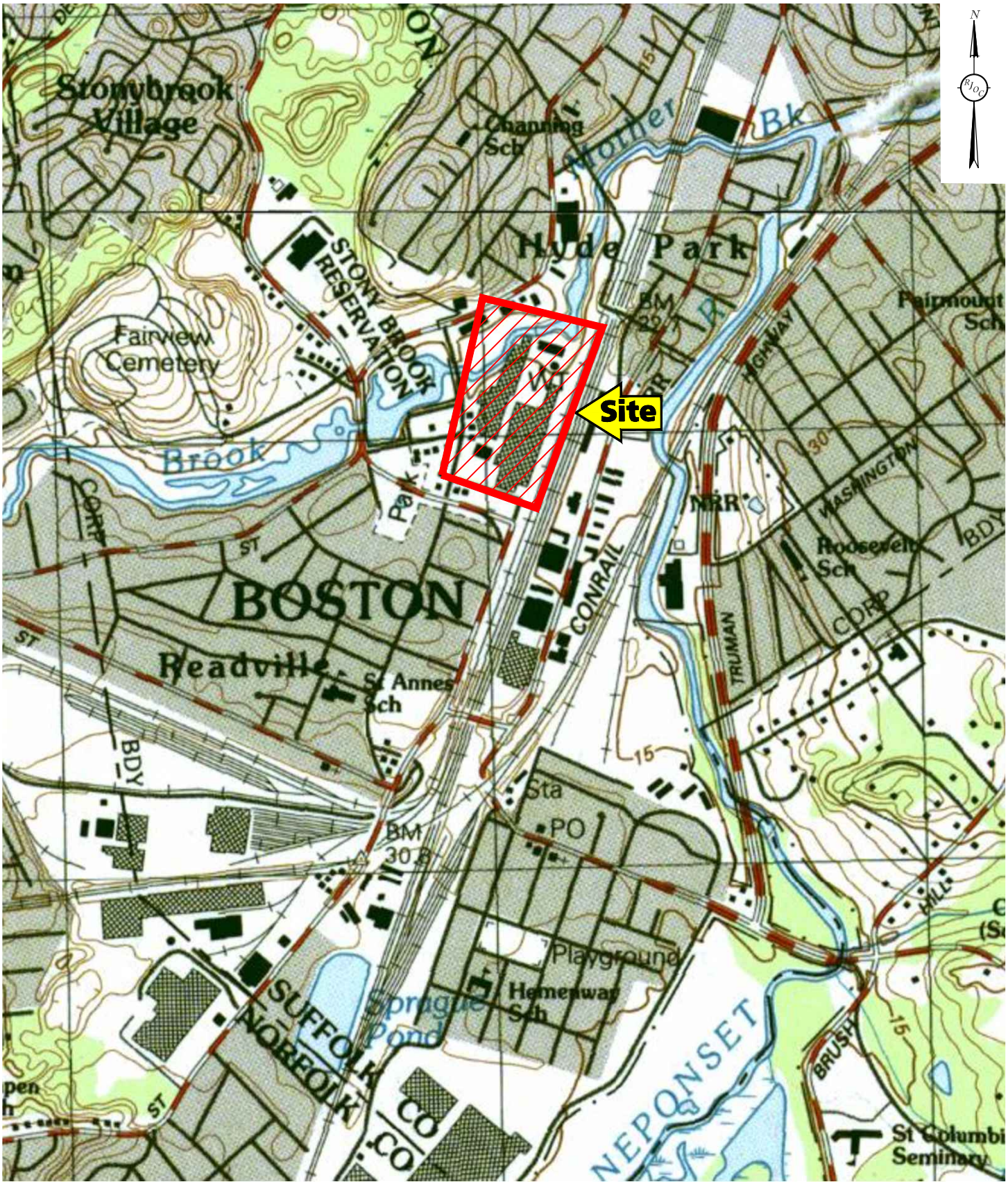
Signature: _____

Date: _____

APPENDICES:

Appendix A – Figures

Appendix A – Figures



No.	REVISION	DATE

Designed by:	HAA
Drawn by:	HAA
Checked by:	BJM
Scale:	1"=1,000'
Date:	12/6/2018

Prepared by:
RJO'CONNELL & ASSOCIATES, INC.
CIVIL ENGINEERS & LAND PLANNERS
80 MONTVALE AVENUE
STONEHAM, MA 02180
781-279-0180 / FAX: 781-279-0173

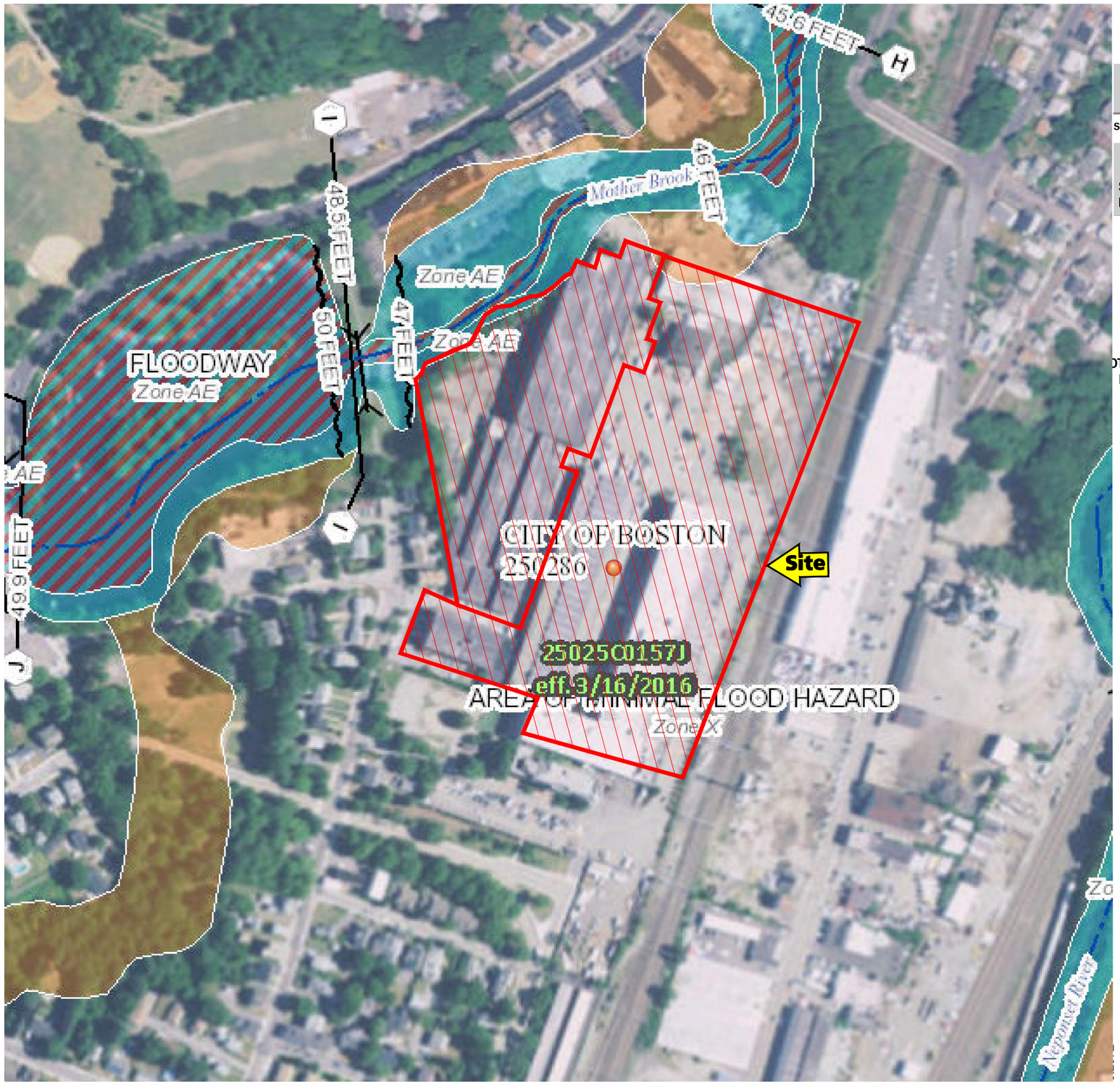
Project Name:
1 WESTINGHOUSE PLAZA
HYDE PARK, MA

Drawing Name:
USGS SITE LOCUS MAP

Drawing No.:
FIG-1

Project No.: 18087

Drawing name: G:\MA\Hyde Park\PMRG\1 Westinghouse\Reports\Stormwater Report\Figures\18087_FIGURE 1-USGS.dwg
Dec 06, 2018 - 13:05pm



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 / 17.5 — Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Transect
- 513 — 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

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 12/6/2018 at 2:16:40 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.

	Date	Revision	No.

Designed by:	HAA
Drawn by:	HAA
Checked by:	BJM
Scale:	1"=500'
Date:	12/6/2018

Prepared For:
THE SEYON GROUP
118 NEWBURY STREET
3RD FLOOR
BOSTON, MA 02116
PHONE: 857-350-4583

Prepared By:
RJO'CONNELL & ASSOCIATES, INC.
CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
80 MONTVALE AVE
STONEHAM, MA 02180
781-279-0180 FAX: 781-279-0173

Project Name:
1 WESTINGHOUSE PLAZA
HYDE PARK, MA

Drawing Name:
FLOOD INSURANCE RATE MAP

Drawing No.:
FIG-2

Project No.: 18087

Drawing name: G:\MA\Hyde Park\PMRC\ Westinghouse\Reports\Stormwater Report\Figures\18087_FIGURE 2-FIRM Map.dwg
Dec 06, 2018 - 16:55pm

APPENDIX C – CDS PARTICLE SEPARATOR CALCULATIONS

Project Information Worksheet

For sizing and cost information:

Region	Fax	E-mail	Call
ME,MA, NH, VT - Jason Greenleaf	207.885.9825	greenleafj@contech-cpi.com	877.907.8676 ext. 222
CT, RI – Heather McCall	207.885.9825	mccallh@contech-cpi.com	877.907.8676 ext. 215
NY – Don LeBlanc	207.885.9825	leblancd@contech-cpi.com	877.907.8676 ext. 660

Project Information

Date: 3-19-19 Response Required By: ASAP

Project Name: Westinghouse Plaza

Project Location: 1 Westinghouse Plaza, Hyde Park, MA

Permitting/Reviewing Agency Standards: Treat first 1" of Runoff Project Description/ Land Use: Commercial

Treatment Requirements - Target Pollutants

- [X] TSS
- [X] Oil & Grease
- [ ] Other:
- [ ] Trash/Floatables
- [ ] Metals:
- [ ] None

Treatment Technology (if known)

- [ ] Filtration
- [X] Hydrodynamic Separation
- [ ] Screening
- [ ] Oil/Water Separation
- [ ] Volumetric Separation
- [ ] Catch Basin Insert
- [ ] High-Flow Bypass

Storage Requirements

- [ ] Detention
- [X] None
- [ ] Retention/Infiltration
- [ ] Other:

Storage Type (if known)

- [ ] Metal
- [ ] Concrete
- [ ] Plastic

Volume Required:

Allowable Depth:

Design Specifications

Structure ID	Contributing Drainage Area: Area (ac or hec)	Runoff C/ % Impervious	T_c (min)	WQ Design Flow/Volume	Peak Condition: Flow (cfs or l/s)	Return Period	Inlet size/ Outlet Size	Elevations (ft or m): Rim	Inlet Invert	Outlet Invert
OGS-1	1.16Ac	0.9 C/ %	6.0	/			12" / 12"	51.90	47.25	47.25
		C/ %		/			/			
		C/ %		/			/			

Inlet Material: Outlet Material:

If high seasonal groundwater, what is the elevation? N/A

Other Design Requirements

Contact Information

Name: JOHN STOY

Company: RJ O'Connell & Assoc., Inc.

Address: 80 Montvale Ave., Suite 201
Stoneham, MA 02180

E-mail: stoy.john@rjoconnell.com

Phone: 781-279-0180, ext. 123

Fax:

Project: Westinghouse Plaza
Location: Hyde Park, MA
Prepared For: RJ O'Connell

Purpose: To calculate the water quality flow rate (WQF) over a given site area. In this situation the WQF is derived from the first 1" of runoff from the contributing impervious surface.

Reference: Massachusetts Dept. of Environmental Protection Wetlands Program / United States Department of Agriculture Natural Resources Conservation Service TR-55 Manual

Procedure: Determine unit peak discharge using Figure 1 or 2. Figure 2 is in tabular form so is preferred. Using the tc, read the unit peak discharge (qu) from Figure 1 or Table in Figure 2. qu is expressed in the following units: cfs/mi^2/watershed inches (csm/in).

Compute Q Rate using the following equation:

Q = (qu) (A) (WQV)

where:

Q = flow rate associated with first 1" of runoff
qu = the unit peak discharge, in csm/in.
A = impervious surface drainage area (in square miles)
WQV = water quality volume in watershed inches (1" in this case)

Structure Name	Impv. (acres)	A (miles^2)	t_c (min)	t_c (hr)	WQV (in)	qu (csm/in.)	Q (cfs)
WQ	1.16	0.0018125	6.0	0.100	1.00	774.00	1.40

CONTECH ENGINEERED SOLUTIONS

CDS TECHNOLOGIES

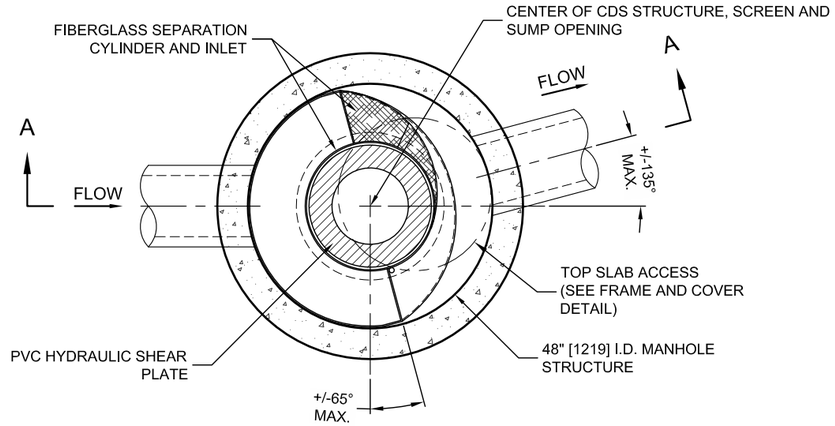
CDS ESTIMATED NET ANNUAL SOLIDS LOAD REDUCTION
BASED ON THE RATIONAL RAINFALL METHOD

WESTINGHOUSE PLAZA
HYDE PARK, MA

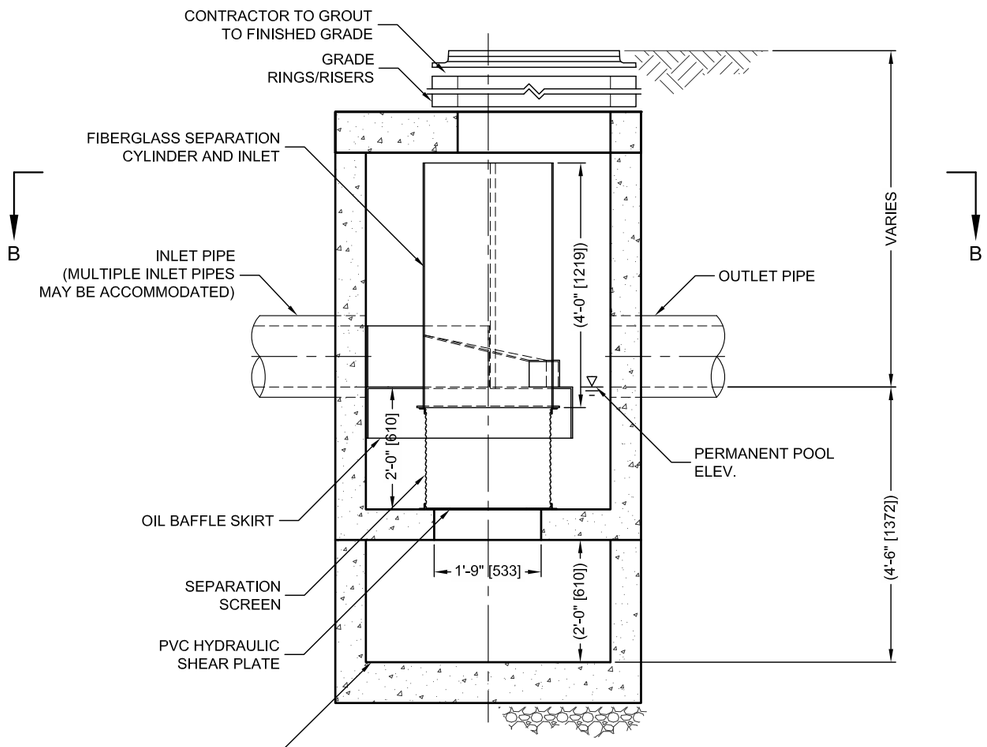
Area	1.16 ac	Unit Site Designation	WQ
Weighted C	0.9	Rainfall Station #	69
t_c	6 min		
CDS Model	2015-4	CDS Treatment Capacity	1.4 cfs

Rainfall Intensity[1] (in/hr)	Percent Rainfall Volume[1]	Cumulative Rainfall Volume	Total Flowrate (cfs)	Treated Flowrate (cfs)	Incremental Removal (%)
0.02	10.2%	10.2%	0.02	0.02	9.8
0.04	9.6%	19.8%	0.04	0.04	9.2
0.06	9.4%	29.3%	0.06	0.06	8.9
0.08	7.7%	37.0%	0.08	0.08	7.2
0.10	8.6%	45.6%	0.10	0.10	7.9
0.12	6.3%	51.9%	0.13	0.13	5.7
0.14	4.7%	56.5%	0.15	0.15	4.2
0.16	4.6%	61.2%	0.17	0.17	4.1
0.18	3.5%	64.7%	0.19	0.19	3.1
0.20	4.3%	69.1%	0.21	0.21	3.8
0.25	8.0%	77.1%	0.26	0.26	6.8
0.30	5.6%	82.7%	0.31	0.31	4.6
0.35	4.4%	87.0%	0.37	0.37	3.5
0.40	2.5%	89.5%	0.42	0.42	1.9
0.45	2.5%	92.1%	0.47	0.47	1.9
0.50	1.4%	93.5%	0.52	0.52	1.0
0.75	5.0%	98.5%	0.78	0.78	3.0
1.00	1.0%	99.5%	1.04	1.04	0.5
1.50	0.0%	99.5%	1.57	1.40	0.0
2.00	0.0%	99.5%	2.09	1.40	0.0
3.00	0.5%	100.0%	3.13	1.40	0.1
					87.1
				Removal Efficiency Adjustment[2] =	6.5%
				Predicted % Annual Rainfall Treated =	93.3%
				Predicted Net Annual Load Removal Efficiency =	**80.6%**

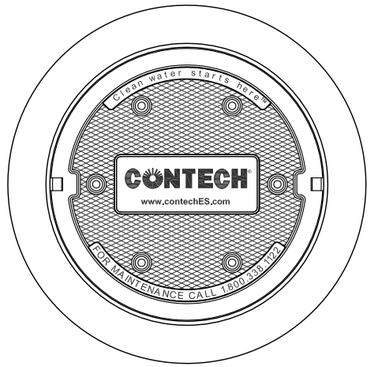
1 - Based on 10 years of hourly precipitation data from NCDC Station 770, Boston WSFO AP, Suffolk County, MA
2 - Reduction due to use of 60-minute data for a site that has a time of concentration less than 30-minutes.



PLAN VIEW B-B
N.T.S.



ELEVATION A-A
N.T.S.



FRAME AND COVER
(DIAMETER VARIES)
N.T.S.

CDS2015-4-C DESIGN NOTES

THE STANDARD CDS2015-4-C CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.

CONFIGURATION DESCRIPTION
GRATED INLET ONLY (NO INLET PIPE)
GRATED INLET WITH INLET PIPE OR PIPES
CURB INLET ONLY (NO INLET PIPE)
CURB INLET WITH INLET PIPE OR PIPES
SEPARATE OIL BAFFLE (SINGLE INLET PIPE REQUIRED FOR THIS CONFIGURATION)
SEDIMENT WEIR FOR NJDEP / NJCAT CONFORMING UNITS

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID	
WATER QUALITY FLOW RATE (CFS OR L/s)	*
PEAK FLOW RATE (CFS OR L/s)	*
RETURN PERIOD OF PEAK FLOW (YRS)	*
SCREEN APERTURE (2400 OR 4700)	*

PIPE DATA:	I.E.	MATERIAL	DIAMETER
INLET PIPE 1	*	*	*
INLET PIPE 2	*	*	*
OUTLET PIPE	*	*	*

RIM ELEVATION	*

ANTI-FLOTATION BALLAST	WIDTH	HEIGHT
	*	*

NOTES/SPECIAL REQUIREMENTS:

* PER ENGINEER OF RECORD

GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. DIMENSIONS MARKED WITH ( ) ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
3. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.contechES.com
4. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
5. STRUCTURE SHALL MEET AASHTO HS20 AND CASTINGS SHALL MEET HS20 (AASHTO M 306) LOAD RATING, ASSUMING GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION.
6. PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.

INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
C. CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

CONTECH ENGINEERED SOLUTIONS LLC
www.contechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CDS2015-4-C
INLINE CDS
STANDARD DETAIL