DCR Marine Park Playground
1889 William J Day Blvd, South Boston

Notice of Intent Application
Improvements to Marine Park Playground

City of Boston
Conservation Commission
October 2022

Prepared for:
Department of Conservation and Recreation
251 Causeway Street
Boston, MA 02114

BSC Job #89572.03

Prepared by:

BSC GROUP

803 Summer Street
Boston, MA 02127

BSC GROUP
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Engineers
Environmental Scientists
Software Developers
Landscape Architects
Planners
Surveyors

www.bscgroup.com

OCTOBER 5, 2022

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

Attn: Nicholas Moreno, Executive Director Boston Conservation Commission

RE: Notice of Intent Application, Improvements to Marine Park Playground
1889 William J Day Blvd, South Boston

Dear Mr. Moreno and Members of the Conservation Commission,

On behalf of The Department of Conservation and Recreation (DCR), c/o Sandra Libby (the Applicant), BSC Group, Inc. (BSC) is providing updated information regarding the Notice of Intent (NOI) Application previously filed but not accepted on September 21, 2022 for the property located at 1889 William J Day Boulevard, in Boston, Massachusetts (the Site). The proposed project at the site involves improvements to the Marine Park Playground. The NOI was prepared in accordance with the Massachusetts Wetland Protection Act, M.G.L. c.131 s. 40 (WPA) and implementing regulations (310 CMR 10.00), and the City of Boston Wetlands Ordinance (Chapter 7-1.4) and Regulations.

The following provides clarification and responses regarding questions that were generated during your office's initial review of the application and provided to BSC and DCR via email on September 23, 2022. These responses are submitted for further consideration by the Commission.

Boston Conservation Commission Office (BCC) notes:

- The person listed as the Applicant on the WPA and Boston NOI forms needs to be the same person as the person signing for the Applicant. Either Danielle should sign both forms or Sandra should be listed as the Applicant.

BSC response:
Applicant contact information was revised on the WPA and Boston NOI application forms to be consistent with the signatures provided.

Boston CC notes:

- The Boston NOI form indicates work will be occurring within the CFRZ. The CFRZ is not a resource area that is currently regulated by the Commission, and therefore all references to the CFRZ on the Boston NOI form and within the project narrative should be removed.

BSC response: Impacts to the CFRZ are no longer indicated on the Boston NOI form and references to the CFRZ have been removed from the revised narrative. All revised material has been provided with this filing.

Boston CC notes:

- Staff's question of whether there is an off-site coastal bank or coastal beach with a buffer zone that might extend onto the project area was not answered.

BSC response:
A coastal beach/bank is located to the south and east of the Site beyond the William J. Day Boulevard. The limits of the associated 100-foot buffer zone are noted on the plan set as extending close to the boundary of the parcel. Project activities and established limits of work are not located within the buffer zone. An orthophoto based environmental resources map has also been included.

Boston CC notes
- Staff's question regarding whether there is any work proposed on the restroom buildings was not answered.

BSC response:
The restroom building is also referenced as "the comfort station" as noted in the Project Description. Work is not proposed to the comfort station building itself, but improvements are being made to the access to the building to maintain ADA compliance.

Boston CC notes:
- Staff's question regarding whether MWRA approval is needed for this project was not answered.

BSC response: MWRA approval is needed for the project. BSC submitted the MWRA permit on September 7th and received an email notification on September 23rd that the permit was reviewed favorably. The permit has been forwarded to DCR to sign.

Boston CC notes:

- Staff's question regarding whether any trees will be removed as part of this work was not answered. Additionally, the narrative indicates there will be a tree evaluation. More details should be provided regarding the tree evaluation, such as when it will occur, what trees will be evaluated, and what the goal of the tree evaluation is.

BSC response: The tree evaluation was performed on September 29th by Davey Tree Service. The detailed results of the tree evaluation describe three trees that are in either critical condition or nearly dead. The two in critical condition are 36" Norway Maples, the other tree nearly dead is a Little-leaf Linden. These three trees are recommended for removal per the arborist's evaluation. The project proposes to add nine (9) native deciduous trees to the Park.

Boston CC notes:

- The project narrative cites the performance standards for Redevelopment within Previously Developed LSCSF. However, the definition of Redevelopment in the regulations is "work or activity within previously developed or degraded areas prior to December 19, 2019. A previously developed or degraded area contains impervious surfaces from existing structures or pavement, absence of topsoil, junkyards, or abandoned dumping grounds." Staff does not agree that the entire project site falls under this description, and therefore the general LSCSF performance standards and their applicability should also be discussed.

BSC response:
The NOI narrative has been updated to include a discussion of each of the locally-regulated general performance standards for LSCSF and applicability to the project.

Enclosed please find the revised Notice of Intent application and accompanying materials. If you have any questions or require additional information, please contact me at (508) 778 -8919.

Sincerely,

BSC GROUP, INC.

Paul Mancuso, WPIT
Wetland Scientist

cc: Department of Conservation and Recreation, 251 Causeway Street, Boston, MA 02114
MassDEP Northeast Regional Office (NERO)

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City of Boston Environment

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

Boston File Number

MassDEP File Number

A. GENERAL INFORMATION

1. Project Location

1889 William J Day Blvd	South Boston	02127
a. Street Address	b. City/Town	c. Zip Code
06	0603415000	
f. Assessors Map/Plat Number	g. Parcel /Lot Number	

2. Applicant

Danielle	Mellett	Department of Conservation and Recreation
a. First Name	b. Last Name	c. Company

251 Causeway Street
d. Mailing Address

Boston	MA	02114
e. City/Town	f. State	g. Zip Code

857-248-3598		danielle.mellett@mass.gov
h. Phone Number	i. Fax Number	j. Email address

3. Property Owner

Patrice	Kish	Commonwealth of Massachusetts - Department of Conservation and Recreation
a. First Name	b. Last Name	c. Company

251 Causeway Street
d. Mailing Address

Boston	MA	02114
e. City/Town	f. State	g. Zip Code

		patrice.kish@mass.gov
h. Phone Number	i. Fax Number	j. Email address

☐ Check if more than one owner

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

4. Representative (if any)

Paul	Mancuso	BSC Group, Inc.
a. First Name	b. Last Name	c. Company

349 Route 28, Unit D
d. Mailing Address

West Yarmouth	MA	02114
e. City/Town	f. State	g. Zip Code

508-778-8919		pmancuso@bscgroup.com
h. Phone Number	i. Fax Number	j. Email address

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

☑ Yes ☐ No

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

6. General Information

General improvements to the existing Marine Park Playground. See project narrative for more detailed description.

7. Project Type Checklist

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

8. Property recorded at the Registry of Deeds

Suffolk — a. County
575 — b. Page Number
7624 — c. Book
d. Certificate # (if registered land)

9. Total Fee Paid

$2037.50 — a. Total Fee Paid
$237.50 (to MassDEP) — b. WPA Fee Paid
$1,800.00 (to Boston) — c. Ordinance Fee Paid

B. BUFFER ZONE & RESOURCE AREA IMPACTS

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

☐ Yes ☑ No

1. Coastal Resource Areas

Resource Area	Resource Area Size	Proposed Alteration*	Proposed Migitation
☐ *Coastal Flood Resilience Zone*	Square feet	Square feet	Square feet
☐ *25-foot Waterfront Area*	Square feet	Square feet	Square feet
☐ *100-foot Salt Marsh Area*	Square feet	Square feet	Square feet
☐ *Riverfront Area*	Square feet	Square feet	Square feet

2. Inland Resource Areas

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

C. OTHER APPLICABLE STANDARDS & REQUIREMENTS

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

MWRA approval: Permit application submitted to MWRA on 9/7/2022. Email notification received 9/23/2022 that the permit was reviewed favorably.

Chapter 91 Public Waterfront Act - Minor Modification for work in filled tidelands: Draft submittal prepared and will be forwarded to MassDEP concurrently.

NPDES CGP: Coverage for projects greater than one-acre in size (to be obtained prior to construction).

950 CMR 70.00 Mass Historical Commission Review: DCR has forwarded a PNF to MHC.

2. Is any portion of the proposed project located in Estimated Habitat of Rare Wildlife as indicated on the most recent Estimated Habitat Map of State-Listed Rare 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://www.mass.gov/dfwele/dfw/nhesp/nhregmap.htm.

☐ Yes ☑ No

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

A. Submit Supplemental Information for Endangered Species Review

☐ Percentage/acreage of property to be altered:

(1) within wetland Resource Area _____ percentage/acreage

(2) outside Resource Area _____ percentage/acreage

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

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

☐ Yes ☑ No

If yes, provide the name of the ACEC: _____

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

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

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

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

☐ Yes ☑ No

D. SIGNATURES AND SUBMITTAL REQUIREMENTS

I hereby certify under the penalties of perjury that the foregoing Notice of Intent and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge. I understand that the Conservation Commission will place notification of this Notice in a local newspaper at the expense of the applicant in accordance with the Wetlands Protection Ordinance.

Signature of Applicant

Digitally signed by Patrice Kish
Date: 2022.09.20 13:30:24 -04'00'

Oct. 6, 2022
Date

Signature of Property Owner (if different)

9/20/22
Date

Signature of Representative (if any)

9-9-2022
Date

APPENDIX A. - STATUTORY REVIEW & APPROVAL CHECKLIST

Applicants submitting a Notice of Intent to the Boston Conservation Commission are also required to include a list of all permits and approvals either obtained, or necessary to be obtained, for the proposed activity. This checklist is not fully comprehensive but Applicants may utilize this checklist to fulfill this requirement. Any additional permits and approvals needed should be discussed in the narrative accompanying the Notice of Intent.

FEDERAL REVIEWS AND APPROVALS

NEEDED	OBTAINED	REGULATION	REVIEW BODY
☐	☐	National Environmental Policy Act (NEPA)	Varies
☐	☐	Section 404 Permit	U.S. Army Corps of Engineers
☑	☐	National Pollution Discharge Elimination System Permit (NPDES)	U.S. Environmental Protection Agency
☐	☐	Stormwater Construction General Permit	U.S. Environmental Protection Agency
☐	☐	Federal Endangered Species Act (ESA)	U.S. Fish and Wildlife Service or National Marine Fisheries Service
☐	☐	Federal Fisheries Regulations	National Marine Fisheries Service

COMMONWEALTH OF MASSACHUSETTS REVIEWS AND APPROVALS

NEEDED	OBTAINED	REGULATION	REVIEW BODY
☐	☐	Massachusetts Environmental Policy Act (MEPA)	Massachusetts Environmental Policy Act Office
☐	☐	Federal Consistency Review	Office of Coastal Zone Management
☑	☐	Massachusetts Public Waterfront Act (Chapter 91)	Massachusetts Department of Environmental Protection (Waterways Program)
☐	☐	Section 401 Water Quality Certification	Massachusetts Department of Environmental Protection (Wetlands Program)
☐	☐	Massachusetts Endangered Species Act (MESA)	National Heritage and Endangered Species Program
☐	☐	Massachusetts Marine Fisheries Regulations	Massachusetts Division of Marine Fisheries

☐	☐	Historic Preservation	Massachusetts Board of Underwater Archaeological Resources
☑	☐	Historic Preservation	Massachusetts Historical Commission
☐	☐	Massachusetts Contingency Plan	Massachusetts Department of Environmental Protection
☐	☐	Massachusetts Building Code Variance	Board of Building Regulations and Standards

CITY OF BOSTON LOCAL REVIEWS AND APPROVALS

NEEDED	OBTAINED	REGULATION	REVIEW BODY
☐	☐	Boston Zoning Code Article 80	Boston Planning and Development Agency
☐	☐	Boston Zoning Code	Inspectional Services Department
☐	☐	Boston Zoning Code Variance	Zoning Board of Appeals
☐	☐	Project Design Review	Civic Design Commission
☐	☐	Utility Plan Review	Boston Water and Sewer Commission
☐	☐	Boston Zoning Code Article 32 (GCOD)	Boston Groundwater Trust
☐	☐	Historic Preservation	Boston Landmarks Commission
☐	☐	Boston City Code (100 Foot Rule)	Boston Parks and Recreation Commission
☐	☐	Public Realm Improvements	Boston Public Improvement Commission
☐	☐	Parking Freeze/Abrasive Blasting	Boston Air Pollution Control Commission
☑	☐	Massachusetts Building Code	Inspectional Services Department

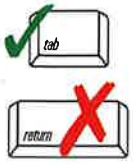
Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

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

Provided by MassDEP:
MassDEP File Number
Document Transaction Number
Boston
City/Town

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



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

A. General Information

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

a. Street Address	b. City/Town	c. Zip Code
1889 William J Day Blvd	South Boston	02127

Latitude and Longitude:

d. Latitude	e. Longitude
42.333683	-71.024314

f. Assessors Map/Plat Number	g. Parcel /Lot Number
	0603415000

2. Applicant:

a. First Name	b. Last Name
Danielle	Mellett

c. Organization: Department of Conservation and Recreation

d. Street Address: 251 Causeway Street

e. City/Town	f. State	g. Zip Code
Boston	MA	02114

h. Phone Number	i. Fax Number	j. Email Address
857-248-3598		danielle.mellett@mass.gov

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

a. First Name	b. Last Name
Patrice	Kish

c. Organization: Commonwealth of Massachusetts - Department of Conservation and Recreation

d. Street Address: 251 Causeway Street

e. City/Town	f. State	g. Zip Code
Boston	MA	02114

h. Phone Number	i. Fax Number	j. Email address
		patrice.kish@mass.gov

4. Representative (if any):

a. First Name	b. Last Name
Paul	Mancuso

c. Company: BSC Group, Inc.

d. Street Address: 349 Route 28, Unit D

e. City/Town	f. State	g. Zip Code
West Yarmouth	MA	02673

h. Phone Number	i. Fax Number	j. Email address
508-778-8919		PMancuso@BSCGroup.com

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

a. Total Fee Paid	b. State Fee Paid	c. City/Town Fee Paid
$500.00	$237.50	$262.50 +

Massachusetts Department of Environmental Protection
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WPA Form 3 – Notice of Intent

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

Provided by MassDEP:

MassDEP File Number

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A. General Information (continued)

6. General Project Description:

General improvements to the existing Marine Park Playground. See project narrative for more detailed description.

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**
7624	575

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	1. Name of Waterway (if available) - **specify coastal or inland**	

2. Width of Riverfront Area (check one):

☐ 25 ft. - Designated Densely Developed Areas only

☐ 100 ft. - New agricultural projects only

☐ 200 ft. - All other projects

3. Total area of Riverfront Area on the site of the proposed project: _____ square feet

4. Proposed alteration of the Riverfront Area:

a. total square feet _____ b. square feet within 100 ft. _____ c. square feet between 100 ft. and 200 ft. _____

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

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

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

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

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Provided by MassDEP:

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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
	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	81,606 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

   2021
   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

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

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

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
WPA Form 3 – Notice of Intent
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:
MassDEP File Number
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Boston
City/Town

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

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

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

(d) ☐ Vegetation cover type map of site

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

(f) OR Check One of the Following

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

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

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

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

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

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

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

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

North Shore - Hull to New Hampshire border:

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

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

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
WPA Form 3 – Notice of Intent
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:
MassDEP File Number
Document Transaction Number
Boston
City/Town

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

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

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

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

   b. ACEC

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

   a. ☐ Yes ☒ No

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

   a. ☐ Yes ☒ No

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

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

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

      2. ☒ A portion of the site constitutes redevelopment

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

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

      1. ☐ Single-family house

      2. ☐ Emergency road repair

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

      or

D. Additional Information

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

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

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

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

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

Massachusetts Department of Environmental Protection
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Provided by MassDEP:
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Boston
City/Town

D. Additional Information (cont'd)

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

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

Improvements to Marine Park Playground
a. Plan Title

BSC Group, Inc.
b. Prepared By

Dominic Rinaldi, PE
c. Signed and Stamped by

10/5/2022
d. Final Revision Date

Varies: 1" = 20' or 1" =100' on Cover sheet
e. Scale

f. Additional Plan or Document Title

g. Date

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

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

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

8. ☒ Attach NOI Wetland Fee Transmittal Form

9. ☒ Attach Stormwater Report, if needed.

E. Fees

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

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

2. Municipal Check Number

3. Check date: 9/21/2022

4. State Check Number: eDEP credit card payment

5. Check date: 9/21/2022

6. Payor name on check: First Name: BSC Group

7. Payor name on check: Last Name

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

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

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Boston
City/Town

F. Signatures and Submittal Requirements

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

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

1. Signature of Applicant
Patrice Kish
Digitally signed by Patrice Kish
Date: 2022.09.20 13:31:38 -04'00'

2. Date
Oct. 6, 2022

3. Signature of Property Owner (if different)
Paul Mann

4. Date
Sept 20, 2022

5. Signature of Representative (if any)

6. Date
September 21

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

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

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

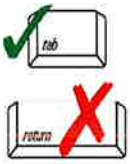
The original and copies must be sent simultaneously. Failure by the applicant to send copies in a timely manner may result in dismissal of the Notice of Intent.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

NOI Wetland Fee Transmittal Form

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

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



A. Applicant Information

1. Location of Project:

1889 William J Day Blvd	South Boston
a. Street Address	b. City/Town
c. Check number	d. Fee amount

2. Applicant Mailing Address:

Danielle	Mellett
a. First Name	b. Last Name

Department of Conservation and Recreation
c. Organization

251 Causeway Street
d. Mailing Address

Boston	MA	02114
e. City/Town	f. State	g. Zip Code

857-248-3598		danielle.mellett@mass.gov
h. Phone Number	i. Fax Number	j. Email Address

3. Property Owner (if different):

Patrice	Kish
a. First Name	b. Last Name

Commonwealth of Massachusetts - Department of Conservation and Recreation
c. Organization

251 Causeway Street
d. Mailing Address

Boston	MA	02114
e. City/Town	f. State	g. Zip Code

		patrice.kish@mass.gov
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 2 J	1	$500.00	$500.00
Boston Cat 2 - $300.00			
Boston Title14 Section 450-> $1,500.00			

Step 5/Total Project Fee: $500.00

Step 6/Fee Payments:

Total Project Fee:	$500.00 (a. Total Fee from Step 5)
State share of filing Fee:	$237.50 (b. 1/2 Total Fee **less** $12.50)
City/Town share of filling Fee:	$262.50 - N/A Boston has its own fees

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.)

PROJECT DESCRIPTION

1.0 INTRODUCTION

The proposed project located at 1889 William J Day Blvd (the Site) in South Boston, MA involves improvements to the existing DCR Marine Park Playground. This application is being submitted in accordance with the Massachusetts Wetlands Protection Act and the City of Boston Wetlands Ordinance and the City of Boston Wetlands Regulations.

2.0 SITE DESCRIPTION

The property located at 1889 William J Day Blvd contains a playground. The property is bordered by Pleasure Bay to the east, Dorchester Bay to the south, Murphy Memorial Skating Rink to the north, and residential apartments to the west. The wetland resource areas and areas of conservation jurisdiction on the site that are protected under the Wetlands Protection Act, the City of Boston's Wetland Ordinance and the City of Boston's Wetlands Regulations include:

- Land Subject to Coastal Storm Flowage, Zone AE (El. 15 & 16)

The existing and proposed Marine Park Playground is located within Land Subject to Coastal Storm Flowage. The existing Site contains three separate play areas for different age groups, a comfort station building, a small picnic area, and access paths around the perimeter of the Site. Portions of the existing play areas are old and outdated. The proposed playground will include new state of the art playground equipment.

3.0 PROPOSED ACTIVITIES

The purpose of this application is to authorize the following activities:

Improvements to Marine Park Playground: The proposed Marine Park Playground will have one large play area designed for children of all ages. The proposed play area will have multiple sections with various playground equipment including swings, slides, ropes, monkey bars, etc. The play area will be encompassed by a 4-foot high ornamental fence with ornamental gates on the northeast and southwest sides of the play area. Public benches will be included around the inside perimeter of the play area fence. The playground area will include a resilient rubberized playground surfacing for safety purposes.

Outside of the designated play area, public benches, picnic tables, bike racks, and new canopy trees will be installed. New and replacement access paths around the playground and in and out of the park are proposed as well. Changes to the comfort station or bathroom building are not proposed as part of this project. Numerous canopy trees are proposed around the park to add shady areas for the public to use. Specifically, two Red Maples, four White Oaks, and three Splendens Scarlet Oaks will be planted around the park as shown on the planting plan. Existing mature trees will be protected, however the results of the tree evaluation performed on September 29, 2022, describe three trees in very poor condition that should be removed. The tree evaluation for the Marine Park Playground improvements is being compiled in the forthcoming Tree Evaluation Report.

In total the existing Site has approximately 8,695 square feet (sf) of impervious surface, and the proposed Site will have approximately 11,335 sf of impervious surface. Most of the additional impervious surface is resulting from improving the access paths in and around the park. The existing Site only offers one path around the perimeter of the park with a small dirt path through the middle. The improvements will offer easier access through the park for the public. To improve stormwater management in the park, two new area drains, and four new drywells will be installed on Site. Please refer to the Project Stormwater Report for details on the stormwater management design.

Typical construction equipment will be used to complete the project such as an excavator, backhoe, bobcat, miscellaneous hand tools, etc. The construction area will be enclosed by a construction fence with erosion control measures as described on the plans. All the demolition work will be done at the beginning of the project, any stockpile material on site shall be placed in the designated area as shown on the drawings. Proposed playground equipment to be installed including resilient rubberized playground surfacing, fencing curbing, paving, and stormwater system. A tree evaluation will be submitted for review. The project will be completed in one Phase.

4.0 PERFORMANCE STANDARDS

The Massachusetts Wetlands Protection Act does not include any performance standards for work within Land Subject to Coastal Storm Flowage. However, the City of Boston Wetlands Regulations do include Land Subject to Coastal Storm Flowage performance standards in Section XVII(E). These City of Boston performance standards are listed below with details of how the project meets each standard.

Section XVII. Land Subject to Coastal Storm Flowage: Performance Standards

Section XVII(E)1: When the Commission determines that LSCSF overlays or overlaps with other resource areas protected under the Ordinance, the applicable performance standards for each resource area shall be independently as well as collectively applied, and the project shall be conditioned to protect the Resource Area Values of all resource areas affected by the project and the ability of such other resource areas to protect the Resource Area Values described in Section XVII(A).

This project is only located with LSCSF. No other performance standards apply to the Project Site.

Section XVII(E)2: If LSCSF affected by proposed activity or work is significant to the Resource Area Values described in Section XVII(A), such activity shall not have an adverse impact on the subject site, adjacent properties, properties located in the adjacent Coastal Flood Resilience Zone, or any public or private way by increasing the elevation or velocity of flood or storm waters or by increasing flows due to a change in drainage or flowage characteristics.

The project includes minimal changes to grading that will not impact the functionality of LSCSF or cause impacts to adjacent lands. General drainage characteristics will not be altered and no increase to elevation or patterns of flooding will occur. The

proposed stormwater management systems of area drains and drywells will mitigate the small increase of impervious surfaces proposed. As the project site is already an active playground area and the project includes minimal tree removal with additional tree plantings, there are no expected impacts to wildlife or wildlife habitat. As such it will not have an adverse effect of the subject site, adjacent properties, or any public or private way by increasing the elevation or velocity of flood or storm waters or by increasing flows due to a change in drainage or flow characteristics in accordance with the Resource Area Values.

Section XVII (E) 3: If LSCSF is significant to flood control or storm damage prevention, the proposed activity or work shall not result in flood damage due to filling, which causes lateral displacement of flood waters that, in the judgment of the Commission, would otherwise be confined within said area. The Commission, in its sole discretion, may permit such activity so long as the activity will not have an adverse impact on said area's ability to provide storm damage prevention and flood control; provided, further, that the activity or work incorporate best management practices to reduce or eliminate damage resulting from SLR and coastal storms.

The proposed project will not result in flood damage due to filling. Minimal regrading of the site is proposed and the new playground equipment, site furnishings, etc. will not alter flood patterns or increase flooding impacts.

Section XVII (E) 4: If LSCSF receives and holds coastal flood waters, the proposed activity or work shall not impact the ability of the area to receive, hold, and laterally spread flood waters if it causes unnatural redirection, refraction, diffraction, or reflection of coastal flood waters and waves

The Site is located within the flood zone (AE El. 15 & 16), and as such the Site can receive, hold, and laterally spread flood waters. The proposed project will not alter the Site in such a way that will cause any unnatural redirection, refraction, diffraction, or reflection of coastal flood waters and waves. Overall, the proposed project will not significantly alter the grades of the Site. The project does not include any new buildings which would cause unnatural redirection, refraction, diffraction, or reflection of coastal flood waters. Flood waters will be able to freely pass over the Site and through the redesigned playground similarly to how flood waters pass through the existing playground.

Section XVII (E) 5: If LSCSF receives coastal flood waters that naturally flow across the landform surface without redirecting or channeling the flow, the proposed activity or work shall not cause flood water to become redirected or channeled or increase in velocity, so as to cause erosion, scour, and increased storm damage to the project's locus and adjacent areas.

No portion of the proposed project would cause flood water to become redirected or channelized to increase the flood water velocity. Therefore, the proposed project will not cause increased erosion, scour, or storm damage to the project's locus or adjacent areas.

Section XVII (E) 6: If LSCSF is significant to wildlife and their habitat, proposed activity or work shall not impair the capacity of those portions of LSCSF to provide important wildlife habitat functions.

The proposed project will not impair the capacity of the Site to provide important wildlife habitat and habitat functions. The existing Site is already developed as a public park with playground areas. The proposed Site will remain as a public park with playground areas. No wildlife functions are anticipated to be lost by the proposed project.

Section XVII (E) 7: If LSCSF is significant to the prevention of pollution, proposed activity or work shall not have an adverse impact on the characteristic of the LSCSF to remove suspended solids and other contaminants from runoff before entering into other wetland resource areas or a body of water.

The proposed project will improve the ability of the Site to reduce pollutants from directly washing into adjacent wetland resource areas. The two new proposed area drains connected to drywells will improve stormwater management on Site and reduce storm and flood waters containing pollutants from draining directly back into adjacent wetland resource areas.

Section XVII (E) 8: Proposed work or activity in LSCSF which results in alteration to vegetative cover, interruptions in the beneficial supply of sediment to other wetland resource areas, or changes to the form or volume of a dune or beach, and such result will have an adverse impact on said dune or beach's ability to provide storm damage prevention and flood control, is prohibited.

The proposed project involves relocating and redesigning the playground area within the Marine Park. In total the existing Site has approximately 8,695 sf of impervious surface, and the proposed Site will have approximately 11,335 sf of impervious surface. Therefore, some vegetative cover of the existing Site will be lost. However, all areas where existing playground and pathways are being removed will be reseeded and stabilized to provide vegetative cover. The proposed project also includes planting 9 mature trees within the proposed park. One existing mature tree that is in declining health will be removed as shown on the Project Plans. No portion of the project will cause interruptions in the beneficial supply of sediment to other wetland resource areas, or changes to the form or volume of a dune or beach.

Section XVII (E) 9: Notwithstanding Sections XVII(E)(1) through (8), the Commission may, in its sole discretion, permit the following activities provided that the applicant demonstrates to the satisfaction of the Commission that best available measures, as defined by the Ordinance, are utilized to minimize or eliminate adverse impacts on the critical characteristics of and Resource Area Values protected by LSCSF described in Section XVII(A) herein, and provided further that all other performance standards for overlapping or overlaying wetland resource areas are met:

This standard is not applicable as the proposed project does not qualify as any of the activities listed in Section XVII(E) 9 (i) through (x). The proposed project has, however, provided the best available measures to protect the resource area and the critical characteristics defined in Section XVII(A).

Section XVII (E) 10: In the interest of storm damage prevention, flood control, and prevention of pollution, should the Commission permit activity or work in LSCSF that is part of new construction or constitutes substantial improvement to an existing structure, the Commission may condition the permitted activity or work so that any critical building systems, infrastructure, or equipment is located two (2) feet above the anticipated BFE expected to occur within the next 50 years based on the best available data and projections of SLR.

There are no buildings proposed as part of the project. Therefore, should the commission permit the proposed project, there is no need to condition the work so that any critical building systems, infrastructure, or equipment is located two (2) feet above the anticipated BFE expected to occur within the next 50 years.

Section XVII (E) 11: When any proposed work or activity in LSCSF is located within an ACEC, the proposed work or activity shall have no adverse impact upon the Resource Area Values described in Section XVII(A) and shall fully mitigate any impacts resulting from the proposed work or activity.

This standard is not applicable as the proposed project is not located within an Area of Environmental Concern.

Section XVII (E) 12: Section XVII(E)(11) shall supersede the provisions of Section XVII(E)(9)(i) through (viii), but it shall not apply if the presumption set forth in Section XVII(D) is overcome.

This standard is not applicable as the proposed project is not located within an Area of Environmental Concern.

Section XVII (E) 13: Notwithstanding the provisions of Section XVII(E)(2) through (X), no project may be permitted which will have any adverse impact on specified habitat sites of rare vertebrate or invertebrate species indicated on the most recent Estimated Habitat Map of State-listed Rare Wetlands Wildlife (if any) published by the Massachusetts NHESP.

This standard is not applicable as the proposed project is not located within NHESP mapped priority or estimated habitat of rare wildlife.

5.0 CLIMATE RESILIENCY

The proposed project is located directly adjacent to the ocean and entirely within the coastal wetland resource area Land Subject to Coastal Storm Flowage (LSCSF), including both the 100-year floodplain with Base Flood Elevation 15-feet & 16-feet (Zone AE, NAVD88) and Velocity Zone at elevation 16-feet (VE, NAVD88). The project site is subject to climate exposure relative to sea level rise and coastal storm inundation and has therefore been designed to meet the interests of the *City of Boston Ordinance Protecting Local Wetlands and Promoting Climate Change Adaptation* and the *Wetlands Protection Act* which include but are not limited to: protection of public or private water supply and quality, protection of the public and private groundwater supply and quality, short term and long term coastal and stormwater flood control, erosion and sedimentation control, storm damage prevention, protection of surface water supply and quality, wildlife habitat, rare and endangered plant

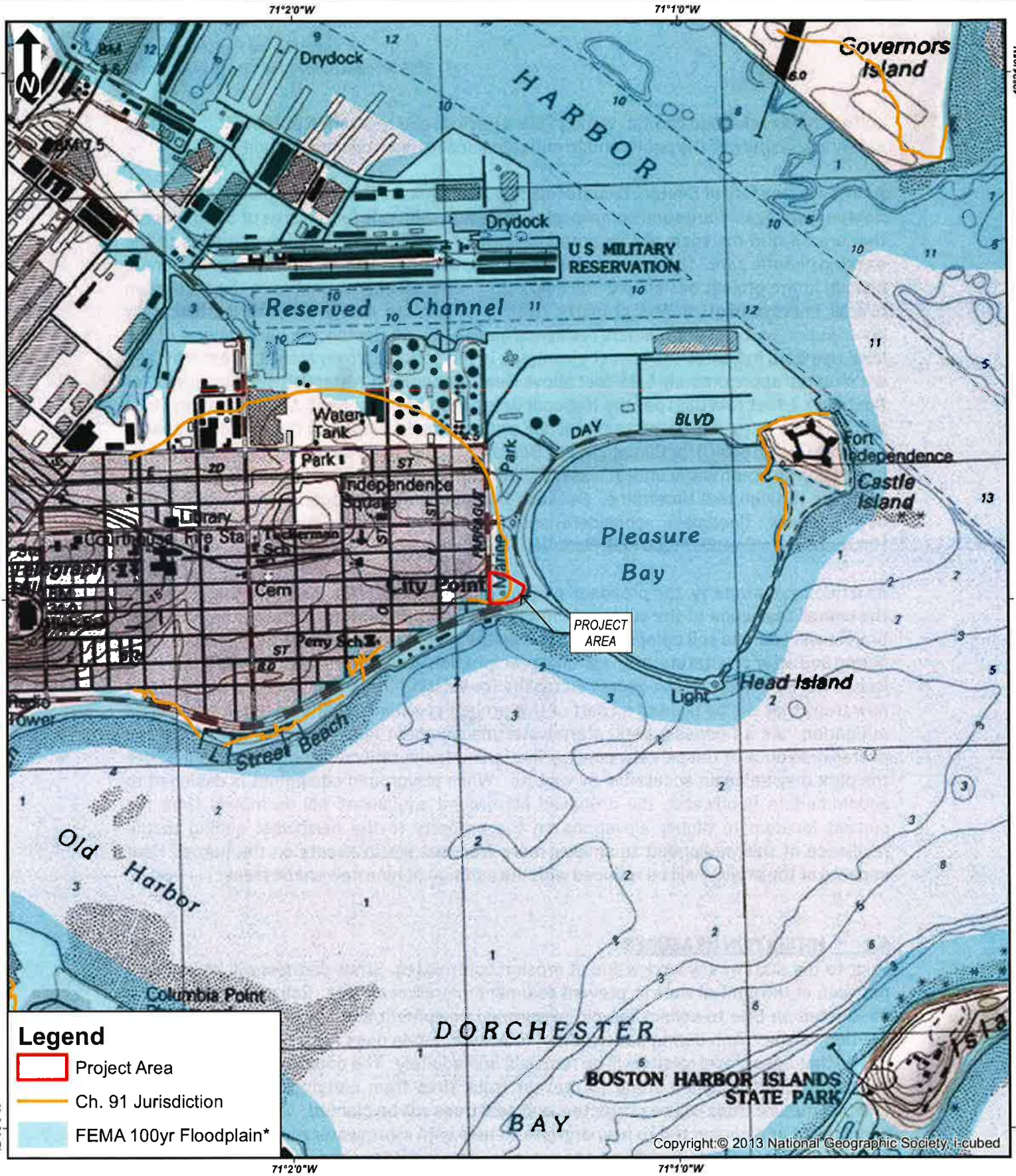
and animal species and habitat, wetland plant habitat, and recreation to protect the health, safety and welfare of the public and to mitigate impacts from climate change.

A review of the City of Boston, Climate Ready Boston Coastal Resilience Solutions for South Boston Plan reveals large and complex project design solutions for the area of South Boston that are beyond the scale of this proposed project limited to restorative upgrades to the existing historic park. The project applicant has however, considered the effects of climate change in the project design and considers the proposed improvements to the park as an overall improvement on the property relative to climate resilience, and incrementally contributing to the overall climate resilience goals of South Boston. An initial review of sea level rise data indicates the lowest elevations in the park (approximately 9.7-feet NAVD88) are situated approximately 4.93-feet above Mean Higher High Water (MHHW) Elevations for Boston (4.7-feet NAVD88) per the National Oceanic and Atmospheric Administration Tides and Currents Data. Following sea level rise projections developed by the Boston Research Advisory Group (BRAG) for Climate Ready Boston initiatives, the park is protected from daily inundation by ocean water until at least 2070 with an anticipated 40-inches (3.33-feet) of sea level rise through that timeframe. Because this area is already located within the current day 100-year floodplain, considerations of coastal storm inundation using the Massachusetts Coastal Flood Risk Model (MC-FRM) were not evaluated.

As a floodable property, the proposed project incorporates design elements that improves the overall resilience of the subject property and in South Boston. Notably, the proposed project will address soil compaction issues on the parcel to allow for additional infiltration during and after coastal storm or extreme precipitation events. Addressing soil compaction issues will also improve the overall suitability for existing trees that will be protected and new trees that will be planted as part of this project providing additional urban heat island mitigation. As a floodable park, stormwater management improvements will add to the overall resilience of the parcel including shortening the duration after a storm event where the park may be again accessible by visitors. While playground equipment is designed to accommodate floodwater, the proposed playground equipment will be moved from the current location to higher elevations on the property to the northwest adding to the resilience of this equipment to smaller more frequent storm events on the parcel. Heat impacts of the project will be reduced with the addition of nine new shade trees.

6.0 MITIGATION MEASURES

Prior to the start of any work a line of erosion controls (eg. Straw wattles) will be installed between at the limit of work to prevent sediment migration off site. Roll off containers will be located on Site to collect the old playground equipment and any construction debris. Caution will be taken during construction to ensure debris does not exit the Site, and any debris that does travel offsite will be removed immediately. The construction entrance will be covered with crushed stone to prevent truck tires from carrying sediment off site. Existing mature trees will be protected, and new trees will be planted. New area drains will be installed and connected to new drywells to help with stormwater management on Site. Any disturbed areas will be returned to pre-existing conditions once construction has been completed.



Scale:
1:24,000
1 inch = 2,000 feet
0 1,000 2,000
Feet
(Page size: 8.5 X 11)

IMPROVEMENTS TO MARINE PARK PLAYGROUND

USGS Site Location Map
South Boston, MA

Source: 2013 National Geographic Society, i-cubed

BSC GROUP

File Location: \\bscbos\wor\GIS-WOR\GISPrj\8957203\Output\Maps\MXD\ReportMaps\MarinePark_ER_20221003.mxd
Date Saved: 10/4/2022 10:22:00 AM

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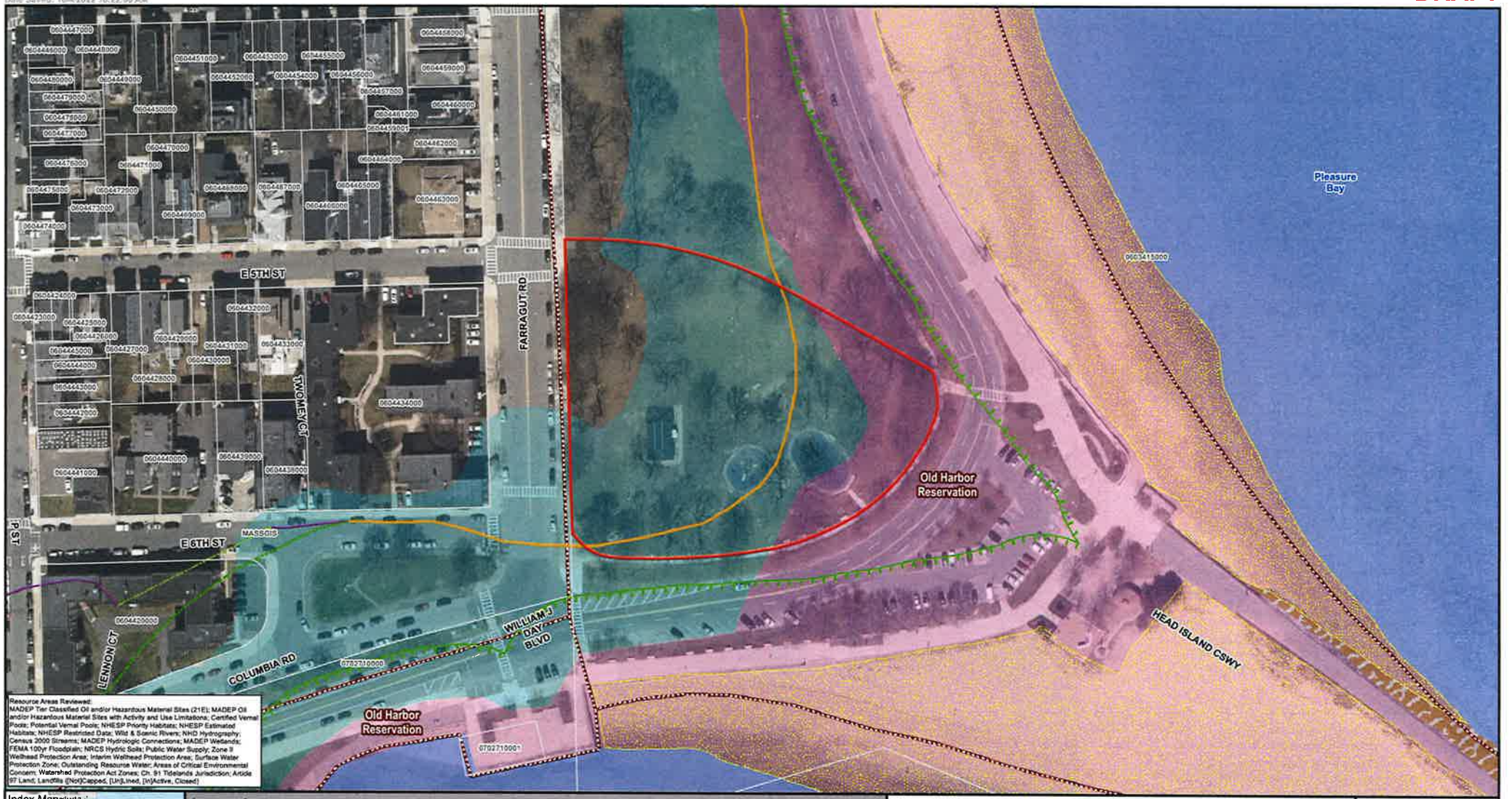


Resource Areas Reviewed:
MADEP Tier Classified Oil and/or Hazardous Material Sites (21E); MADEP Oil and/or Hazardous Material Sites with Activity and Use Limitations; Certified Vernal Pools; Potential Vernal Pools; NHESP Priority Habitats; NHESP Estimated Habitats; NHESP Restricted Data; Wild & Scenic Rivers; NHD Hydrography; Census 2000 Streams; MADEP Hydrologic Connections; MADEP Wetlands; FEMA 100yr Floodplain; NRCS Hydric Soils; Public Water Supply; Zone II Wellhead Protection Area; Interim Wellhead Protection Area; Surface Water Protection Zone; Outstanding Resource Water; Areas of Critical Environmental Concern; Watershed Protection Act Zones; Ch. 91 Tidelands Jurisdiction; Article 97 Land; Landfills ([Not]Capped, [Un]Lined, [In]Active, Closed)

Index Map

Legend

- Project Area
- 100ft Buffer Zone
- DCR Owned Property (Article 97)
- Parcel Boundaries
- Ch. 91 Jurisdiction
- Landlocked Tidelands
- Historic High Water
- Inferred Historic High Water

MADEP Wetlands

- Open Water*
- Coastal Beach*
- Rocky Intertidal Shore*

FEMA 100yr Floodplain*

Flood Zone

- AE
- VE

N

1 inch = 100 feet
0 50 100
Feet

*Indicates Layers Set to Transparency

IMPROVEMENTS TO MARINE PARK PLAYGROUND

Environmental Resources Map

South Boston, MA

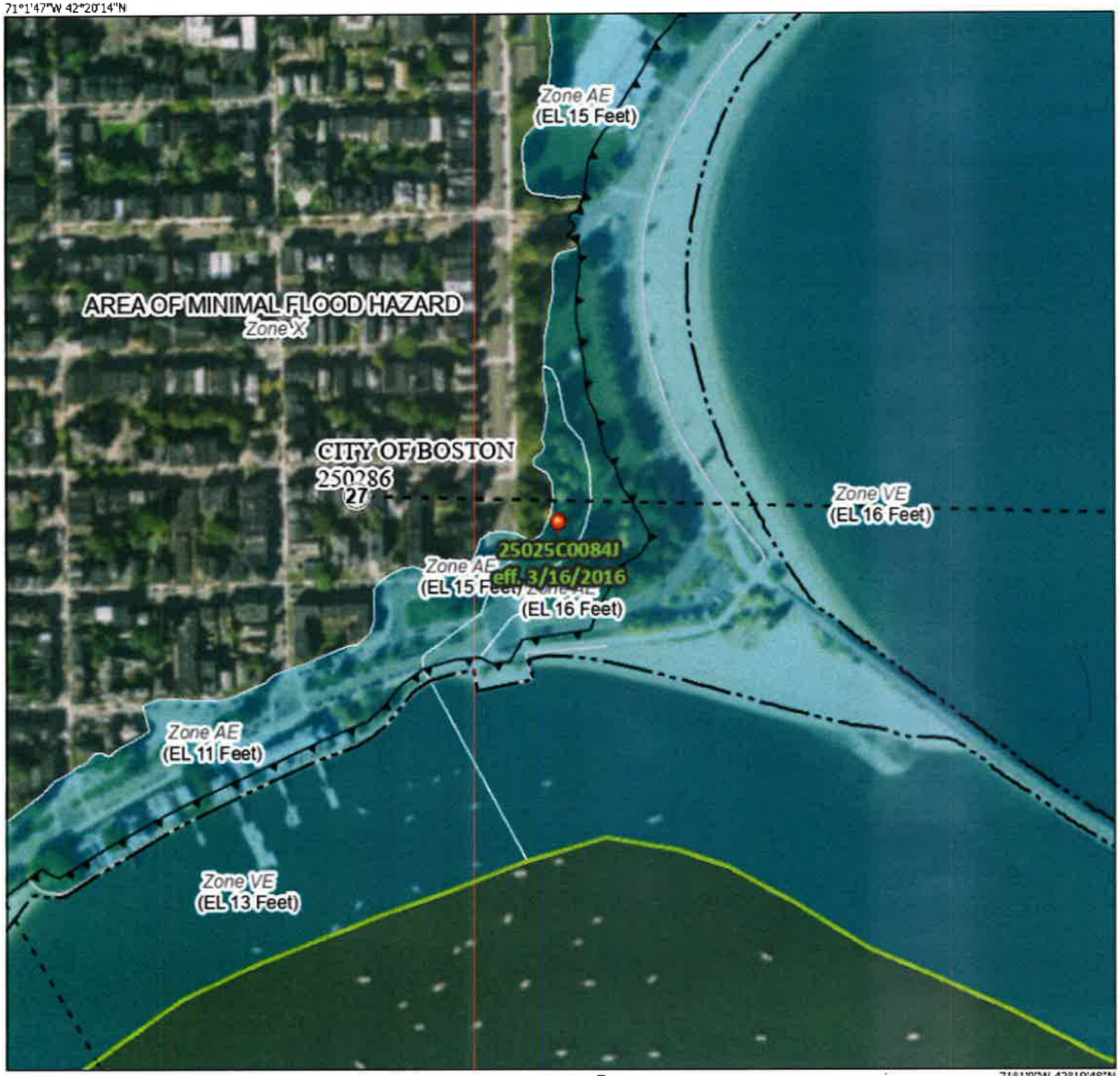
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

BSC GROUP

National Flood Hazard Layer FIRMette

FEMA

71°1'47"W 42°20'14"N



71°1'9"W 42°19'48"N

Feet

0 250 500 1,000 1,500 2,000

1:6,000

Legend

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

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

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

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

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

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- 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

N

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

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 12/13/2021 at 10:21 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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

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Date Saved: 12/13/2021 8:22:36 AM

71°1'30"W

42°2'0"N

Legend

- NHESP Priority Habitats of Rare Species
- NHESP Estimated Habitats of Rare Wildlife
- Certified Vernal Pools
- Potential Vernal Pools

Scale: 1:5,000 1 inch = 417 feet 0 220 440 Feet	N	**DCR MARINE PARK PLAYGROUND** **BOSTON, MA** NHESP Map

Source: USGS 2008-2009
NHESP 2017
ESRI World Imagery
ESRI World Topo

BSC GROUP

THIS DOCUMENT IS INTENDED FOR GENERAL PLANNING & INFORMATION PURPOSES ONLY. ALL MEASUREMENTS & LOCATIONS ARE APPROXIMATE

Photo 1: View of the existing DCR Marine Park Playground. *Facing west*

Photo 2: View of the existing DCR Marine Park Playground. *Facing south*

Entrance from Columbia Rd & William J. Day Blvd

Overview of Park Looking East Towards Pleasure Bay

Existing Restroom Facility

Existing Playground for Ages 5-12

Existing Playground for Ages 2-5

Overview of Existing Playground Location

Abutters List for Marine Park Playground. All Abutters Within 300' of Subject Parcel 0603415000 as of 8-26-2022

FULL_ADDRESS	CITY	ZIP	OWNER	MAIL_ADDRESS	MAIL_CS	STATE	MAIL_ZIP
1889 WILLIAM J DAY BL	SOUTH BOST	2127	COMMONWLTH OF MASS	1889 WM J DAY BLVD	SOUTH BOSTON	MA	2127
FARRAGUT RD	SOUTH BOST	2127	COMMONWLTH OF MASS	FARRAGUT RD	SOUTH BOSTON	MA	2127
945 E BROADWAY PS-1	SOUTH BOST	2127	EVANS KAREN M	938 E BROADWAY	SOUTH BOSTON	MA	2127
866 E FIFTH ST 2	SOUTH BOST	2127	JONES DANIEL	866 E FIFTH ST #2	SOUTH BOSTON	MA	2127
17 TWOMEY CT 58	SOUTH BOST	2127	ADDUCI ANNE M	17 TWOMEY COURT #58	SOUTH BOSTON	MA	2127
9 TWOMEY CT 52	SOUTH BOST	2127	DAWLEY MAEVE	9 TWOMEY CT, UNIT 52	SOUTH BOSTON	MA	2127
145 FARRAGUT RD 5	SOUTH BOST	2127	OTOOLE DOROTHY F	145 FARRAGUT RD #5	SOUTH BOSTON	MA	2127
135 FARRAGUT RD 17	SOUTH BOST	2127	MCINTIRE CLAIRE	135 FARRAGUT RD #17	S BOSTON	MA	2127
125 FARRAGUT RD 33	SOUTH BOST	2127	LYONS PAULA A	125 FARRAGUT RD #33	SOUTH BOSTON	MA	2127
862 E FIFTH ST 1	SOUTH BOST	2127	FURNER P ROSS	862 E FIFTH ST # 1	SOUTH BOSTON	MA	2127
125 FARRAGUT RD 27	SOUTH BOST	2127	EDMONDS PAULINE	125 FARRAGUT RD #27	SOUTH BOSTON	MA	2127
71 FARRAGUT RD 5	SOUTH BOST	2127	MACPHERSON CATHERINE J	PO BOX 850590	BRAINTREE	MA	2185
145 FARRAGUT RD 8	SOUTH BOST	2127	SILVA ISABEL J	145 FARRAGUT RD #8	SOUTH BOSTON	MA	2127
945 E BROADWAY PS-24	SOUTH BOST	2127	RASKAUSKAS PETER J	934 E BROADWAY	SOUTH BOSTON	MA	2127
17 TWOMEY CT 61	SOUTH BOST	2127	HAYES JOHN F ETAL	17 TWOMEY COURT #61	SOUTH BOSTON	MA	2127
9 TWOMEY CT 49	SOUTH BOST	2127	SPACONE SUSAN	9 TWOMEY CT #49	SOUTH BOSTON	MA	2127
25 TWOMEY CT 21	SOUTH BOST	2127	MORAN COLLEEN P	25 TWOMEY CT, UNIT 21	SOUTH BOSTON	MA	2127
145 FARRAGUT RD 2	SOUTH BOST	2127	MERCHIA THREE LLC	11 EMILY DR	NORTH EASTON	MA	2356
1 TWOMEY CT 41	SOUTH BOST	2127	THOMAS MERIBAH F	1 TWOMEY CT #41	S BOSTON	MA	2127
950 E BROADWAY	SOUTH BOST	2127	POSKEL CLAIRE E TS	950 E BROADWAY	SOUTH BOSTON	MA	2127
1 TWOMEY CT 38	SOUTH BOST	2127	SILVA ISABEL JUDITH TS	219 COURT RD	WINTHROP	MA	2152
83 FARRAGUT RD 2	SOUTH BOST	2127	CARR JACQUELINE A	83 FARRAGUT RD, UNIT 2	SOUTH BOSTON	MA	2127
25 TWOMEY CT 24	SOUTH BOST	2127	DECLUE PATRICIA	25 TWOMEY COURT #24	SOUTH BOSTON	MA	2127
71 FARRAGUT RD 2	SOUTH BOST	2127	NIKKI 12 LLC	338 HOWARD ST	BROCKTON	MA	2302
145 FARRAGUT RD 11	SOUTH BOST	2127	VARHELYI ILDIKO	145 FARRAGUT RD #11	SOUTH BOSTON	MA	2127
125 FARRAGUT RD 30	SOUTH BOST	2127	RZEPECKI STEFANIE ANN	125 FARRAGUT RD #30	SOUTH BOSTON	MA	2127
17 TWOMEY CT 55	SOUTH BOST	2127	MCCARTHY WILLIAM E	17 TWOMEY CT #55	S BOSTON	MA	2127
75 FARRAGUT RD	SOUTH BOST	2127	SEVENTY 5 FARRAGUT RD	75 FARRAGUT RD	SOUTH BOSTON	MA	2127
145 FARRAGUT RD 7	SOUTH BOST	2127	CANAVAN THOMAS	145 FARRAGUT RD #7	SOUTH BOSTON	MA	2127
17 TWOMEY CT 60	SOUTH BOST	2127	BULGER JOHN P	17 TWOMEY COURT #60	SOUTH BOSTON	MA	2127
1 TWOMEY CT 46	SOUTH BOST	2127	MARTIN PAUL R	1 TWOMEY COURT #46	SOUTH BOSTON	MA	2127
1 TWOMEY CT 40	SOUTH BOST	2127	TOUHEY BRIAN V	67 SILVERHILL RD	MILFORD	MA	1757
17 TWOMEY CT 66	SOUTH BOST	2127	LOULAKIS JOHN J	17 TWOMEY CT #66	BOSTON	MA	2127
125 FARRAGUT RD 35	SOUTH BOST	2127	TESTA ROCCO	125 FARRAGUT RD #35	S BOSTON	MA	2127
83 FARRAGUT RD 1	SOUTH BOST	2127	RYAN STEPHEN T	83 FARRAGUT RD #1	S BOSTON	MA	2127
1 TWOMEY CT 37	SOUTH BOST	2127	BIANCHI TIMOTHY	1 TWOMEY COURT #37	SOUTH BOSTON	MA	2127
71 FARRAGUT RD 1	SOUTH BOST	2127	HAYES THOMAS J JR	955 E BROADWAY	SOUTH BOSTON	MA	2127
145 FARRAGUT RD 10	SOUTH BOST	2127	KANE MARTIN W	145 FARRAGUT RD #10	S BOSTON	MA	2127
125 FARRAGUT RD 29	SOUTH BOST	2127	SHEA KAREN A	125 FARRAGUT RD #29	SOUTH BOSTON	MA	2127
945 E BROADWAY 8	SOUTH BOST	2127	KARASARIDES MARIA	945 E BROADWAY #8	SOUTH BOSTON	MA	2127
9 TWOMEY CT 54	SOUTH BOST	2127	DOYLE ANN E	9 TWOMEY CT	SOUTH BOSTON	MA	2127
17 TWOMEY CT 57	SOUTH BOST	2127	LEVINS JOSEPH C JR	17 TWOMEY COURT #57	SOUTH BOSTON	MA	2127
866 E FIFTH ST 1	SOUTH BOST	2127	BERREBY SHARON	64 SOMERSET RD	BROOKLINE	MA	2445
17 TWOMEY CT 63	SOUTH BOST	2127	SANTOS CHRISTOPHER J	17 TWOMEY CT #63	S BOSTON	MA	2127
145 FARRAGUT RD 4	SOUTH BOST	2127	MCGRORY MARY P TS	51 CHRISTINA DRIVE	BRAINTREE	MA	2184
1 TWOMEY CT 43	SOUTH BOST	2127	RATTET FAMILY TRUST	174 POND ROAD P.O. BOX 1222	WEST TISBURY	MA	2575
125 FARRAGUT RD 32	SOUTH BOST	2127	THE JEAN MARIE INGEMI REVOCABLE TRUST	8265 WALBERT STREET	PORT CHARLOTTE	FL	33981
135 FARRAGUT RD 14	SOUTH BOST	2127	MAUREEN T CONLEY LIVING TRUST	46 TILDEN CIRCLE	QUINCY	MA	2171
125 FARRAGUT RD 26	SOUTH BOST	2127	MORAN SHANNON E	125 FARRAGUT RD UNIT 26	BOSTON	MA	2127
71 FARRAGUT RD 4	SOUTH BOST	2127	MASSENZIO DAVID	71 FARRAGUT RD UNIT 4	SOUTH BOSTON	MA	2127
75 FARRAGUT RD 2	SOUTH BOST	2127	REARDON JOHN P	75 FARRAGUT RD #2	SOUTH BOSTON	MA	2127
17 TWOMEY CT 62	SOUTH BOST	2127	KEANE MARY B	17 TWOMEY CT #62	SOUTH BOSTON	MA	2127
1 TWOMEY CT 48	SOUTH BOST	2127	STAPLETON LISA D	29 BUCKINGHAM RD	MILTON	MA	2186
945 E BROADWAY PS-11	SOUTH BOST	2127	DRISCOLL JOHN C	945 E BROADWAY #4	SOUTH BOSTON	MA	2127
25 TWOMEY CT 20	SOUTH BOST	2127	CONFORTI KIMBERLY A	25 TWOMEY CT	SOUTH BOSTON	MA	2127
145 FARRAGUT RD 1	SOUTH BOST	2127	DEGAN SALLY M	723 E SEVENTH ST	SOUTH BOSTON	MA	2127
1 TWOMEY CT 42	SOUTH BOST	2127	SILVA ISABEL JUDITH TS	219 COURT RD	WINTHROP	MA	2152
1 TWOMEY CT 39	SOUTH BOST	2127	BURKE DENNIS W	245 HIGHLAND ST	MILTON	MA	2186
135 FARRAGUT RD 13	SOUTH BOST	2127	MCCUNE MARY	135 FARRAGUT RD #13	SOUTH BOSTON	MA	2127
862 E FIFTH ST 3	SOUTH BOST	2127	TOP OF THE FIFTH LLC MASS LLC	862 E FIFTH ST #3	SOUTH BOSTON	MA	2127
125 FARRAGUT RD 31	SOUTH BOST	2127	KORSHUKIN EUGENE	11 ELKINS ST #250	SOUTH BOSTON	MA	2127
145 FARRAGUT RD 12	SOUTH BOST	2127	GOODMAN LAURA	145 FARRAGUT RD #12	SOUTH BOSTON	MA	2127
17 TWOMEY CT 59	SOUTH BOST	2127	KING PATRICK J	20 FANEUIL RD	WALTHAM	MA	2452

945 E BROADWAY 10	SOUTH BOST	2127	VAUGHAN MICHAEL K	945 E BROADWAY #10	SOUTH BOSTON	MA	2127
9 TWOMEY CT 51	SOUTH BOST	2127	JAMES G GETONGA LIVING TRUST	5 STILLMAN PLACE, UNIT 2	BOSTON	MA	2113
1 TWOMEY CT 45	SOUTH BOST	2127					
25 TWOMEY CT 23	SOUTH BOST	2127	DONOVAN MARION F	25 TWOMEY COURT #23	SOUTH BOSTON	MA	2127
135 FARRAGUT RD 16	SOUTH BOST	2127	WALSH KATHERINE	135 FARRAGUT RD #16	SOUTH BOSTON	MA	2127
17 TWOMEY CT 65	SOUTH BOST	2127	ADDUCI ANNE MARIE	17 TWOMEY COURT #65	SOUTH BOSTON	MA	2127
125 FARRAGUT RD 34	SOUTH BOST	2127	PELLETIER JULIA N	125 FARRAGUT RD, UNIT 34	SOUTH BOSTON	MA	2127
71 FARRAGUT RD 6	SOUTH BOST	2127	MARTINO CHRISTOPHER	71 FARRAGUT ROAD #6	SOUTH BOSTON	MA	2127
862 E FIFTH ST	SOUTH BOST	2127	EIGHT-62 EAST FIFTH ST CONDO	862 EAST FIFTH ST	SOUTH BOSTON	MA	2127
E BROADWAY 7	SOUTH BOST	2127	KARASARIDES THEODORA	945 E BROADWAY #7	SOUTH BOSTON	MA	2127
17 TWOMEY CT 56	SOUTH BOST	2127	DOHERTY HENRY T JR	73A WINTHROP AV &	LAWRENCE	MA	1843
945 E BROADWAY 9	SOUTH BOST	2127	HYNES JOHN B III	945 E BROADWAY #9	SOUTH BOSTON	MA	2127
866 E FIFTH ST	SOUTH BOST	2127	EIGHT-66 EAST FIFTH STREET CONDO TR	866 E FIFTH ST	SOUTH BOSTON	MA	2127
9 TWOMEY CT 50	SOUTH BOST	2127	NEAL FREDERICK	9 TWOMEY COURT #50	SOUTH BOSTON	MA	2127
25 TWOMEY CT 22	SOUTH BOST	2127	MANNING PATRICK	25 TWOMEY CT #22	SOUTH BOSTON	MA	2127
1 TWOMEY CT 44	SOUTH BOST	2127	ALLEN ANNE CHRISTINA	1 TWOMEY CT 44	SOUTH BOSTON	MA	2127
145 FARRAGUT RD 3	SOUTH BOST	2127	FOLEY FARRAGUT ROAD REALTY TRUST	145 FARRAGUT RD UNIT 3	SOUTH BOSTON	MA	2127
17 TWOMEY CT 64	SOUTH BOST	2127	STAPLETON LIZANNE	3 SYLVAN CI	LYNNFIELD	MA	1940
83 FARRAGUT RD 3	SOUTH BOST	2127	QUIGG HENRY A	83 FARRAGUT RD, #3	SOUTH BOSTON	MA	2127
135 FARRAGUT RD 15	SOUTH BOST	2127	BURKE DENNIS W	245 HIGHLAND ST	MILTON	MA	2186
125 FARRAGUT RD 25	SOUTH BOST	2127	EAGAR ELAINE	5 WHITECAPS DR	EAST FALMOUTH	MA	2536
945 E BROADWAY 6	SOUTH BOST	2127	JOSEPH V ARGUS II REVOCABLE TRUST	945 E BROADWAY, UNIT 6	SOUTH BOSTON	MA	2127
71 FARRAGUT RD 3	SOUTH BOST	2127	HODOR PETER W	866 E FIFTH ST	SOUTH BOSTON	MA	2127
945 E BROADWAY PS-6	SOUTH BOST	2127	EVANS WILLIAM B	942 E BROADWAY	SOUTH BOSTON	MA	2127
55 FARRAGUT RD	SOUTH BOST	2127	DONOVAN JOHN H	55 FARRAGUT ROAD	SOUTH BOSTON	MA	2127
75 FARRAGUT RD 1	SOUTH BOST	2127	BAILEY CONRAD J	75 FARRAGUT RD #1	SOUTH BOSTON	MA	2127
81 FARRAGUT RD	SOUTH BOST	2127	WILLIAMS JOSEPH D	81 FARRAGUT RD	SOUTH BOSTON	MA	2127
145 FARRAGUT RD 6	SOUTH BOST	2127	TALLENT RAYMOND TS	145 FARRAGUT RD #6	SOUTH BOSTON	MA	2127
1 TWOMEY CT 47	SOUTH BOST	2127	METHELIS EDWARD F	1 TWOMEY COURT #47	SOUTH BOSTON	MA	2127
57 FARRAGUT RD	SOUTH BOST	2127	JOANNE CERULLO 2020 IRREVOCABLE TRUST	57 FARRAGUT RD	SOUTH BOSTON	MA	2127
866 E FIFTH ST 3	SOUTH BOST	2127	MAHER REVOCABLE TRUST OF 2019	43A SHEAFE ST	PORTSMOUTH	NH	3801
25 TWOMEY CT 19	SOUTH BOST	2127	SHAHNAZARIAN ANNI	25 TWOMEY COURT #19	SOUTH BOSTON	MA	2127
135 FARRAGUT RD 18	SOUTH BOST	2127	LANE THOMAS T	135 FARRAGUT RD #18	S BOSTON	MA	2169
125 145 FARRAGUT RD	SOUTH BOST	2127	FARRAGUT COURT CONDO TR	125 FARRAGUT RD	SOUTH BOSTON	MA	2127
83 FARRAGUT RD	SOUTH BOST	2127	EIGHTY 3 FARRAGUT ROAD	83 FARRAGUT RD	SOUTH BOSTON	MA	2127
125 FARRAGUT RD 36	SOUTH BOST	2127	CLANCY JOHN P	66 WILLIAMSBURG LN	SCITUATE	MA	2066
71 FARRAGUT RD	SOUTH BOST	2127	ADMIRAL FARRAGUT CONDO TRUST	71 FARRAGUT RD #4	SOUTH BOSTON	MA	2127
145 FARRAGUT RD 9	SOUTH BOST	2127	DAYALJI BHAVESH	145 FARRAGUT RD #9	SOUTH BOSTON	MA	2127
862 E FIFTH ST 2	SOUTH BOST	2127	OHARA MATTHEW	862 E FIFTH ST # 2	SOUTH BOSTON	MA	2127
125 FARRAGUT RD 28	SOUTH BOST	2127	YOUNG WILLIAM J	125 FARRAGUT RD #28	SOUTH BOSTON	MA	2127
9 TWOMEY CT 53	SOUTH BOST	2127	LONERGAN STEFFAN	9 TWOMEY CT #53	SOUTH BOSTON	MA	2127
945 E BROADWAY 3	SOUTH BOST	2127	BARBETTA BRIAN	945 E BROADWAY #3	SOUTH BOSTON	MA	2127
868 E FIFTH ST 3	SOUTH BOST	2127	PINCH SARAH C	868 E FIFTH ST #3	SOUTH BOSTON	MA	2127
945 E BROADWAY	SOUTH BOST	2127	945 EAST BROADWAY	945 EAST BROADWAY	SOUTH BOSTON	MA	2127
868 E FIFTH ST	SOUTH BOST	2127	EIGHT 68 E FIFTH ST CONDO TR	868 E FIFTH ST UNIT 3	SOUTH BOSTON	MA	2127
945 E BROADWAY 2	SOUTH BOST	2127	FENICK DEIRDRE A	945 E BROADWAY #2	SOUTH BOSTON	MA	2127
945 E BROADWAY 5	SOUTH BOST	2127	KAREN C ARGUS REVOCABLE TRUST	945 E BROADWAY, UNIT 5	SOUTH BOSTON	MA	2127
945 E BROADWAY 1	SOUTH BOST	2127	TODD LISA M	945 E BROADWAY #1	SOUTH BOSTON	MA	2127
945 E BROADWAY 4	SOUTH BOST	2127	DRISCOLL JOHN C	945 E BROADWAY #4	SOUTH BOSTON	MA	2127
WILLIAM J DAY BL	SOUTH BOST	2127	COMMONWLTH OF MASS	WM J DAY BLVD	SOUTH BOSTON	MA	2127
868 E FIFTH ST 2	SOUTH BOST	2127	MCKENNA PAUL J	868 E FIFTH ST #2	SOUTH BOSTON	MA	2127
849 E THIRD ST	SOUTH BOST	2127	SIMON FAMILY EAST 3RD	849 E THIRD ST	SOUTH BOSTON	MA	2127
97 FARRAGUT RD	SOUTH BOST	2127	97 FARRAGUT LLC	64 G STREET	SOUTH BOSTON	MA	2127
868 E FIFTH ST 1	SOUTH BOST	2127	GILROY ERIN M	868 E FIFTH ST #1	SOUTH BOSTON	MA	2127
929 E FOURTH ST	SOUTH BOST	2127	CASPER ROSEANN	929 EAST FOURTH	SOUTH BOSTON	MA	2127
E BROADWAY	SOUTH BOST	2127	DIPERRI JAMES S	73 FARRAGUT ST	SOUTH BOSTON	MA	2127
75 FARRAGUT RD 3	SOUTH BOST	2127	BAILEY CONRAD J	75 FARRAGUT RD #3	SOUTH BOSTON	MA	2127
E BROADWAY	SOUTH BOST	2127	DIPERRI JAMES S	73 FARRAGUT RD	SOUTH BOSTON	MA	2127
63 FARRAGUT RD	SOUTH BOST	2127	DAILEY ELIZABETH T	63 FARRAGUT ROAD	SOUTH BOSTON	MA	2127
1883 WILLIAM J DAY BL	SOUTH BOST	2127	COMM OF MASS	1883 WM J DAY BLVD	SOUTH BOSTON	MA	2127
952 E BROADWAY	SOUTH BOST	2127	LONG MARY C	952 E BROADWAY	SOUTH BOSTON	MA	2127
841 E THIRD ST	SOUTH BOST	2127	OKEEFE PATRICIA A	841 E THIRD ST	S BOSTON	MA	2127
77 FARRAGUT RD 3	SOUTH BOST	2127	CONNOLLY THOMAS J LT	77 FARRAGUT RD #3	SOUTH BOSTON	MA	2127
61 FARRAGUT RD 2	SOUTH BOST	2127	COAKLEY JEFFREY P	61 FARRAGUT RD #2	SOUTH BOSTON	MA	2127

77 FARRAGUT RD	SOUTH BOST	2127	SEVENTY 7 FARRAGUT RD	77 FARRAGUT RD	SOUTH BOSTON	MA	2127
121 123 FARRAGUT RD	SOUTH BOST	2127	ONE 21-123 FARRAGUT RD CONDO	121 FARRAGUT RD	SOUTH BOSTON	MA	2127
77 FARRAGUT RD 2	SOUTH BOST	2127	CONCANNON JAMES	77 FARRAGUT RD #2	SOUTH BOSTON	MA	2127
61 FARRAGUT RD 1	SOUTH BOST	2127	KANE RICHARD	61 FARRAGUT RD, #1	SOUTH BOSTON	MA	2127
123 FARRAGUT RD 1	SOUTH BOST	2127	HEBERT ALEX B	123 FARRAGUT RD, UNIT 1	SOUTH BOSTON	MA	2127
934 E FOURTH ST	SOUTH BOST	2127	CONROY JOHN P	934 E FOURTH ST	S BOSTON	MA	2127
77 FARRAGUT RD 1	SOUTH BOST	2127	MACDONALD RODERICK L	77 FARRAGUT RD #1	SOUTH BOSTON	MA	2127
53 FARRAGUT RD	SOUTH BOST	2127	FARMA ANNE M TS	53 FARRAGUT RD	SOUTH BOSTON	MA	2127
61 FARRAGUT RD	SOUTH BOST	2127	FARRAGUT PARK CONDOMINIUM TRUST	61 FARRAGUT RD	SOUTH BOSTON	MA	2127
935 E FOURTH ST	SOUTH BOST	2127	CASPER JOSEPH R	935 E FOURTH ST	SOUTH BOSTON	MA	2127
870 E FIFTH ST	SOUTH BOST	2127	870 EAST 5TH LLC	50 MILK ST 16TH FLOOR	BOSTON	MA	2109
932 E FOURTH ST	SOUTH BOST	2127	NAVID REZA	862 EAST 5TH ST SUITE #2	BOSTON	MA	2127
927 E FOURTH ST	SOUTH BOST	2127	TOOMEY PATRICK M	927 EAST FOURTH ST	SOUTH BOSTON	MA	2127
FARRAGUT RD	SOUTH BOST	2127	TIRABASSI EDMUND	101 FARRAGUT RD	SOUTH BOSTON	MA	2127
61 FARRAGUT RD 3	SOUTH BOST	2127	SHAW MICHAEL P	61 FARRAGUT RD #3	S BOSTON	MA	2127
930 E FOURTH ST	SOUTH BOST	2127	LUZAITIS MARK A	13 BOW ST	WELLESLEY	MA	2481
928 E FOURTH ST	SOUTH BOST	2127	CECCONI FAMILY TRUST	928 EAST FOURTH ST	SOUTH BOSTON	MA	2127
853 E THIRD ST	SOUTH BOST	2127	MAHER PAULA A	853 E THIRD ST	SOUTH BOSTON	MA	2127
121 FARRAGUT RD 2	SOUTH BOST	2127	FITZGERALD WILLIAM M ETAL	121 FARRAGUT RD #2	SOUTH BOSTON	MA	2127
20 FARRAGUT RD	SOUTH BOST	2127	COMMWLTH OF MASS	20 FARRAGUT RD	SOUTH BOSTON	MA	2127
936 E FOURTH ST 1	SOUTH BOST	2127	CARIGNAN JEFFRET K	936 E FOURTH ST, UNIT 1	SOUTH BOSTON	MA	2127
948 E BROADWAY	SOUTH BOST	2127	CRUSH MANAGEMENT LLC	917 E BROADWAY	SOUTH BOSTON	MA	2127
85 FARRAGUT RD	SOUTH BOST	2127	ARMSTRONG DANIEL F	87 FARRAGUT RD	SOUTH BOSTON	MA	2127
109 FARRAGUT RD	SOUTH BOST	2127	PEDERSON MARGARET ETAL	109 FARRAGUT RD	SOUTH BOSTON	MA	2127
E BROADWAY	SOUTH BOST	2127	SEVENTY 7 FARRAGUT ROAD	77 FARRAGUT RD	SOUTH BOSTON	MA	2127
931 E FOURTH ST	SOUTH BOST	2127	JACKSON JOSEPH R JR	931 E FOURTH ST	S BOSTON	MA	2127
65 FARRAGUT RD	SOUTH BOST	2127	REZZA DORIS M	65 FARRAGUT ROAD	SOUTH BOSTON	MA	2127
936 E FOURTH ST	SOUTH BOST	2127	NINE 36 EAST FOURTH STREET	936 EAST FOURTH	SOUTH BOSTON	MA	2127
855 E FIFTH ST	SOUTH BOST	2127	MADDOX JOHN M JR	855 EAST FIFTH ST	SOUTH BOSTON	MA	2127
47 FARRAGUT RD	SOUTH BOST	2127	HIGGINS WILLIAM W JR	47 FARRAGUT RD	SOUTH BOSTON	MA	2127
49 FARRAGUT RD	SOUTH BOST	2127	49 FARRAGUT LLC	36 HAVILEND ST	QUINCY	MA	2170
936 E FOURTH ST 3	SOUTH BOST	2127	GILLOOLY MELISSA	936 E FOURTH ST #3	S BOSTON	MA	2127
FARRAGUT RD	SOUTH BOST	2127	97 FARRAGUT LLC	64 G ST	SOUTH BOSTON	MA	2127
845 E THIRD ST	SOUTH BOST	2127	LAZAR IDA	845 EAST THIRD	SOUTH BOSTON	MA	2127
1 DEAN WY	SOUTH BOST	2127	PICARD ROBERT P	1 DEAN WAY	SOUTH BOSTON	MA	2127
WILLIAM J DAY BL	SOUTH BOST	2127	COMMWLTH OF MASS	WM J DAY BLVD	SOUTH BOSTON	MA	2127
E BROADWAY	SOUTH BOST	2127	SEVENTY 5 FARRAGUT ROAD	75 FARRAGUT RD	SOUTH BOSTON	MA	2127
73 FARRAGUT RD	SOUTH BOST	2127	DIPERRI JAMES S	73 FARRAGUT RD	SOUTH BOSTON	MA	2127
936 E FOURTH ST 2	SOUTH BOST	2127	ABSTON ERIC	936 EAST FOURTH ST #2	SOUTH BOSTON	MA	2127
101 FARRAGUT RD	SOUTH BOST	2127	TIRABASSI EDMUND	101 FARRAGUT RD	SOUTH BOSTON	MA	2127
874 E SIXTH ST	SOUTH BOST	2127	874 EAST SIXTH STREET LLC	202 WEST BROADWAY	BOSTON	MA	2127
105 FARRAGUT RD	SOUTH BOST	2127	BRIAN F MILLER TRUST	105 FARRAGUT RD	SOUTH BOSTON	MA	2127

Search for an address or enter a parcel ID below.

ADDRESS SEARCH

Search for an address...

PARCEL SEARCH

SEARCH

SELECTED PARCEL

0603415000 - undefined

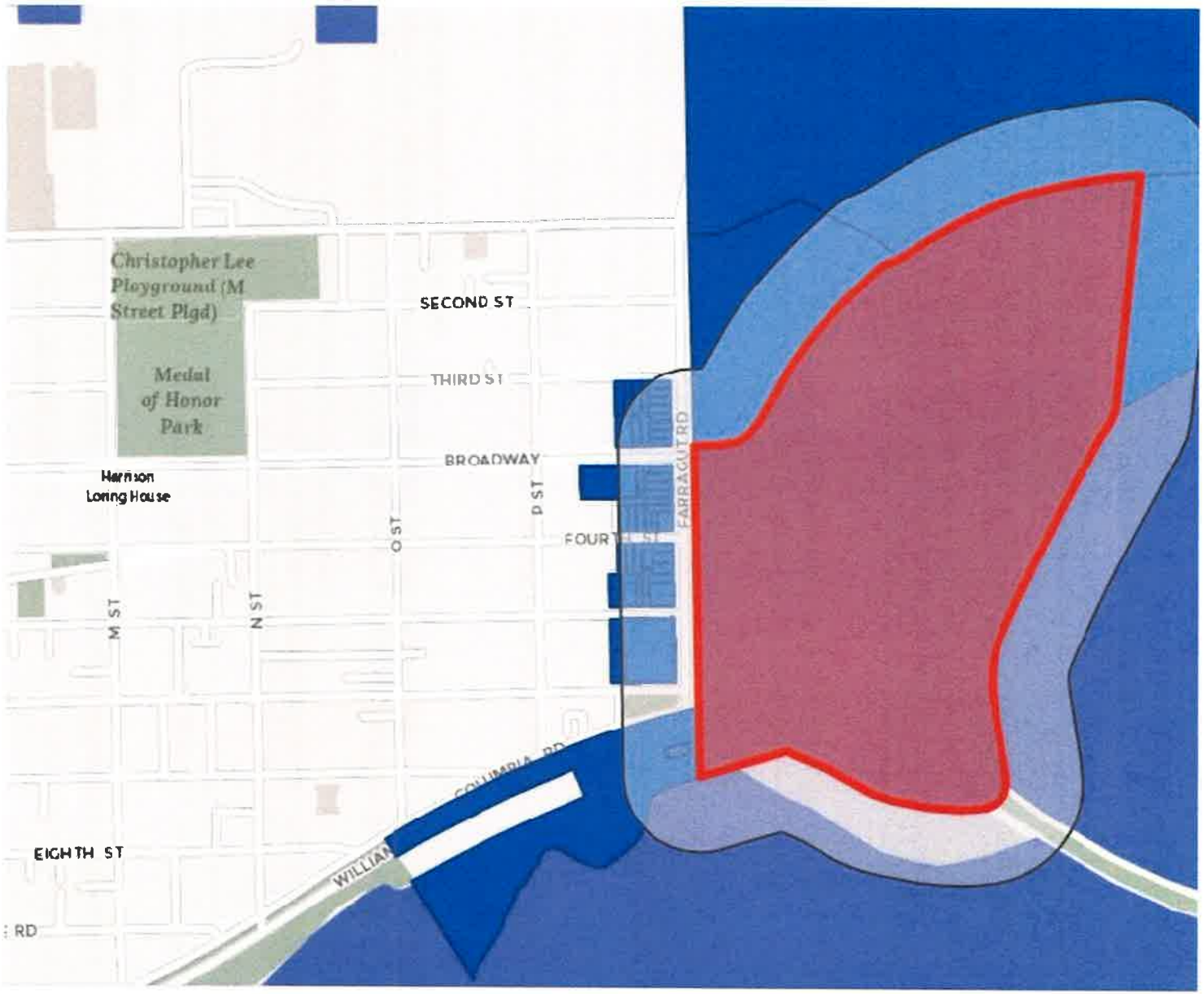
Enter a buffer distance and a the mailing list csv will appear below.

BUFFER DISTANCE (FEET)

300

BUFFER PARCEL

DOWNLOAD MAILING LIST CSV



City of Boston
Environment

CITY of BOSTON
Conservation Commission

NOTIFICATION TO ABUTTERS
BOSTON CONSERVATION COMMISSION

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

A. The Department of Conservation and Recreation has filed a Notice of Intent with the Boston Conservation Commission seeking permission to alter an Area Subject to Protection under the Wetlands Protection Act (General Laws Chapter 131, section 40) and Boston Wetlands Ordinance.

B. The address of the lot where the activity is proposed is 1889 William J Day Blvd.

C. The project involves improvements to the Marine Park Playground.

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

E. Copies of the Notice of Intent may be obtained from BSC Group, Inc. c/o Paul Mancuso by contacting them at 508-778-8919 between the hours of 9:00 am, 5:00 pm.

F. In accordance with the Chapter 20 of the Acts of 2021, the public hearing will take place **virtually** at https://zoom.us/j/6864582044. If you are unable to access the internet, you can call 1-929-205-6099, enter Meeting ID 686 458 2044 # and use # as your participant ID.

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

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

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

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

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

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

City of Boston
Environment

CITY of BOSTON
Conservation Commission

NOTIFICACIÓN PARA PROPIETARIOS Y/O VECINOS COLINDANTES
COMISIÓN DE CONSERVACIÓN DE BOSTON

De conformidad con la Ley de protección de los humedales de Massachusetts, el Capítulo 131, Sección 40 de las Leyes Generales de Massachusetts y la Ordenanza sobre los humedales de Boston, por la presente queda usted notificado como propietario o vecino colindante de un proyecto presentado ante la Comisión de Conservación de Boston.

A. El Departamento de Conservación y Recreación ha presentado una solicitud a la Comisión de Conservación de Boston pidiendo permiso para modificar una zona sujeta a protección en virtud de la Ley de protección de los humedales (Leyes generales, capítulo 131, sección 40) y la Ordenanza sobre los humedales de Boston.

B. La dirección del lote donde se propone la actividad es 1889 William J Day Blvd.

C. El proyecto consiste en mejorías al parque infantil del Marine Park y espacio de encuentro comunitario.

D. Se pueden obtener copias del Aviso de Intención comunicándose con la Comisión de Conservación de Boston en CC@boston.gov.

E. Las copias de la notificación de intención pueden obtenerse en BSC Group, Inc. c/o Paul Mancuso a 508-778-8919 entre las 9 am, 5 pm.

F. De acuerdo con el Capítulo 107 de las Actas de 2022, la audiencia pública se llevará a cabo virtualmente en https://zoom.us/j/6864582044. Si no puede acceder a Internet, puede llamar al 1-929-205-6099, ingresar ID de reunión 686 458 2044 # y usar # como su ID de participante.

G. La información relativa a la fecha y hora de la audiencia pública puede solicitarse a la **Comisión de Conservación de Boston** por correo electrónico a **CC@boston.gov** o llamando al **(617) 635-4416** entre las **9 AM y las 5 PM, de lunes a viernes.**

NOTA: La notificación de la audiencia pública, incluida su fecha, hora y lugar, se publicará en el **Boston Herald** con al menos cinco (5) días de antelación.

NOTA: La notificación de la audiencia pública, incluida su fecha, hora y lugar, se publicará en www.boston.gov/public-notices y en el Ayuntamiento de Boston con no menos de cuarenta y ocho (48) horas de antelación. Si desea formular comentarios, puede asistir a la audiencia pública o enviarlos por escrito a CC@boston.gov o al Ayuntamiento de Boston, Departamento de Medio Ambiente, Sala 709, 1 City Hall Square, Boston, MA 02201.

NOTA: También puede comunicarse con la Comisión de Conservación de Boston o con la Oficina Regional del Noreste del Departamento de Protección Ambiental para obtener más información sobre esta solicitud o la Ley de Protección de Humedales. Para comunicarse con el DEP, llame a la Región Noreste: (978) 694-3200.

NOTA: si tiene previsto asistir a la audiencia pública y necesita servicios de interpretación, sírvase informar al personal en CC@boston.gov antes de las 12 PM del día anterior a la audiencia.

BABEL NOTICE

English:

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

Spanish:

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

Haitian Creole:

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

Traditional Chinese:

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

Vietnamese:

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

Simplified Chinese:

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

CITY of BOSTON

Cape Verdean Creole:

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

Arabic:

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

Russian:

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

Portuguese:

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

French:

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

City of Boston
Environment

CITY of BOSTON
Conservation Commission

AFFIDAVIT OF SERVICE
FOR ABUTTER NOTIFICATION

Under the Massachusetts Wetlands Protection Act
and Boston Wetlands Ordinance

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

A Notice of Intent was filed under the Massachusetts Wetlands Protection Act and/or the Boston Wetlands Ordinance by BSC Group, Inc. on behalf of Mass DCR for proposed improvements at the Marine Park Playground and Community Gathering Space located at 1889 William J Day Blvd, South Boston.

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

Paul Mancuso
Name

10/05/2022
Date

BSC GROUP

MEMORANDUM

603 SUMMER STREET, BOSTON, MA 02127 - www.bscgroup.com
TEL 617-896-4300

To:	DCR / Boston Conservation Commission	**Date:**	September 21, 2022
From:	Ricardo R. Austrich	**Proj. No.**	BSC # 8957203
Re:	SPANISH TRANSLATION AFFIDAVIT		

cc:

I hereby certify that I am fluent in Spanish, both written and oral and have served as a bilingual translator on numerous public engagement projects throughout eastern Massachusetts throughout my professional career.

I hereby certify that I performed the Spanish translation of the Conservation Commission Abutter Notification and certify it's accuracy.

I completed and published post graduate research work performed while living in Spain on a yearlong fellowship earlier in my career.

I was a mid-career Fulbright Fellow in Santiago & Concepcion, Chile where I taught urban design & landscape architecture at the Pontifica Universidad Catolica de Santiago and at the University of Bio Bio in Concepcion. Subsequently, I was an invited speaker at a community & sustainable design conference held at the University of Bio Bio in Concepcion, Chile.

Thank you,

Ricardo R. Austrich, PLA, ASLA (he, him)
Manager of Landscape Architecture
D: 617-896-4331 / C: 617-823-9058
raustrich@bscgroup.com
www.bscgroup.com

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).

Please Submit the Following to the Conservation Commission:

- [X] Two copies (a signed original and 1 copy) of a completed Notice of Intent (WPA Form 3)
- [X] Two copies (a signed original and 1 copy) of a completed Boston Notice of Intent (Local Form)
- [X] Two 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. Some projects may require both an aerial view of the plans along with a profile view of plans depending on the scope of work.
- [X] Two 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.
- [X] (If applicable) Two copies the Federal Emergency Management Agency Flood Insurance Rate Map for the project site. FEMA Flood Maps: https://msc.fema.gov/portal.
- [N/A] Two copies of the 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.
- [X] (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.
- [X] (If applicable) A narrative detailing best management practices for stormwater management as set forth in the Stormwater Management Standards of the Massachusetts Department of Environmental Protection and any separate standards and guidelines prepared by the City and the Boston Water and Sewer Commission.
- [X] (If applicable) Two hard copies of the Checklist for Stormwater Report
- [X] Details of the stormwater management system, including: catch basins, oil separating tanks, detention basins, outfalls, sewer connections, etc.
- [X] Any photographs related to the project representing the wetland resource areas.
- [X] Two copies of a detailed project narrative describing the following: an 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 (listing out each performance standard); a consideration of the effect that projected sea level rise, changes in storm intensity and frequency, and other consequences of climate change may have on the resource areas and proposed activities; construction equipment and material involved; and measures to protect wetland resource areas and mitigate impacts. The applicant shall also include narrative on how they plan to integrate climate change and adaptation planning considerations into their project to promote climate resilience to protect and promote Resource Area Values and functions into the future.
- [X] Two copies of an Abutters List, Affidavit of Service and Abutter Notification, filed concurrently with the Notice of Intent. Abutter notices shall be sent in both English and the second most commonly spoken language(s) in the neighborhood(s) where the project is proposed. Notices shall also include Babel notice cards for additional translation and language access services. All abutters within 300' of the project

Checklist for Filing a Notice of Intent with Boston Conservation Commission

property line must be notified including those in a neighboring municipality. In such an instance, a copy of the filing must also be sent to the local Conservation Commission of the neighboring municipality. EXCEPTION: When work is in land under water bodies and waterways or on a tract of land greater than 50 acres, written notification must only be given to abutters within 300 feet of the "project site."

N/A ☐ Two 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.

BSC GROUP

MEMORANDUM

803 SUMMER STREET, BOSTON, MA 02127 - www.bscgroup.com
TEL 617-896-4300

To:	DCR / Boston Conservation Commission	**Date:**	September 21, 2022
From:	Ricardo R. Austrich	**Proj. No.**	BSC # 8957203
Re:	SPANISH TRANSLATION AFFIDAVIT		

cc:

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Thank you,

Ricardo R. Austrich, PLA, ASLA (he, him)
Manager of Landscape Architecture
D: 617-896-4331 / C: 617-823-9058
raustrich@bscgroup.com
www.bscgroup.com

STORMWATER REPORT

MARINE PARK PLAYGROUND
FARRAGUT ROAD
BOSTON, MA

SEPTEMBER 2022

Owner/Applicant:

DEPARTMENT OF CONSERVATION & RECREATION
251 Causeway Street Suite 9
Boston, MA 02114

BSC Job Number: 89572.03

TABLE OF CONTENTS

SECTION 1.0

PROJECT INFORMATION

1.01 PROJECT DESCRIPTION

The Department of Conservation and Recreation (The Applicant) is seeking to redevelop the existing playground, located at the corner of Columbia Road and Farragut Road in Boston, Massachusetts, currently referred to as Lago Playground. The total project area is approximately 2.65 acres and is located west of Pleasure Bay. The property is bound by Farragut Road to the west, William J Day Boulevard to the east and south, and DCR owned green space to the north.

The project includes the regrading of the land, as well as the installation of new and improved playground equipment. The one-story recreational building that currently exists on the site will remain and paved walkways will be integrated to the design in order to access the building.

1.02 PRE-DEVELOPMENT CONDITIONS

The property is currently a park and playground for the local community. The majority of the property is occupied by green spaces, with small concrete pads that lay underneath public benches and short gravel paths which allow entry to the site.

The existing site topography generally slopes to the southeast, towards Pleasure Bay. There are three existing catch basins in the roadway on the south-east side of the site that capture run-off from the park. There are three additional catch basins in the roadway on the south-west of the site where runoff on the west of the park flows.

There are two (2) primary soil classifications identified by the NRCS Web Soil Survey. They are Merrimack-Urban Land Soils (626B) and Udorthents (655). Based on this information, the stormwater runoff calculations have been performed using curve numbers corresponding to Hydraulic Soil Group (HSG) A and an infiltration rate corresponding to a HSG A soil has been used.

1.03 POST-DEVELOPMENT CONDITIONS

While the project qualifies as a redevelopment project under Stormwater Standard 7, the proposed stormwater management system has been designed in a manner that will meet or exceed the provisions of the Department of Environmental Protection (DEP) Stormwater Management Standards for a new construction project with the exception of the pretreatment portion of Standard 6.

To provide for peak flow rate attenuation, stormwater treatment, and recharge to groundwater, drywells are proposed. The drywells will be constructed in the southeast of the park between the two proposed pedestrian walkways.

Specifics of the project's compliance with the Stormwater Standards are discussed in detail in the following sections.

SECTION 2.0

DRAINAGE SUMMARY

2.01 Stormwater Standard 1 – New Stormwater Conveyances

Per Stormwater Standard 1, no new outfalls may discharge untreated stormwater directly to or cause erosion in wetlands or waters of the Commonwealth. No new untreated stormwater discharges are proposed. The drywells will provide stormwater treatment and infiltration prior to overflow of larger, less frequent storm events.

2.02 Stormwater Standard 2 – Stormwater Runoff Rates

Watershed modeling was performed using HydroCAD Stormwater Modeling Software version 10.00, a computer aided design program that combines SCS runoff methodology with standard hydraulic calculations. A model of the site's hydrology was developed for both pre- and post-development conditions to assess the effects of the proposed development on the project site and surrounding areas.

The stormwater management system for the project has been designed such that the post-development conditions result in no increase to peak runoff rates off the project site for the 2, 10, and 100-year, 24-hour storm events, as detailed in the table below.

Peak Flow Discharge Rates

Node 100P – North Total

Storm Event	Pre-Development Peak Discharge Rate (cfs)	Post-Development Peak Discharge Rate (cfs)	Change in Peak Discharge Rate (cfs)
2-Year	0.01	0.00	0.00
10-Year	0.52	0.51	-0.01
100-Year	4.42	4.09	-0.33

As demonstrated in the tables above, the project meets the requirements of Stormwater Standard 2.

2.03 Stormwater Standard 3 – Groundwater Recharge

Four drywells will be constructed in the existing lawn area southeast of the existing recreational building. The drywells will be set in two groups of two with one grouping connected to each of two are drains built off the edge of paved paths. These drywells have been sized to provide the required recharge volume as directed by Stormwater Standard 3. Overall, this project will result in no loss of annual recharge to groundwater as required by Stormwater Standard 3. Refer to Section 6.0 of this Report for groundwater recharge information.

2.04 Stormwater Standard 4 – TSS Removal

The proposed drywells have been sized to hold the required water quality volume and meet the requirements of Stormwater Standard 4. The water quality volume is defined as the runoff volume requiring TSS Removal for the site and is equal to 1-inch of runoff over the total impervious area of the post-development site. The required water quality volume for the project and drywell sizing information are provided in Section 6.0 of this Report

A long-term pollution prevention plan complying with the requirements of Standard 4 is included in Section 4.0 of this Report.

2.05 Stormwater Standard 5 – Land Uses with Higher Potential Pollutant Loads

This standard is not applicable as the Project is not a land use with higher potential pollutant loads (LUHPPL).

2.06 Stormwater Standard 6 – Stormwater Discharges to a Critical Area

The Project property is located adjacent to a conditionally restricted shellfish growing area. Therefore, it has been designed with a 1-inch water quality depth as required by Standard 6.

2.07 Stormwater Standard 7 – Redevelopment Projects

This project qualifies as a redevelopment project under Stormwater Standard 7. However, the project has been designed to fully comply with all Stormwater Standards except the pretreatment standard for Standard 6. Only 25% TSS is removed prior to the infiltration BMP. The infiltration BMP will provide improvement to the stormwater management on the site.

2.08 Stormwater Standard 8 – Sedimentation and Erosion Control Plan

Erosion and sedimentation controls are shown on the Project Plans. Additionally, a Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan is included in Section 3.0 of this Report.

2.09 Stormwater Standard 9 – Long Term Operation and Maintenance Plan

A Long-Term Operation and Maintenance Plan is included in Section 4.0 of this Report.

2.10 Stormwater Standard 10 – Illicit Discharges

There are no known illicit discharges on the project site, and none are proposed. An illicit discharge compliance statement is included in Section 6.0 and will be signed by the Applicant prior to issuance of any permits.

2.11 Conclusion

As a redevelopment project, this has been designed in accordance with DEP Stormwater Management Standards to the maximum extent practicable. Through the construction of the drywells, the project will provide peak rate attenuation, TSS removal, and groundwater recharge as required. With the exception of the pretreatment requirement of Standard 6, all provisions of all other Stormwater Standards are being fully met.

SECTION 3.0

CONSTRUCTION PERIOD POLLUTION PREVENTION AND EROSION AND SEDIMENTATION CONTROL PLAN

3.0 CONSTRUCTION PERIOD POLLUTION PREVENTION AND EROSION AND SEDIMENTATION CONTROL PLAN

This Section specifies requirements and suggestions for implementation of a Stormwater Pollution Prevention Plan (SWPPP) for **Marine Park Playground in Boston, MA**. The SWPPP shall be provided and maintained on-site by the Contractor(s) during all construction activities. The SWPPP shall be updated as required to reflect changes to construction activity.

The stormwater pollution prevention measures contained in the SWPPP shall be at least the minimum required by Local Regulations. The SWPPP shall include provisions for, but not be limited to, the following:

1. Construction Trailers
2. Lay-down Areas
3. Equipment Storage Areas
4. Stockpile Areas
5. Disturbed Areas

The cost of any fines, construction delays and remedial actions resulting from the Contractor's failure to comply with all provisions of applicable regulations shall be paid for by the Contractor at no additional cost to the Owner.

Erosion and Sedimentation Control

The Contractor shall be solely responsible for erosion and sedimentation control at the site. The Contractor shall utilize a system of operations and all necessary erosion and sedimentation control measures, even if not specified herein or elsewhere, to minimize erosion damage at the site to prevent the migration of sediment into environmentally sensitive areas. Environmentally sensitive areas include all wetland resource areas within, and downstream of, the site, and those areas of the site that are not being altered.

Erosion and sedimentation control shall be in accordance with this Section, the design drawings, and the following:

- "National Pollutant Discharge Elimination System General Permit for Discharges from Construction Activities (EPA Construction General Permit 2022).
- Massachusetts Stormwater Management Policy Handbook issued by the Massachusetts Department of Environmental Protection, January 2008.
- Massachusetts Erosion and Sediment Control Guidelines for Urban and Suburban Areas, A Guide for Planners, Designers and Municipal Officials, March 1997.

The BMP's presented herein should be used as a guide for erosion and sedimentation control and are not intended to be considered specifications for construction. The most important BMP is maintaining a rapid construction process, resulting in prompt stabilization of surfaces, thereby reducing erosion potential. Given the primacy of rapid construction, these guidelines have been designed to allow construction to progress with essentially no hindrance by the erosion control methods prescribed. These guidelines have also been designed with sufficient flexibility to allow the Contractor to modify the suggested methods as required to suit seasonal, atmospheric, and site-specific physical constraints.

Another important BMP is the prevention of concentrated water flow. Sheet flow does not have the erosive potential of a concentrated rivulet. These guidelines recommend construction methods that allow localized erosion control and a system of construction, which inhibits the development of shallow concentrated flow. These BMP's shall be maintained throughout the construction process.

CONTACT INFORMATION AND RESPONSIBLE PARTIES

The following is a list of all project-associated parties:

Owner
Department of Conservation & Recreation
251 Causeway St. Suite 9
Boston, MA 02114

Contractor
To be determined

Environmental Consultant
BSC Group, Inc.
803 Summer Street
Boston, MA 02127

Contact: Dominic Rinaldi, P.E.
Phone: (617) 896–4300
Email: drinaldi@bscgroup.com

3.1 Existing Site and Soil Conditions

The property is currently a park and playground for the local community. The majority of the property is occupied by green spaces, with small concrete pads that lay underneath public benches and short gravel paths which allow entry to the site.

The existing site topography generally slopes to the southeast, towards Pleasure Bay. There are three existing catch basins in the roadway on the south-east side of the site that capture run-off from the park. There are three additional catch basins in the roadway on the south-west of the site where runoff on the west of the park flows.

There are two (2) primary soil classifications identified by the NRCS Web Soil Survey. They are Merrimack-Urban Land Soils (626B) and Udorthents (655). Based on this information, the stormwater runoff calculations have been performed using curve numbers corresponding to Hydraulic Soil Group (HSG) A and an infiltration rate corresponding to a HSG A soil has been used.

3.2 Project Description

The project includes the regrading of the land, as well as the installation of new and improved playground equipment. The one-story recreational building that currently exists on the site will remain and paved walkways will be integrated to the design in order to access the building.

To provide for peak flow rate attenuation, stormwater treatment, and recharge to groundwater, drywells are proposed. The drywells will be constructed in the southeast of the park between the two proposed pedestrian walkways.

3.3 Potential Sources of Pollution

Any project site activities that have the potential to add pollutants to runoff are subject to the requirements of the SWPPP. Listed below are a description of potential sources of pollution from both sedimentation to Stormwater runoff, and pollutants from sources other than sedimentation.

Potential Sources of Sediment to Stormwater Runoff

Potential Source	Activities/Comments
Construction Site Entrance and Site Vehicles	Vehicles leaving the site can track soils onto public roadways. Site Vehicles can readily transport exposed soils throughout the site and off-site areas.

Grading Operations	Exposed soils have the potential for erosion and discharge of sediment to off-site areas.
Material Excavation, Relocation, and Stockpiling	Stockpiling of materials during excavation and relocation of soils can contribute to erosion and sedimentation. In addition, fugitive dust from stockpiled material, vehicle transport and site grading can be deposited in wetlands and waterway.
Landscaping Operations	Landscaping operations specifically associated with exposed soils can contribute to erosion and sedimentation. Hydroseeding, if not properly applied, can runoff to adjacent wetlands and waterways.

Potential Pollutants and Sources, other than Sediment to Stormwater Runoff

Potential Source	Activities/Comments
Staging Areas and Construction Vehicles	Vehicle refueling, minor equipment maintenance, sanitary facilities and hazardous waste storage
Materials Storage Area	General building materials, solvents, adhesives, paving materials, paints, aggregates, trash, etc.
Construction Activities	Construction, paving, curb/gutter installation, concrete pouring/mortar/stucco

3.4 Erosion and Sedimentation Control Best Management Practices

All construction activities will implement Best Management Practices (BMP's) in order to minimize overall site disturbance and impacts to the site's natural features. Please refer to the following sections for a detailed description of site-specific BMP's. In addition, an Erosion and Sedimentation Control Plan is provided in the Site Plans.

3.5 Timetable and Construction Phasing

This section provides the Owner and Contractor with a suggested order of construction that shall minimize erosion and the transport of sediments. The individual objectives of the construction techniques described herein shall be considered an integral component of the project design intent of each project phase. The construction sequence is not intended to prescribe definitive construction methods and should not be interpreted as a construction specification document. However, the Contractor shall follow the general construction phase principles provided below:

- Protect and maintain existing vegetation wherever possible.
- Minimize the area of disturbance.
- To the extent possible, route unpolluted flows around disturbed areas.
- Install mitigation devices as early as possible.
- Minimize the time disturbed areas are left unstabilized.
- Maintain siltation control devices in proper condition.
- The contractor should use the suggested sequence and techniques as a general guide and modify the suggested methods and procedures as required to best suit seasonal, atmospheric, and site-specific physical constraints for the purpose of minimizing the environmental impact of construction.

3.6 Site Stabilization

Grubbing Stripping and Grading

- Erosion control devices shall be in place as shown on the design plans before grading commences.
- Stripping shall be done in a manner, which will not concentrate runoff. If precipitation is expected, earthen berms shall be constructed around the area being stripped, with a silt sock, silt fence or haybale dike situated in an arc at the low point of the berm.

- If intense precipitation is anticipated, silt socks, haybales, dikes and /or silt fences shall be used as required to prevent erosion and sediment transport. The materials required shall be stored on site at all time.
- If water is required for soil compaction, it shall be added in a uniform manner that does not allow excess water to flow off the area being compacted.
- Dust shall be held at a minimum by sprinkling exposed soil with an appropriate amount of water.

Maintenance of Disturbed Surfaces

- Runoff shall be diverted from disturbed side slopes in both cut and fill.
- Mulching may be used for temporary stabilization.
- Silt sock, haybale or silt fences shall be set where required to trap products of erosion and shall be maintained on a continuing basis during the construction process.

Loaming and Seeding

- Loam shall not be placed unless it is to be seeded directly thereafter.
- All disturbed areas shall have a minimum of 4" of loam placed before seeded and mulched.
- Consideration shall be given to hydro-mulching, especially on slopes in excess of 3 to 1.
- Loamed and seeded slopes shall be protected from washout by mulching or other acceptable slope protection until vegetation begins to grow.

Stormwater Collection System Installation

- The Stormwater drainage system shall be installed from the downstream end up and in a manner which will not allow runoff from disturbed areas to enter pipes.
- Excavation for the drainage system shall not be left open when rainfall is expected overnight. If left open under other circumstances, pipe ends shall be closed by a staked board or by an equivalent method.
- All catch basin openings shall be covered by a silt bag between the grate and the frame or protected from sediment by silt fence surrounding the catch basin grate.

Completion of Paved Areas

- During the placement of sub-base and pavement, the entrance to the Stormwater drainage systems shall be sealed when rain is expected. When these entrances are closed, consideration must be given to the direction of run-off and measures shall be undertaken to minimize erosion and to provide for the collection of sediment.
- In some situations, it may be necessary to keep catch basins open.
- Appropriate arrangements shall be made downstream to remove all sediment deposition.

Stabilization of Surfaces

- Stabilization of surfaces includes the placement of pavement, rip-rap, wood bark mulch and the establishment of vegetated surfaces.
- Upon completion of construction, all surfaces shall be stabilized even though it is apparent that future construction efforts will cause their disturbance.
- Vegetated cover shall be established during the proper growing season and shall be enhanced by soil adjustment for proper pH, nutrients and moisture content.
- Surfaces that are disturbed by erosion processes or vandalism shall be stabilized as soon as possible.
- Areas where construction activities have permanently or temporarily ceased shall be stabilized within 14 days from the last construction activity, except when construction activity will resume within 21 days (e.g., the total time period that construction activity is temporarily ceased is less than 21 days).
- Hydro-mulching of grass surfaces is recommended, especially if seeding of the surfaces is required outside the normal growing season.
- Hay mulch is an effective method of temporarily stabilizing surfaces, but only if it is properly secured by branches, weighted snow fences or weighted chicken wire.

3.7 Temporary Structural Erosion Control Measures

Temporary erosion control measures serve to minimize construction-associated impacts to wetland resource and undisturbed areas. Please refer to the following sections for a description of temporary erosion control measures implemented as part of the project and this sample SWPPP.

3.7.1 Silt Socks and Silt Fencing

The siltation barriers will demarcate the limit of work, form a work envelope and provide additional assurance that construction equipment will not enter the adjacent wetlands or undisturbed portions of the site. All barriers will remain in place until disturbed areas are stabilized.

3.7.2 Temporary Stormwater Diversion Swale

A temporary diversion swale is an effective practice for temporarily diverting stormwater flows and to reduce stormwater runoff velocities during storm events. The swale channel can be installed before infrastructure construction begins at the site, or as needed throughout the construction process. The diversion swale should be routinely compacted or seeded to minimize the amount of exposed soil.

3.7.3 Dewatering Basins

Dewatering may be required during stormwater system, foundation construction and utility installation. Should the need for dewatering arise, groundwater will be pumped directly into a temporary settling basin, which will act as a sediment trap during construction. All temporary settling basins will be located within close proximity of daily work activities. Prior to discharge, all groundwater will be treated by means of the settling basin or acceptable substitute. Discharges from sediment basins will be free of visible floating, suspended and settleable solids that would impair the functions of a wetland or degrade the chemical composition of the wetland resource area receiving ground or surface water flows and will be to the combined system.

3.7.4 Material Stockpiling Locations

Piping and trench excavate associated with the subsurface utility work will be contained with a single row of silt socks and/or haybales.

3.8 Permanent Structural Erosion Control Measures

Permanent erosion control measures serve to minimize post-construction impacts to wetland resource areas and undisturbed areas. Please refer to the Site Plans and Long-Term Operations and Maintenance Plan for a description of permanent erosion control measures implemented as part of the project.

3.9 Good Housekeeping Best Management Practices

3.9.1 Street Sweeping

All public street adjacent to the Project property shall be swept clean on a daily basis during construction of any soils tracked onto it from the Project site. All sweepings shall be disposed of off-site in accordance with all applicable laws and regulations.

3.9.2 Material Handling and Waste Management

Solid waste generation during the construction period will be primarily construction debris. The debris will include scrap lumber (used forming and shoring pallets and other shipping containers), waste packaging materials (plastic sheeting and cardboard), scrap cable and wire, roll-off containers (or dumpsters) and will be removed by a contract hauler to a properly licensed landfill. The roll-off containers will be covered with a properly secured tarp before the hauler exits the site. In addition to construction debris, the construction work force will generate some amount of household-type wastes (food packing, soft drink containers, and other paper). Trash containers for these wastes will be located around the site and will be emptied regularly so as to prevent wind-blown litter. This waste will also be removed by a contract hauler.

All hazardous waste material such as oil filters, petroleum products, paint and equipment maintenance fluids will be stored in structurally sound and sealed shipping containers in the hazardous-materials storage area and segregated from other non-waste materials. Secondary containment will be provided for all materials in the hazardous materials storage area and will consist of commercially available spill pallets. Additionally, all hazardous materials will be disposed of in accordance with federal, state and municipal regulations.

A temporary sanitary facility (portable toilet) will be provided at the site in the combined staging area. The toilet will be away from a concentrated flow path and traffic flow and will have collection pans underneath as secondary treatment. All sanitary waste will be collected from an approved party at a minimum of two times per week.

3.9.3 Designated Washout Areas

Designated temporary, below-ground concrete washout areas will be constructed, as required, to minimize the pollution potential associated with concrete, paint, stucco, mixers etc. Signs will, if required, be posted marking the location of the washout area to ensure that concrete equipment operators use the proper facility. Concrete pours will not be conducted during or before an anticipated precipitation event. All excess concrete and concrete washout slurries from the concrete mixer trucks and chutes will be discharged to the washout area or hauled off-site for disposal.

3.9.4 Equipment/Vehicle Maintenance and Fueling Areas

Several types of vehicles and equipment will be used on-site throughout the project including graders, scrapers, excavators, loaders, paving equipment, rollers, trucks and trailers, backhoes and forklifts. All major equipment/vehicle fueling and maintenance will be performed off-site. When vehicle fueling must occur on-site, the fueling activity will occur in the staging area. Only minor equipment maintenance will occur on-site. Vehicular refueling or maintenance shall not be allowed within any protected wetland resource areas. All equipment fluids generated from maintenance activities will be disposed of into designated drums stored on spill pallets. Absorbent, spill-cleanup materials and spill kits will be available at the combined staging and materials storage area. Drip pans will be placed under all equipment receiving maintenance and vehicles and equipment parked overnight.

3.9.5 Equipment/Vehicle Wash down Area

All equipment and vehicle washing will be performed off-site.

3.9.6 Spill Prevention Plan

A spill containment kit will be kept on-site in the Contractor's trailer and/or the designated staging area throughout the duration of construction. Should there be an accidental release of petroleum product into a resource area, the appropriate agencies will be immediately notified.

3.9.7 Inspections

Maintenance of existing and proposed BMP's to address stormwater management facilities during construction is an on-going process. The purpose of the inspections is to observe all sources of stormwater or non-stormwater discharge as identified in the SWPPP as well as the status of the receiving waters and fulfill the requirements of the Order of Conditions. The following sections describe the appropriate inspection measures to adequately implement the project's SWPPP.

<u>Inspection Personnel</u>

The owner's appointed representative will be responsible for performing regular inspections of erosion controls and ordering repairs as necessary.

<u>Inspection Frequency</u>

Inspections will be performed by qualified personnel as required by the Order of Conditions, but at a minimum once every 7 days.

3.10 SWPPP Inspection and Maintenance Report

Inspection report shall be made in a form reviewed and approved by the Owner and Engineer.

SECTION 4.0

LONG-TERM POLLUTION PREVENTION & OPERATION AND MAINTENANCE PLAN

4.0 LONG-TERM POLLUTION PREVENTION & OPERATION AND MAINTENANCE PLAN

As required by Stormwater Standard 4, this Long-Term Pollution Prevention Plan has been developed for source control and pollution prevention at the site after construction.

MAINTENANCE RESPONSIBILITY

Ensuring that the provisions of the Long-Term Pollution Prevention Plan are followed will be the responsibility of The Applicant, the Department of Conservation and Recreation.

GOOD HOUSEKEEPING PRACTICES

The site to be kept clean of trash and debris at all times. Trash, junk, etc. is not to be left outside.

VEHICLE WASHING CONTROLS

The following BMP's, or equivalent measures, methods or practices are required if you are engaged in vehicle washing and/or steam cleaning:

It is allowable to rinse down the body or a vehicle, including the bed of a truck, with just water without doing any wash water control BMP's.

If you wash (with mild detergents) on an area that infiltrates water, such as gravel, grass, or loose soil, it is acceptable to let the wash water infiltrate as long as you only wash the body of vehicles.

However, if you wash on a paved area and use detergents or other cleansers, or if you wash/rinse the engine compartment or the underside of vehicles, you must take the vehicles to a commercial vehicle wash.

REQUIREMENTS FOR ROUTINE INSPECTIONS AND MAINTENANCE OF STORMWATER BMPS

All stormwater BMPs are to be inspected and maintain as follows;

Silt Socks, Straw Wattles, and Other Temporary Measures

The temporary erosion control measures will be installed up gradient of any wetland resource area where any disturbance or alteration might otherwise allow for erosion or sedimentation. They will be regularly inspected to ensure that they are functioning adequately. Additional supplies of these temporary measures will be stockpiled on site for any immediate needs or routine replacement.

Area Drains

Regular maintenance is essential. Area drains remain effective at removing pollutants only if they are cleaned out frequently. Inspect or clean area drains at least two times per year at the end of the foliage and snow removal seasons. Sediments must also be removed two times per year or whenever the depth of the deposits in the area drains sump is greater than or equal to one half the depth form the bottom of the invert of the lowest pipe in the area drain.

Drywells

Maintenance is required for the proper operation of the underground drywells. Drywells are prone to failure due to clogging if the upstream BMP's are not maintained.

After construction, the drywell system shall be inspected after every major storm for the first few months to ensure proper stabilization and function. Water levels shall be recorded over several days to check the drainage of the systems. It is recommended that a logbook be maintained showing the depth of water in the drywell systems at each observation in order to determine the rate at which the system dewaters after runoff producing storm events. Once the performance characteristics of the drywells have been verified, the monitoring schedule can be reduced to an annual basis, unless the performance data suggests that a more frequent schedule is required.

Preventive maintenance on the drywell system shall be performed at least twice a year, and sediment shall be removed from any and all pretreatment and collection structures. Sediment shall be removed when deposits approach within six inches of the invert heights of connecting pipes between unit rows, or in sumped inlet structures. Ponded water inside

the systems (as visible from the access ports) that remains after several days most likely indicates that the bottom of the systems are clogged and will require cleaning or replacement.

The system is designed with a defined surface grate that can be used as an observation well and as access for a vacuum truck tube for use in removing sediment.

PROVISIONS FOR MAINTENANCE OF LAWNS, GARDENS AND OTHER LANDSCAPE AREAS

All lawns, trees, and landscaped areas will be maintained in accordance with the Department of Conservation and Recreation's standard practices.

PROVISIONS FOR SOLID WASTE MANAGEMENT (SITE TRASH)

Trash will be placed in trash receptacles and the Owner will make provisions for its regular and timely removal.

SNOW DISPOSAL AND PLOWING PLANS

The purpose of the snow and snowmelt management plan is to provide guidelines regarding snow disposal site selection, site preparation and maintenance that are acceptable to the Department of Environmental Protection. For the areas that require snow removal, snow storage onsite will largely be accomplished by using pervious areas along the shoulder of the paved areas as windrowed by plows.

- Avoid dumping of snow into any water body, including rivers, ponds, or wetlands. In addition to water quality impacts and flooding, snow disposed of in open water can cause navigational hazards when it freezes into ice blocks.
- Avoid disposing of snow on top of storm drain catch basins or in stormwater basins. Snow combined with sand and debris may block a storm drainage system, causing localized flooding. A high volume of sand, sediment, and litter released from melting snow also may be quickly transported through the system into surface water.
- In significant storm events, the melting or off-site trucking of snow may be implemented. These activities shall be conducted in accordance with all local, state and federal regulations.
- Snow shall be removed from the areas around on-site fire-hydrants to maintain emergency access to hydrants at all times. Removable flags or markers should be placed on hydrants to allow snow removal crews to more easily locate hydrants and not damage them with plows or other snow removal equipment.

WINTER ROAD SALT AND/OR SAND USE AND STORAGE RESTRICTIONS

The applicant will be responsible for sanding and salting the site. No storage on site.

TRAINING OF STAFF OR PERSONNEL INVOLVED WITH IMPLEMENTING LONG-TERM POLLUTION PREVENTION PLAN

The Long-Term Pollution Prevention Plan is to be implemented by property owner of the site. Trained and, if required, licensed Professionals are to be hired by the owner as applicable to implement the Long-Term Pollution Prevention Plan.

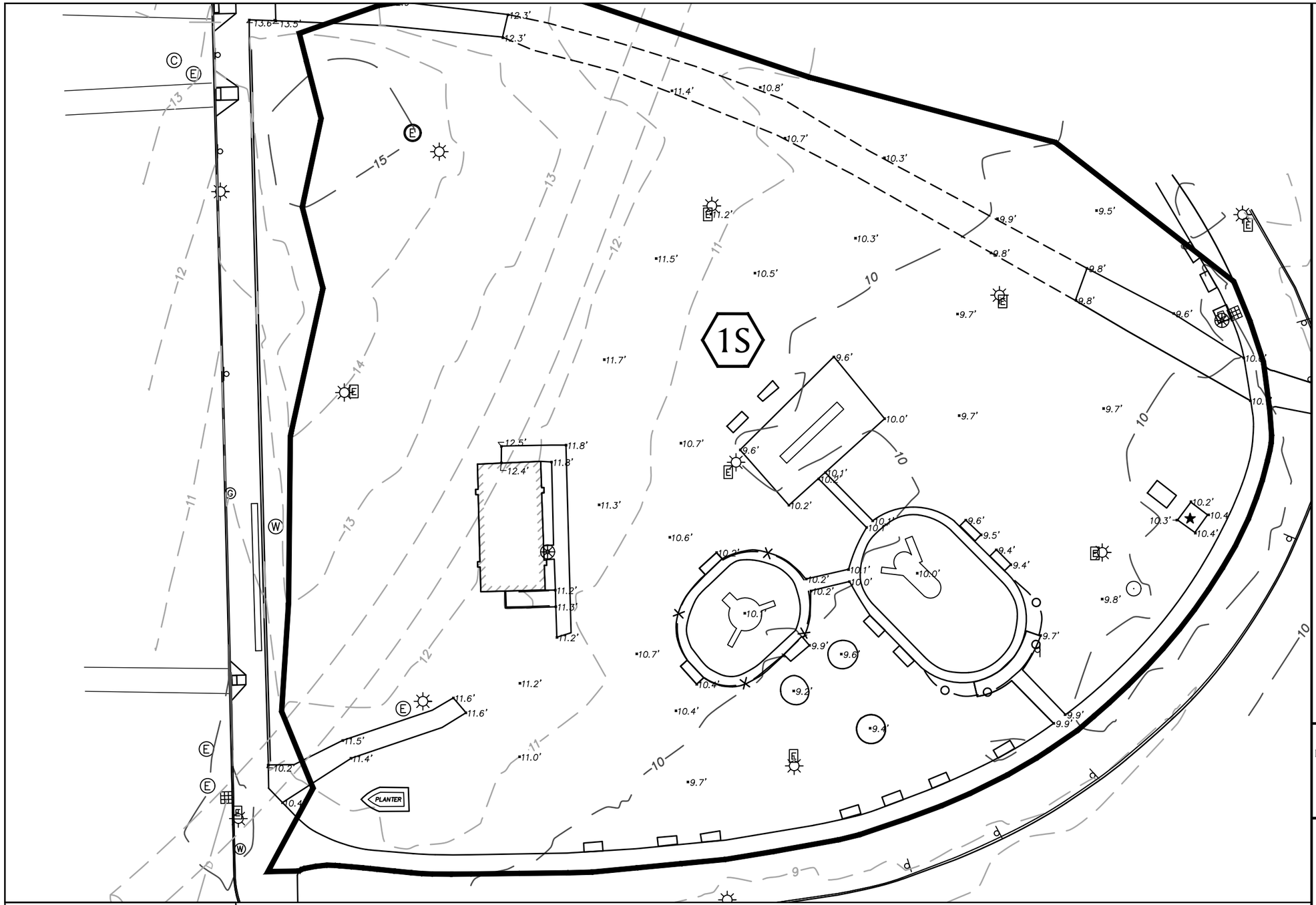
LIST OF EMERGENCY CONTACTS FOR IMPLEMENTING LONG-TERM POLLUTION PREVENTION PLAN

The applicant will be required to implement the Long-Term Pollution Prevention Plan and will create and maintain a list of emergency contacts.

SECTION 5.0

HYDROLOGY CALCULATIONS

5.01 EXISTING WATERSHED PLAN



MARINE PARK PLAYGROUND

FARRAGUT ROAD

BOSTON
MASSACHUSETTS
(SUFFOLK COUNTY)

EXISTING WATERSHED PLAN

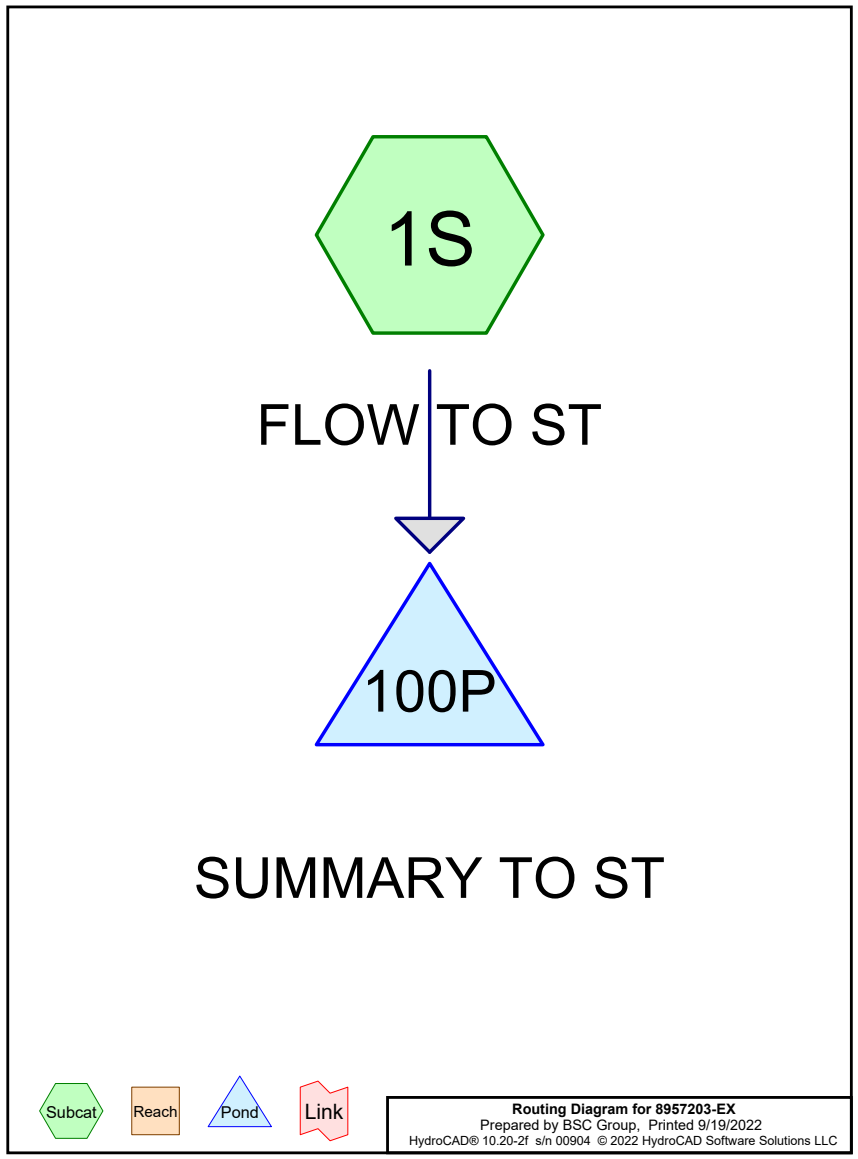
September 14, 2022

PREPARED FOR:
DEPARTMENT OF CONSERVATION & RECREATION
251 CAUSEWAY ST. SUITE 9
Boston, MA 02114

BSC GROUP
803 Summer Street
Boston, Massachusetts
02127
617 896 4300

Job No.: 89572.03 Date: 2022-09-15
Scale: 1" = 40' Revised:
Dwg No: 8957203-EXW
File: PRJ-BOS/89572.03/C/ DD/89572.03-EXW

5.02 EXISTING HYDROLOGY CALCULATIONS (HYDROCAD™ PRINTOUTS)



Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	2-year	Type III 24-hr		Default	24.00	1	3.26	2
2	10-year	Type III 24-hr		Default	24.00	1	5.15	2
3	100-year	Type III 24-hr		Default	24.00	1	8.15	2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
2.267	39	>75% Grass cover, Good, HSG A (1S)
0.053	96	Gravel surface, HSG A (1S)
0.139	76	Playground Surface, HSG A (1S)
0.168	98	Unconnected pavement, HSG A (1S)
0.032	98	Unconnected roofs, HSG A (1S)
2.658	**47**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
2.658	HSG A	1S
0.000	HSG B	
0.000	HSG C	
0.000	HSG D	
0.000	Other	
2.658		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
2.267	0.000	0.000	0.000	0.000	2.267	>75% Grass cover, Good	1S
0.053	0.000	0.000	0.000	0.000	0.053	Gravel surface	1S
0.139	0.000	0.000	0.000	0.000	0.139	Playground Surface	1S
0.168	0.000	0.000	0.000	0.000	0.168	Unconnected pavement	1S
0.032	0.000	0.000	0.000	0.000	0.032	Unconnected roofs	1S
2.658	**0.000**	**0.000**	**0.000**	**0.000**	**2.658**	**TOTAL AREA**	

Time span=0.00-24.00 hrs, dt=0.01 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: FLOW TO ST Runoff Area=115,797 sf 7.51% Impervious Runoff Depth>0.04"
Tc=6.0 min UI Adjusted CN=44 Runoff=0.01 cfs 0.008 af

Pond 100P: SUMMARY TO ST Inflow=0.01 cfs 0.008 af
Primary=0.01 cfs 0.008 af

Total Runoff Area = 2.658 ac Runoff Volume = 0.008 af Average Runoff Depth = 0.04"
92.49% Pervious = 2.459 ac 7.51% Impervious = 0.200 ac

Summary for Subcatchment 1S: FLOW TO ST

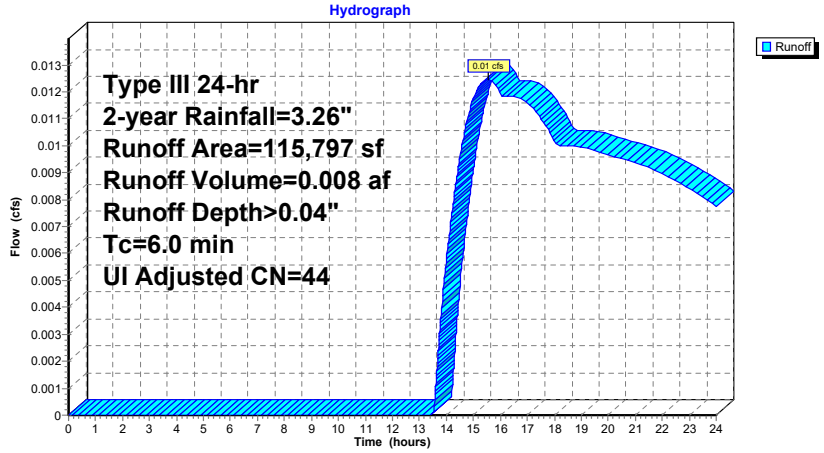
Runoff = 0.01 cfs @ 15.54 hrs, Volume= 0.008 af, Depth> 0.04"
Routed to Pond 100P : SUMMARY TO ST

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 2-year Rainfall=3.26"

	Area (sf)	CN	Adj	Description
	7,314	98		Unconnected pavement, HSG A
	1,378	98		Unconnected roofs, HSG A
	2,307	96		Gravel surface, HSG A
*	6,063	76		Playground Surface, HSG A
	98,735	39		>75% Grass cover, Good, HSG A
	115,797	47	44	Weighted Average, UI Adjusted
	107,105			92.49% Pervious Area
	8,692			7.51% Impervious Area
	8,692			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, min TC**

Subcatchment 1S: FLOW TO ST

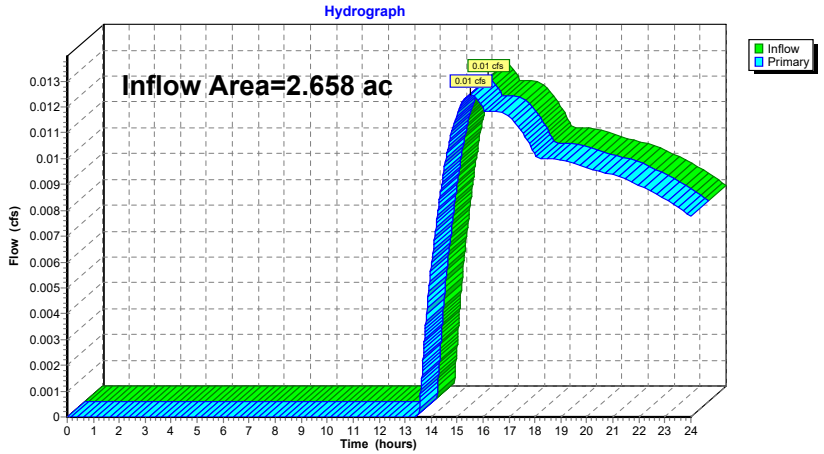


Summary for Pond 100P: SUMMARY TO ST

Inflow Area = 2.658 ac, 7.51% Impervious, Inflow Depth > 0.04" for 2-year event
Inflow = 0.01 cfs @ 15.54 hrs, Volume= 0.008 af
Primary = 0.01 cfs @ 15.54 hrs, Volume= 0.008 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

Pond 100P: SUMMARY TO ST



Time span=0.00-24.00 hrs, dt=0.01 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: FLOW TO ST Runoff Area=115,797 sf 7.51% Impervious Runoff Depth>0.44"
Tc=6.0 min UI Adjusted CN=44 Runoff=0.52 cfs 0.098 af

Pond 100P: SUMMARY TO ST Inflow=0.52 cfs 0.098 af
Primary=0.52 cfs 0.098 af

Total Runoff Area = 2.658 ac Runoff Volume = 0.098 af Average Runoff Depth = 0.44"
92.49% Pervious = 2.459 ac 7.51% Impervious = 0.200 ac

Summary for Subcatchment 1S: FLOW TO ST

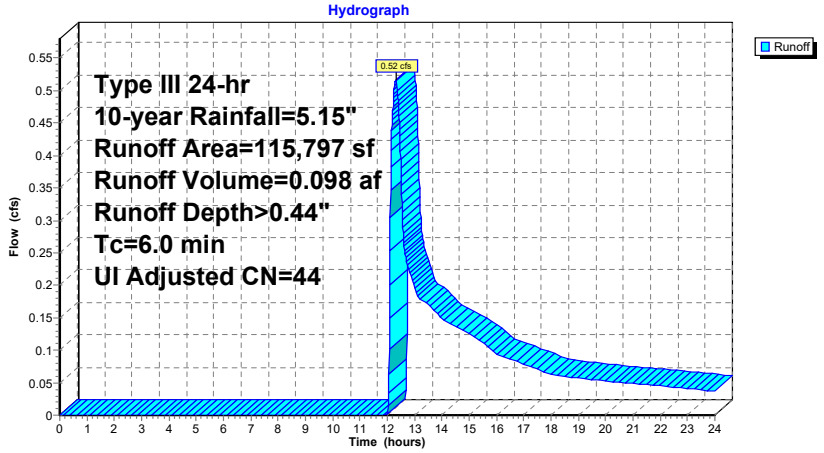
Runoff = 0.52 cfs @ 12.31 hrs, Volume= 0.098 af, Depth> 0.44"
Routed to Pond 100P : SUMMARY TO ST

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-year Rainfall=5.15"

	Area (sf)	CN	Adj	Description
	7,314	98		Unconnected pavement, HSG A
	1,378	98		Unconnected roofs, HSG A
	2,307	96		Gravel surface, HSG A
*	6,063	76		Playground Surface, HSG A
	98,735	39		>75% Grass cover, Good, HSG A
	115,797	47	44	Weighted Average, UI Adjusted
	107,105			92.49% Pervious Area
	8,692			7.51% Impervious Area
	8,692			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, min TC**

Subcatchment 1S: FLOW TO ST

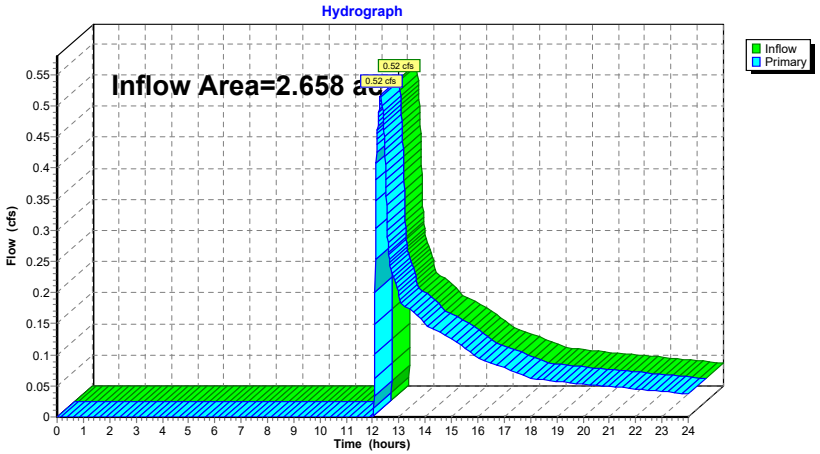


Summary for Pond 100P: SUMMARY TO ST

Inflow Area = 2.658 ac, 7.51% Impervious, Inflow Depth > 0.44" for 10-year event
Inflow = 0.52 cfs @ 12.31 hrs, Volume= 0.098 af
Primary = 0.52 cfs @ 12.31 hrs, Volume= 0.098 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

Pond 100P: SUMMARY TO ST



Time span=0.00-24.00 hrs, dt=0.01 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: FLOW TO ST Runoff Area=115,797 sf 7.51% Impervious Runoff Depth>1.71"
Tc=6.0 min UI Adjusted CN=44 Runoff=4.42 cfs 0.379 af

Pond 100P: SUMMARY TO ST Inflow=4.42 cfs 0.379 af
Primary=4.42 cfs 0.379 af

Total Runoff Area = 2.658 ac Runoff Volume = 0.379 af Average Runoff Depth = 1.71"
92.49% Pervious = 2.459 ac 7.51% Impervious = 0.200 ac

Summary for Subcatchment 1S: FLOW TO ST

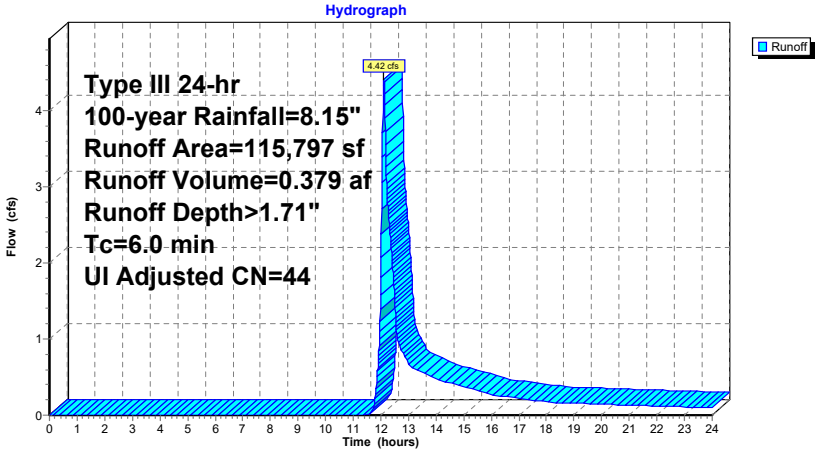
Runoff = 4.42 cfs @ 12.10 hrs, Volume= 0.379 af, Depth> 1.71"
Routed to Pond 100P : SUMMARY TO ST

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-year Rainfall=8.15"

	Area (sf)	CN	Adj	Description
	7,314	98		Unconnected pavement, HSG A
	1,378	98		Unconnected roofs, HSG A
	2,307	96		Gravel surface, HSG A
*	6,063	76		Playground Surface, HSG A
	98,735	39		>75% Grass cover, Good, HSG A
	115,797	47	44	Weighted Average, UI Adjusted
	107,105			92.49% Pervious Area
	8,692			7.51% Impervious Area
	8,692			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, min TC**

Subcatchment 1S: FLOW TO ST

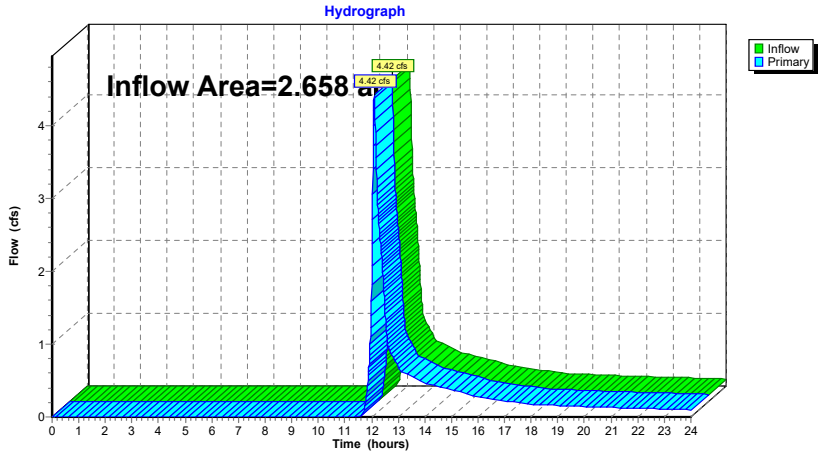


Summary for Pond 100P: SUMMARY TO ST

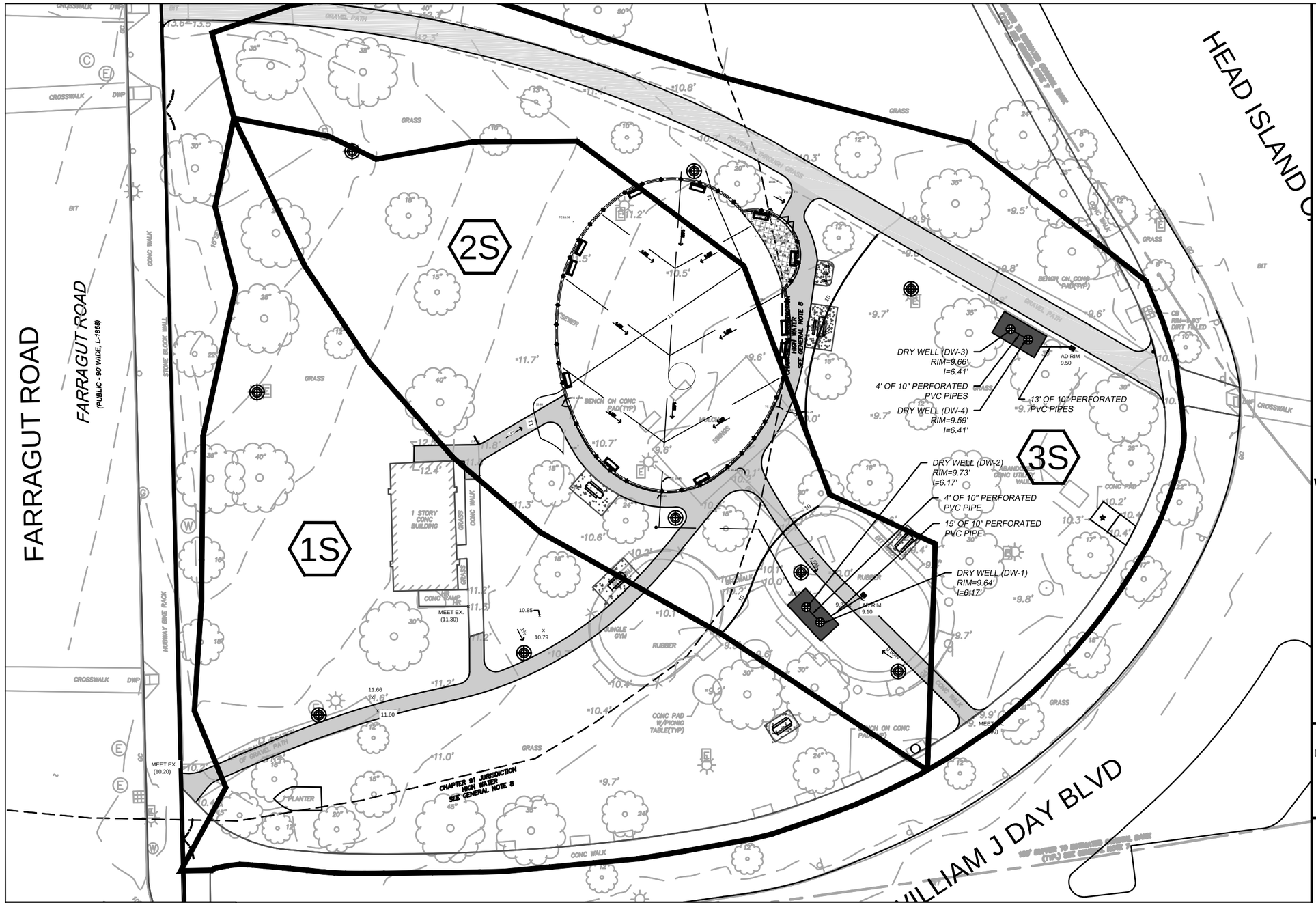
Inflow Area = 2.658 ac, 7.51% Impervious, Inflow Depth > 1.71" for 100-year event
Inflow = 4.42 cfs @ 12.10 hrs, Volume= 0.379 af
Primary = 4.42 cfs @ 12.10 hrs, Volume= 0.379 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

Pond 100P: SUMMARY TO ST



5.03 PROPOSED WATERSHED PLAN



LEGEND

1S — SUBCATCHMENT

SUBCATCHMENT BOUNDARY

SCALE: 1" = 40'

0 20 40 80 FEET

MARINE PARK PLAYGROUND

FARRAGUT ROAD

BOSTON MASSACHUSETTS

(SUFFOLK COUNTY)

PROPOSED WATERSHED PLAN

September 14, 2022

PREPARED FOR:

DEPARTMENT OF CONSERVATION & RECREATION

251 CAUSEWAY ST. SUITE 9

Boston, MA 02114

BSC GROUP
803 Summer Street
Boston, Massachusetts
02127
617 896 4300

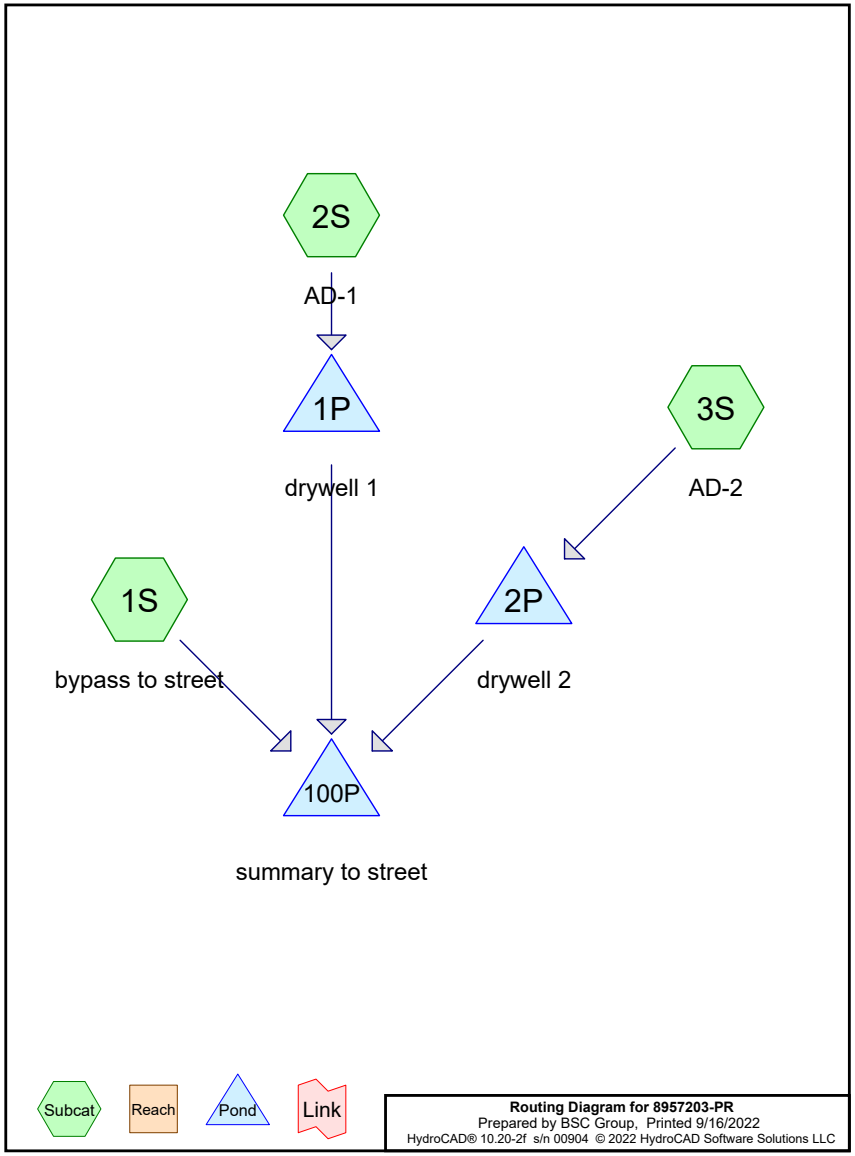
Job No.: 89572.03 Date: 2022-09-15

Scale: 1" = 40' Revised:

Dwg No: 8957203-PRW

File: PRJ-BOS/89572.03/C/_DD/89572.03-PRW

5.04 PROPOSED HYDROLOGY CALCULATIONS (HYDROCAD™ PRINTOUTS)



Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	2-year	Type III 24-hr		Default	24.00	1	3.26	2
2	10-year	Type III 24-hr		Default	24.00	1	5.15	2
3	100-year	Type III 24-hr		Default	24.00	1	8.15	2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
2.176	39	>75% Grass cover, Good, HSG A (1S, 2S, 3S)
0.223	76	Playground Surface, HSG A (2S, 3S)
0.229	98	Unconnected pavement, HSG A (1S, 2S, 3S)
0.032	98	Unconnected roofs, HSG A (1S)
2.658	**48**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
2.658	HSG A	1S, 2S, 3S
0.000	HSG B	
0.000	HSG C	
0.000	HSG D	
0.000	Other	
2.658		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
2.176	0.000	0.000	0.000	0.000	2.176	>75% Grass cover, Good	1S, 2S, 3S
0.223	0.000	0.000	0.000	0.000	0.223	Playground Surface	2S, 3S
0.229	0.000	0.000	0.000	0.000	0.229	Unconnected pavement	1S, 2S, 3S
0.032	0.000	0.000	0.000	0.000	0.032	Unconnected roofs	1S
2.658	**0.000**	**0.000**	**0.000**	**0.000**	**2.658**	**TOTAL AREA**	

Time span=0.00-24.00 hrs, dt=0.01 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: bypass to street Runoff Area=41,432 sf 8.84% Impervious Runoff Depth>0.02"
Tc=6.0 min UI Adjusted CN=42 Runoff=0.00 cfs 0.001 af

Subcatchment2S: AD-1 Runoff Area=32,656 sf 8.20% Impervious Runoff Depth>0.16"
Tc=6.0 min UI Adjusted CN=51 Runoff=0.03 cfs 0.010 af

Subcatchment3S: AD-2 Runoff Area=41,716 sf 11.99% Impervious Runoff Depth>0.04"
Tc=6.0 min UI Adjusted CN=44 Runoff=0.00 cfs 0.003 af

Pond 1P: drywell 1 Peak Elev=1.45' Storage=87 cf Inflow=0.03 cfs 0.010 af
Discarded=0.01 cfs 0.010 af Primary=0.00 cfs 0.000 af Outflow=0.01 cfs 0.010 af

Pond 2P: drywell 2 Peak Elev=0.03' Storage=2 cf Inflow=0.00 cfs 0.003 af
Discarded=0.00 cfs 0.003 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.003 af

Pond 100P: summary to street Inflow=0.00 cfs 0.001 af
Primary=0.00 cfs 0.001 af

Total Runoff Area = 2.658 ac Runoff Volume = 0.015 af Average Runoff Depth = 0.07"
90.21% Pervious = 2.398 ac 9.79% Impervious = 0.260 ac

Summary for Subcatchment 1S: bypass to street

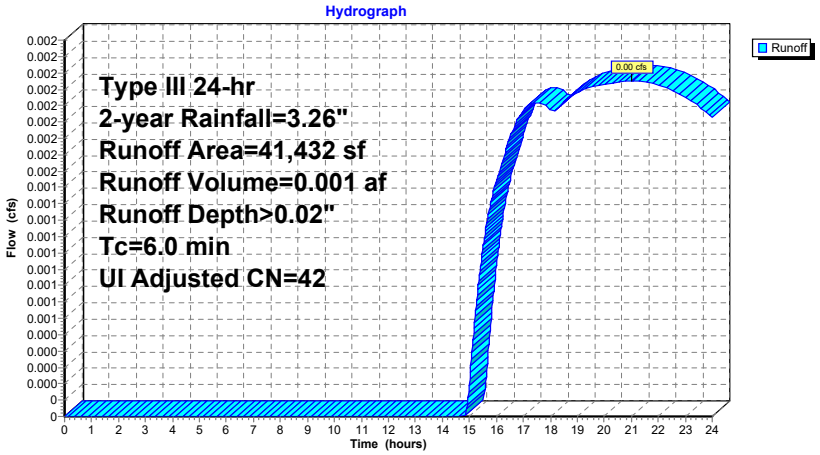
Runoff = 0.00 cfs @ 21.02 hrs, Volume= 0.001 af, Depth> 0.02"
Routed to Pond 100P : summary to street

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 2-year Rainfall=3.26"

Area (sf)	CN	Adj	Description
2,282	98		Unconnected pavement, HSG A
1,379	98		Unconnected roofs, HSG A
37,771	39		>75% Grass cover, Good, HSG A
41,432	44	42	Weighted Average, UI Adjusted
37,771			91.16% Pervious Area
3,661			8.84% Impervious Area
3,661			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, min. Tc**

Subcatchment 1S: bypass to street



Summary for Subcatchment 2S: AD-1

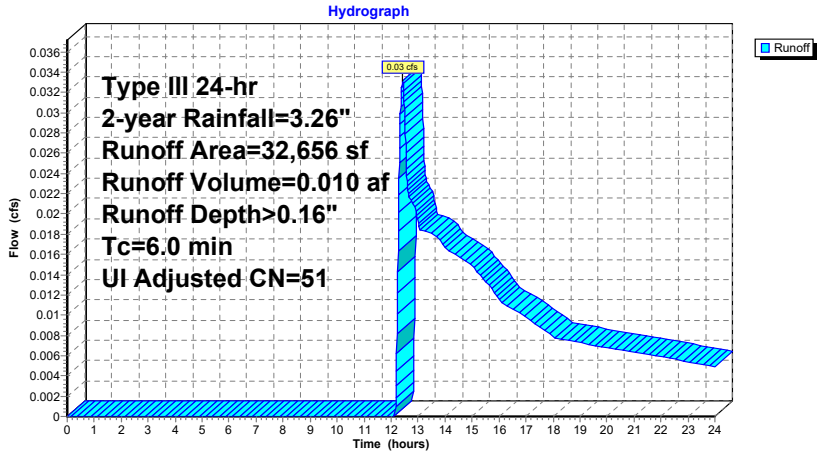
Runoff = 0.03 cfs @ 12.42 hrs, Volume= 0.010 af, Depth> 0.16"
Routed to Pond 1P : drywell 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 2-year Rainfall=3.26"

	Area (sf)	CN	Adj	Description
	2,677	98		Unconnected pavement, HSG A
*	8,170	76		Playground Surface, HSG A
	21,809	39		>75% Grass cover, Good, HSG A
	32,656	53	51	Weighted Average, UI Adjusted
	29,979			91.80% Pervious Area
	2,677			8.20% Impervious Area
	2,677			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, min Tc**

Subcatchment 2S: AD-1



Summary for Subcatchment 3S: AD-2

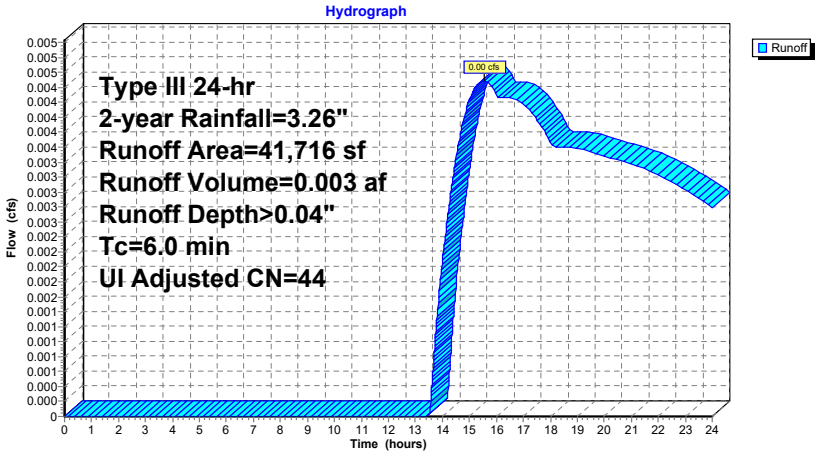
Runoff = 0.00 cfs @ 15.54 hrs, Volume= 0.003 af, Depth> 0.04"
Routed to Pond 2P : drywell 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 2-year Rainfall=3.26"

	Area (sf)	CN	Adj	Description
	5,001	98		Unconnected pavement, HSG A
*	1,526	76		Playground Surface, HSG A
	35,189	39		>75% Grass cover, Good, HSG A
	41,716	47	44	Weighted Average, UI Adjusted
	36,715			88.01% Pervious Area
	5,001			11.99% Impervious Area
	5,001			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, min. Tc**

Subcatchment 3S: AD-2



Summary for Pond 1P: drywell 1

Inflow Area = 0.750 ac, 8.20% Impervious, Inflow Depth > 0.16" for 2-year event
Inflow = 0.03 cfs @ 12.42 hrs, Volume= 0.010 af
Outflow = 0.01 cfs @ 12.33 hrs, Volume= 0.010 af, Atten= 66%, Lag= 0.0 min
Discarded = 0.01 cfs @ 12.33 hrs, Volume= 0.010 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Pond 100P : summary to street

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs / 6
Peak Elev= 1.45' @ 16.12 hrs Surf.Area= 200 sf Storage= 87 cf

Plug-Flow detention time= 79.9 min calculated for 0.010 af (99% of inflow)
Center-of-Mass det. time= 77.7 min (1,067.1 - 989.5)

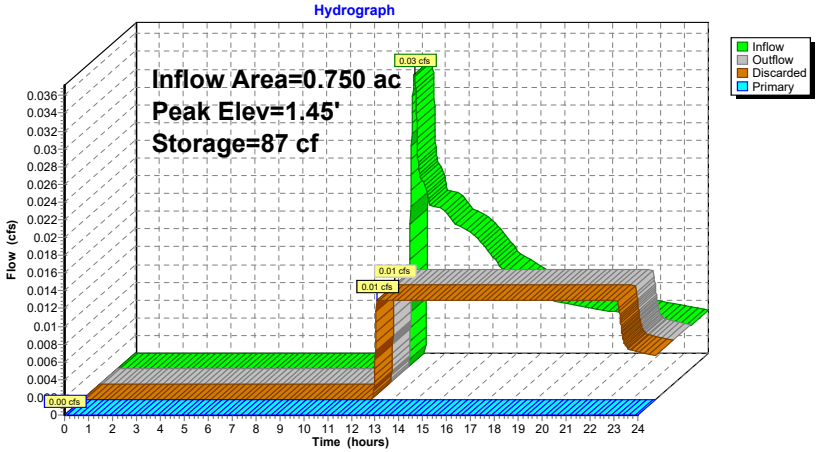
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	181 cf	**10.00'W x 10.00'L x 7.00'H crushed stone** 700 cf Overall - 98 cf Embedded = 602 cf x 30.0% Voids
#2	2.00'	63 cf	**4.00'D x 5.00'H Drywell** Inside #1 98 cf Overall - 6.0" Wall Thickness = 63 cf
#3	7.00'	5 cf	**2.00'D x 1.50'H Riser**
		248 cf	x 2.00 = 496 cf Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**2.410 in/hr Exfiltration over Surface area**
#2	Primary	8.50'	**6.2' long Sharp-Crested Rectangular Weir X 2.00** 0 End Contraction(s)

Discarded OutFlow Max=0.01 cfs @ 12.33 hrs HW=0.09' (Free Discharge)
↑—**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=0.00' (Free Discharge)
↑—**2=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 1P: drywell 1



Summary for Pond 2P: drywell 2

Inflow Area = 0.958 ac, 11.99% Impervious, Inflow Depth > 0.04" for 2-year event
Inflow = 0.00 cfs @ 15.54 hrs, Volume= 0.003 af
Outflow = 0.00 cfs @ 15.66 hrs, Volume= 0.003 af, Atten= 0%, Lag= 7.4 min
Discarded = 0.00 cfs @ 15.66 hrs, Volume= 0.003 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Pond 100P : summary to street

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs / 4
Peak Elev= 0.03' @ 15.66 hrs Surf.Area= 200 sf Storage= 2 cf

Plug-Flow detention time= 7.6 min calculated for 0.003 af (99% of inflow)
Center-of-Mass det. time= 4.4 min (1,124.4 - 1,120.0)

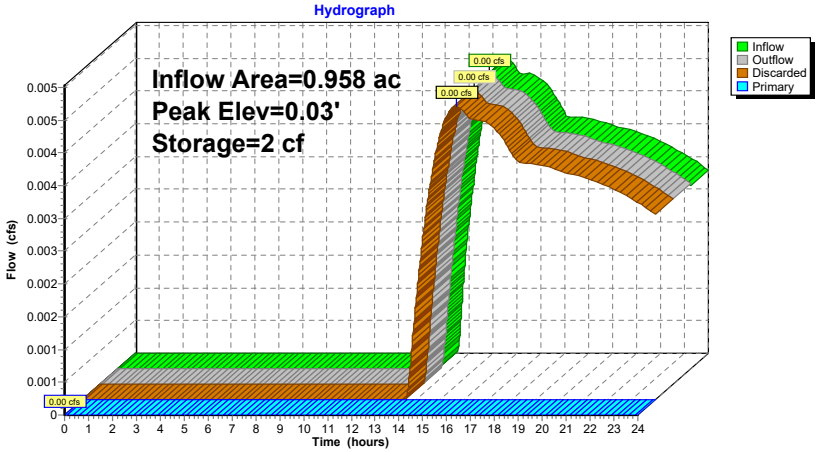
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	181 cf	**10.00'W x 10.00'L x 7.00'H crushed stone** 700 cf Overall - 98 cf Embedded = 602 cf x 30.0% Voids
#2	2.00'	63 cf	**4.00'D x 5.00'H Drywell** Inside #1 98 cf Overall - 6.0" Wall Thickness = 63 cf
#3	7.00'	5 cf	**2.00'D x 1.50'H Riser**
		248 cf	x 2.00 = 496 cf Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**2.410 in/hr Exfiltration over Surface area**
#2	Primary	8.50'	**6.2' long Sharp-Crested Rectangular Weir X 2.00** 0 End Contraction(s)

Discarded OutFlow Max=0.01 cfs @ 15.66 hrs HW=0.03' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=0.00' (Free Discharge)
↑**2=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 2P: drywell 2

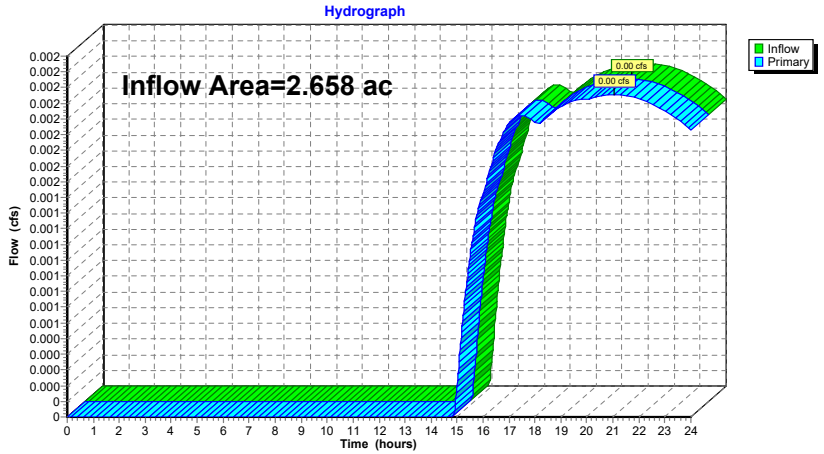


Summary for Pond 100P: summary to street

Inflow Area = 2.658 ac, 9.79% Impervious, Inflow Depth > 0.01" for 2-year event
Inflow = 0.00 cfs @ 21.02 hrs, Volume= 0.001 af
Primary = 0.00 cfs @ 21.02 hrs, Volume= 0.001 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

Pond 100P: summary to street



Time span=0.00-24.00 hrs, dt=0.01 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: bypass to street Runoff Area=41,432 sf 8.84% Impervious Runoff Depth>0.35"
Tc=6.0 min UI Adjusted CN=42 Runoff=0.12 cfs 0.028 af

Subcatchment2S: AD-1 Runoff Area=32,656 sf 8.20% Impervious Runoff Depth>0.81"
Tc=6.0 min UI Adjusted CN=51 Runoff=0.50 cfs 0.051 af

Subcatchment3S: AD-2 Runoff Area=41,716 sf 11.99% Impervious Runoff Depth>0.44"
Tc=6.0 min UI Adjusted CN=44 Runoff=0.19 cfs 0.035 af

Pond 1P: drywell 1 Peak Elev=8.53' Storage=496 cf Inflow=0.50 cfs 0.051 af
Discarded=0.01 cfs 0.011 af Primary=0.39 cfs 0.053 af Outflow=0.40 cfs 0.065 af

Pond 2P: drywell 2 Peak Elev=8.51' Storage=496 cf Inflow=0.19 cfs 0.035 af
Discarded=0.01 cfs 0.011 af Primary=0.08 cfs 0.024 af Outflow=0.09 cfs 0.036 af

Pond 100P: summary to street Inflow=0.51 cfs 0.106 af
Primary=0.51 cfs 0.106 af

Total Runoff Area = 2.658 ac Runoff Volume = 0.114 af Average Runoff Depth = 0.51"
90.21% Pervious = 2.398 ac 9.79% Impervious = 0.260 ac

Summary for Subcatchment 1S: bypass to street

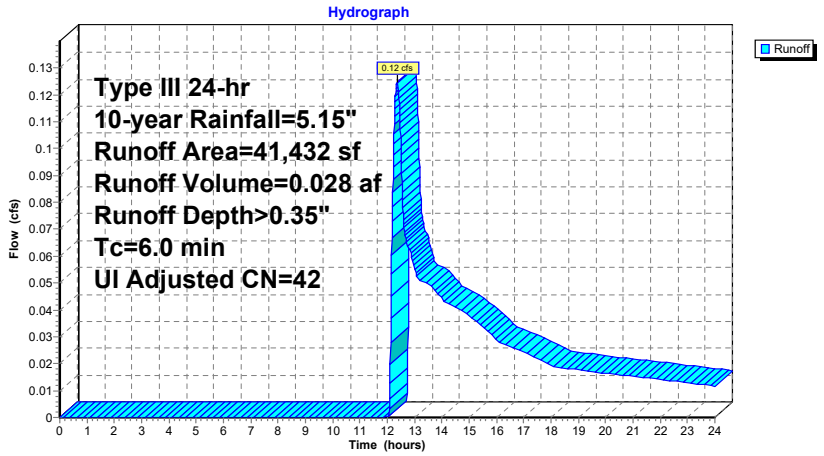
Runoff = 0.12 cfs @ 12.36 hrs, Volume= 0.028 af, Depth> 0.35"
Routed to Pond 100P : summary to street

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-year Rainfall=5.15"

Area (sf)	CN	Adj	Description
2,282	98		Unconnected pavement, HSG A
1,379	98		Unconnected roofs, HSG A
37,771	39		>75% Grass cover, Good, HSG A
41,432	44	42	Weighted Average, UI Adjusted
37,771			91.16% Pervious Area
3,661			8.84% Impervious Area
3,661			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, min. Tc**

Subcatchment 1S: bypass to street



Summary for Subcatchment 2S: AD-1

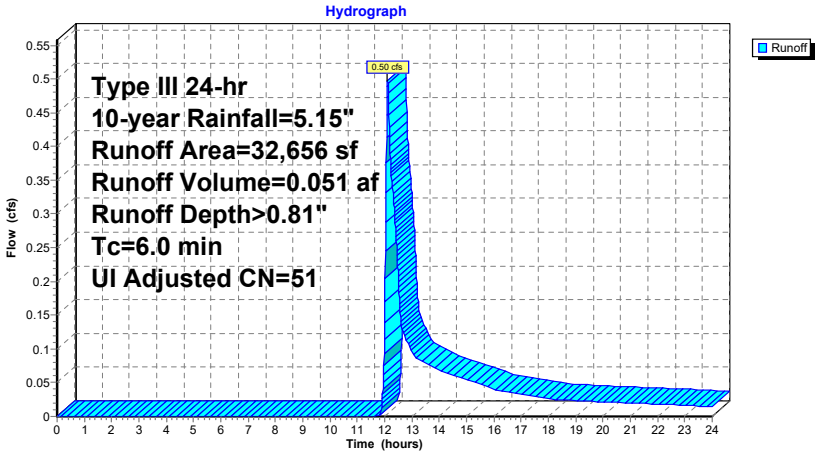
Runoff = 0.50 cfs @ 12.11 hrs, Volume= 0.051 af, Depth> 0.81"
Routed to Pond 1P : drywell 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-year Rainfall=5.15"

	Area (sf)	CN	Adj	Description
	2,677	98		Unconnected pavement, HSG A
*	8,170	76		Playground Surface, HSG A
	21,809	39		>75% Grass cover, Good, HSG A
	32,656	53	51	Weighted Average, UI Adjusted
	29,979			91.80% Pervious Area
	2,677			8.20% Impervious Area
	2,677			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, min Tc**

Subcatchment 2S: AD-1



Summary for Subcatchment 3S: AD-2

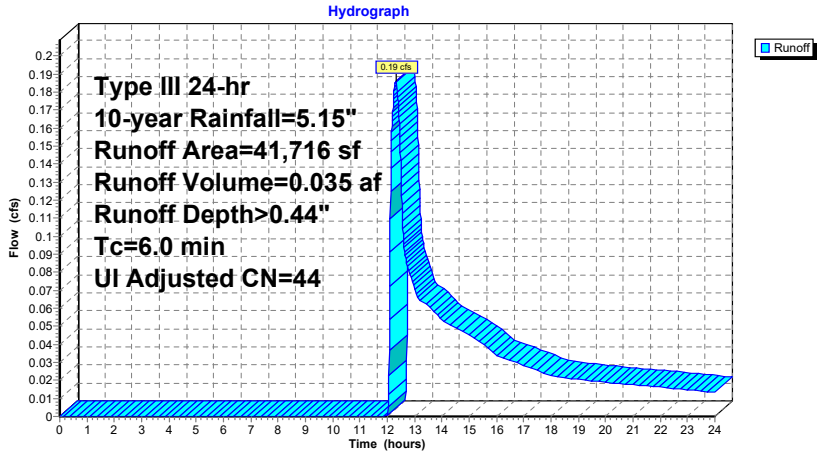
Runoff = 0.19 cfs @ 12.31 hrs, Volume= 0.035 af, Depth> 0.44"
Routed to Pond 2P : drywell 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-year Rainfall=5.15"

	Area (sf)	CN	Adj	Description
	5,001	98		Unconnected pavement, HSG A
*	1,526	76		Playground Surface, HSG A
	35,189	39		>75% Grass cover, Good, HSG A
	41,716	47	44	Weighted Average, UI Adjusted
	36,715			88.01% Pervious Area
	5,001			11.99% Impervious Area
	5,001			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, min. Tc**

Subcatchment 3S: AD-2



Summary for Pond 1P: drywell 1

Inflow Area = 0.750 ac, 8.20% Impervious, Inflow Depth > 0.81" for 10-year event
Inflow = 0.50 cfs @ 12.11 hrs, Volume= 0.051 af
Outflow = 0.40 cfs @ 12.38 hrs, Volume= 0.065 af, Atten= 20%, Lag= 15.9 min
Discarded = 0.01 cfs @ 12.37 hrs, Volume= 0.011 af
Primary = 0.39 cfs @ 12.38 hrs, Volume= 0.053 af
Routed to Pond 100P : summary to street

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs / 6
Peak Elev= 8.53' @ 12.38 hrs Surf.Area= 206 sf Storage= 496 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 35.7 min (941.0 - 905.3)

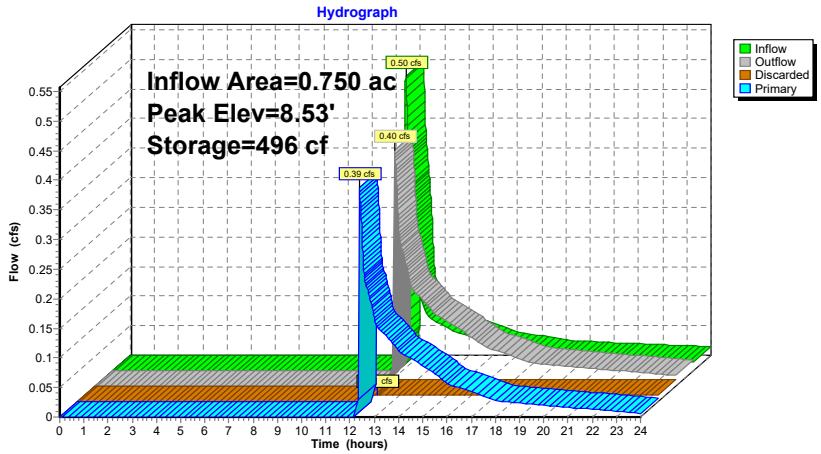
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	181 cf	**10.00'W x 10.00'L x 7.00'H crushed stone** 700 cf Overall - 98 cf Embedded = 602 cf x 30.0% Voids
#2	2.00'	63 cf	**4.00'D x 5.00'H Drywell** Inside #1 98 cf Overall - 6.0" Wall Thickness = 63 cf
#3	7.00'	5 cf	**2.00'D x 1.50'H Riser**
		248 cf	x 2.00 = 496 cf Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**2.410 in/hr Exfiltration over Surface area**
#2	Primary	8.50'	**6.2' long Sharp-Crested Rectangular Weir X 2.00** 0 End Contraction(s)

Discarded OutFlow Max=0.01 cfs @ 12.37 hrs HW=8.14' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.24 cfs @ 12.38 hrs HW=8.53' (Free Discharge)
└**2=Sharp-Crested Rectangular Weir** (Weir Controls 0.24 cfs @ 0.59 fps)

Pond 1P: drywell 1



Summary for Pond 2P: drywell 2

Inflow Area = 0.958 ac, 11.99% Impervious, Inflow Depth > 0.44" for 10-year event
Inflow = 0.19 cfs @ 12.31 hrs, Volume= 0.035 af
Outflow = 0.09 cfs @ 13.68 hrs, Volume= 0.036 af, Atten= 51%, Lag= 82.2 min
Discarded = 0.01 cfs @ 13.63 hrs, Volume= 0.011 af
Primary = 0.08 cfs @ 13.68 hrs, Volume= 0.024 af
Routed to Pond 100P : summary to street

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs / 4
Peak Elev= 8.51' @ 13.68 hrs Surf.Area= 206 sf Storage= 496 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 78.0 min (1,025.1 - 947.1)

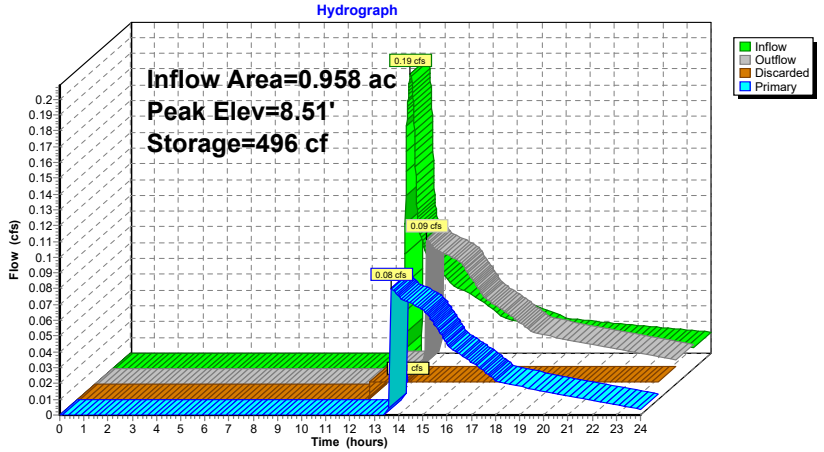
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	181 cf	**10.00'W x 10.00'L x 7.00'H crushed stone** 700 cf Overall - 98 cf Embedded = 602 cf x 30.0% Voids
#2	2.00'	63 cf	**4.00'D x 5.00'H Drywell** Inside #1 98 cf Overall - 6.0" Wall Thickness = 63 cf
#3	7.00'	5 cf	**2.00'D x 1.50'H Riser**
		248 cf	x 2.00 = 496 cf Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**2.410 in/hr Exfiltration over Surface area**
#2	Primary	8.50'	**6.2' long Sharp-Crested Rectangular Weir X 2.00** 0 End Contraction(s)

Discarded OutFlow Max=0.01 cfs @ 13.63 hrs HW=7.19' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.02 cfs @ 13.68 hrs HW=8.51' (Free Discharge)
└**2=Sharp-Crested Rectangular Weir** (Weir Controls 0.02 cfs @ 0.27 fps)

Pond 2P: drywell 2

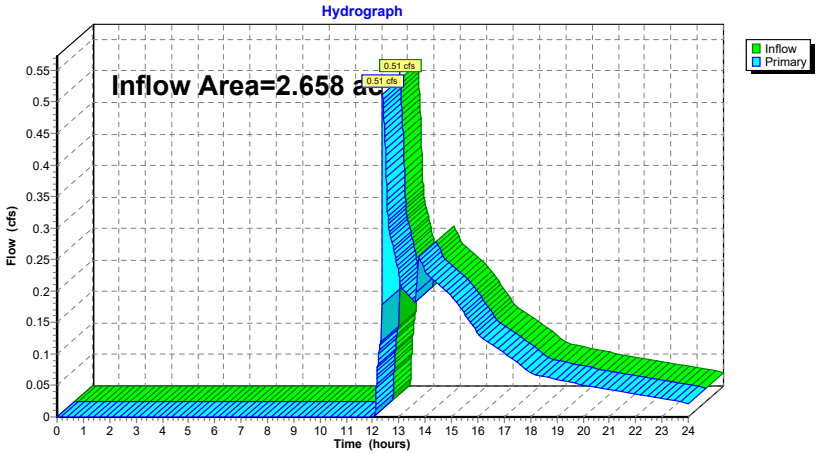


Summary for Pond 100P: summary to street

Inflow Area = 2.658 ac, 9.79% Impervious, Inflow Depth > 0.48" for 10-year event
Inflow = 0.51 cfs @ 12.38 hrs, Volume= 0.106 af
Primary = 0.51 cfs @ 12.38 hrs, Volume= 0.106 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

Pond 100P: summary to street



Time span=0.00-24.00 hrs, dt=0.01 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: bypass to street Runoff Area=41,432 sf 8.84% Impervious Runoff Depth>1.51"
Tc=6.0 min UI Adjusted CN=42 Runoff=1.31 cfs 0.120 af

Subcatchment2S: AD-1 Runoff Area=32,656 sf 8.20% Impervious Runoff Depth>2.45"
Tc=6.0 min UI Adjusted CN=51 Runoff=2.01 cfs 0.153 af

Subcatchment3S: AD-2 Runoff Area=41,716 sf 11.99% Impervious Runoff Depth>1.71"
Tc=6.0 min UI Adjusted CN=44 Runoff=1.59 cfs 0.136 af

Pond 1P: drywell 1 Peak Elev=8.62' Storage=496 cf Inflow=2.01 cfs 0.153 af
Discarded=0.01 cfs 0.012 af Primary=1.76 cfs 0.045 af Outflow=1.78 cfs 0.057 af

Pond 2P: drywell 2 Peak Elev=8.59' Storage=496 cf Inflow=1.59 cfs 0.136 af
Discarded=0.01 cfs 0.012 af Primary=1.03 cfs 0.016 af Outflow=1.04 cfs 0.027 af

Pond 100P: summary to street Inflow=4.09 cfs 0.180 af
Primary=4.09 cfs 0.180 af

Total Runoff Area = 2.658 ac Runoff Volume = 0.409 af Average Runoff Depth = 1.85"
90.21% Pervious = 2.398 ac 9.79% Impervious = 0.260 ac

Summary for Subcatchment 1S: bypass to street

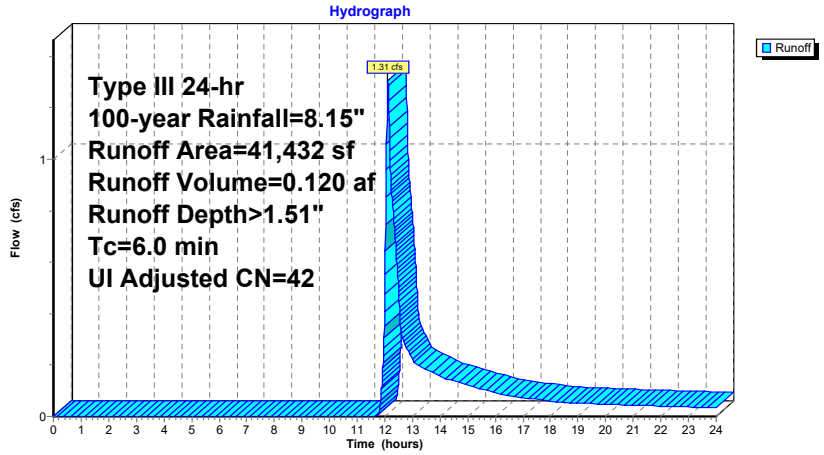
Runoff = 1.31 cfs @ 12.11 hrs, Volume= 0.120 af, Depth> 1.51"
Routed to Pond 100P : summary to street

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-year Rainfall=8.15"

Area (sf)	CN	Adj	Description
2,282	98		Unconnected pavement, HSG A
1,379	98		Unconnected roofs, HSG A
37,771	39		>75% Grass cover, Good, HSG A
41,432	44	42	Weighted Average, UI Adjusted
37,771			91.16% Pervious Area
3,661			8.84% Impervious Area
3,661			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, min. Tc**

Subcatchment 1S: bypass to street



Summary for Subcatchment 2S: AD-1

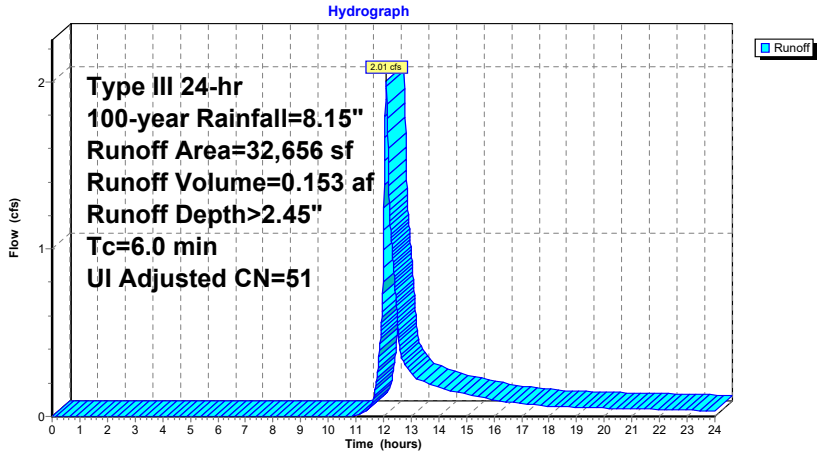
Runoff = 2.01 cfs @ 12.10 hrs, Volume= 0.153 af, Depth> 2.45"
Routed to Pond 1P : drywell 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-year Rainfall=8.15"

	Area (sf)	CN	Adj	Description
	2,677	98		Unconnected pavement, HSG A
*	8,170	76		Playground Surface, HSG A
	21,809	39		>75% Grass cover, Good, HSG A
	32,656	53	51	Weighted Average, UI Adjusted
	29,979			91.80% Pervious Area
	2,677			8.20% Impervious Area
	2,677			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, min Tc**

Subcatchment 2S: AD-1



Summary for Subcatchment 3S: AD-2

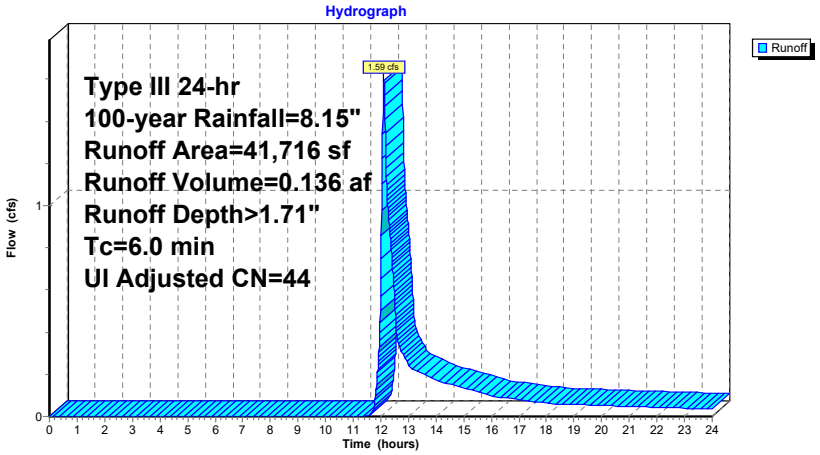
Runoff = 1.59 cfs @ 12.10 hrs, Volume= 0.136 af, Depth> 1.71"
Routed to Pond 2P : drywell 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-year Rainfall=8.15"

	Area (sf)	CN	Adj	Description
	5,001	98		Unconnected pavement, HSG A
*	1,526	76		Playground Surface, HSG A
	35,189	39		>75% Grass cover, Good, HSG A
	41,716	47	44	Weighted Average, UI Adjusted
	36,715			88.01% Pervious Area
	5,001			11.99% Impervious Area
	5,001			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, min. Tc**

Subcatchment 3S: AD-2



Summary for Pond 1P: drywell 1

Inflow Area = 0.750 ac, 8.20% Impervious, Inflow Depth > 2.45" for 100-year event
Inflow = 2.01 cfs @ 12.10 hrs, Volume= 0.153 af
Outflow = 1.78 cfs @ 12.10 hrs, Volume= 0.057 af, Atten= 12%, Lag= 0.0 min
Discarded = 0.01 cfs @ 11.99 hrs, Volume= 0.012 af
Primary = 1.76 cfs @ 12.10 hrs, Volume= 0.045 af
Routed to Pond 100P : summary to street

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs / 6
Peak Elev= 8.62' @ 12.10 hrs Surf.Area= 206 sf Storage= 496 cf

Plug-Flow detention time= 76.8 min calculated for 0.057 af (38% of inflow)
Center-of-Mass det. time= (not calculated: outflow precedes inflow)

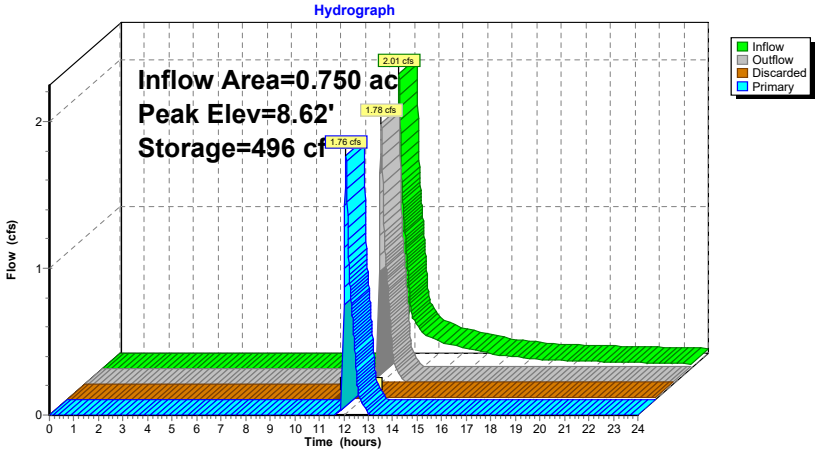
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	181 cf	**10.00'W x 10.00'L x 7.00'H crushed stone** 700 cf Overall - 98 cf Embedded = 602 cf x 30.0% Voids
#2	2.00'	63 cf	**4.00'D x 5.00'H Drywell** Inside #1 98 cf Overall - 6.0" Wall Thickness = 63 cf
#3	7.00'	5 cf	**2.00'D x 1.50'H Riser**
		248 cf	x 2.00 = 496 cf Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**2.410 in/hr Exfiltration over Surface area**
#2	Primary	8.50'	**6.2' long Sharp-Crested Rectangular Weir X 2.00** 0 End Contraction(s)

Discarded OutFlow Max=0.01 cfs @ 11.99 hrs HW=8.55' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=1.69 cfs @ 12.10 hrs HW=8.62' (Free Discharge)
↑**2=Sharp-Crested Rectangular Weir** (Weir Controls 1.69 cfs @ 1.13 fps)

Pond 1P: drywell 1



Summary for Pond 2P: drywell 2

Inflow Area = 0.958 ac, 11.99% Impervious, Inflow Depth > 1.71" for 100-year event
Inflow = 1.59 cfs @ 12.10 hrs, Volume= 0.136 af
Outflow = 1.04 cfs @ 12.10 hrs, Volume= 0.027 af, Atten= 35%, Lag= 0.0 min
Discarded = 0.01 cfs @ 12.08 hrs, Volume= 0.012 af
Primary = 1.03 cfs @ 12.10 hrs, Volume= 0.016 af
Routed to Pond 100P : summary to street

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs / 4
Peak Elev= 8.59' @ 12.10 hrs Surf.Area= 206 sf Storage= 496 cf

Plug-Flow detention time= 153.1 min calculated for 0.027 af (20% of inflow)
Center-of-Mass det. time= (not calculated: outflow precedes inflow)

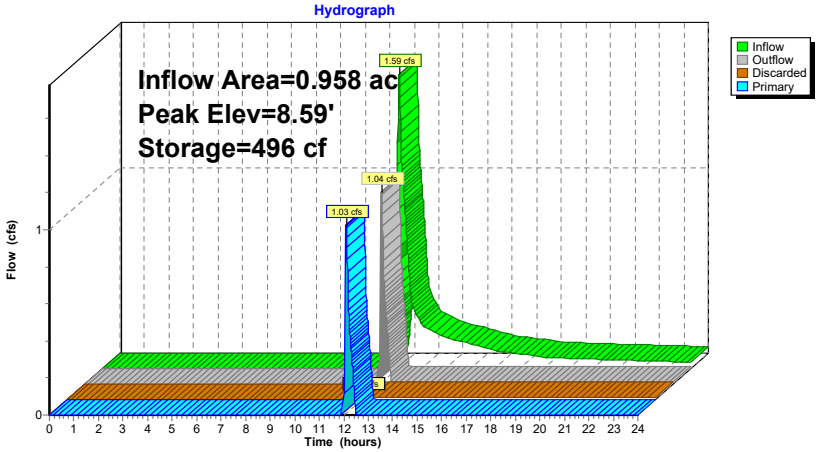
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	181 cf	**10.00'W x 10.00'L x 7.00'H crushed stone** 700 cf Overall - 98 cf Embedded = 602 cf x 30.0% Voids
#2	2.00'	63 cf	**4.00'D x 5.00'H Drywell** Inside #1 98 cf Overall - 6.0" Wall Thickness = 63 cf
#3	7.00'	5 cf	**2.00'D x 1.50'H Riser**
		248 cf	x 2.00 = 496 cf Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**2.410 in/hr Exfiltration over Surface area**
#2	Primary	8.50'	**6.2' long Sharp-Crested Rectangular Weir X 2.00** 0 End Contraction(s)

Discarded OutFlow Max=0.01 cfs @ 12.08 hrs HW=8.58' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=1.02 cfs @ 12.10 hrs HW=8.59' (Free Discharge)
└**2=Sharp-Crested Rectangular Weir** (Weir Controls 1.02 cfs @ 0.96 fps)

Pond 2P: drywell 2

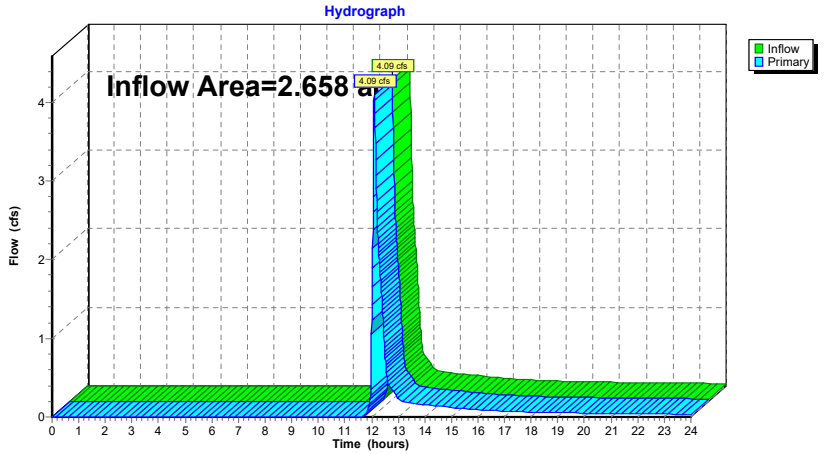


Summary for Pond 100P: summary to street

Inflow Area = 2.658 ac, 9.79% Impervious, Inflow Depth > 0.81" for 100-year event
Inflow = 4.09 cfs @ 12.10 hrs, Volume= 0.180 af
Primary = 4.09 cfs @ 12.10 hrs, Volume= 0.180 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

Pond 100P: summary to street



SECTION 6.0

ADDITIONAL DRAINAGE CALCULATIONS

6.01 TSS REMOVAL CALCULATIONS

TSS Removal Calculation Worksheet

Location: Marine Park Playground, Boston, MA

Project: 8-9572.03

Prepared By: D. Rinaldi

Date: 09/15/2022

AREA 1 - (2S) Area Drain

Total Impervious Area, Acres= 0.061

A	B	C	D	E
BMP	TSS Removal Rate	Starting TSS Load*	Amount Removed (BxC)	Remaining Load (C-D)
Dry Well	0.8	1.00	0.80	0.20

TSS Removal = 0.80

AREA 2 - (3S) Area Drain

Total Impervious Area, Acres= 0.115

A	B	C	D	E
BMP	TSS Removal Rate	Starting TSS Load*	Amount Removed (BxC)	Remaining Load (C-D)
Dry Well	0.8	1.00	0.80	0.20

TSS Removal = 0.80

Weighted Annual Average TSS Removal Rate

[TSS Removal-1 (Area-1) + TSS Revoval-2 (Area-2)+ ….] / [Area-1 + Area-2 + ...] = 0.80

Project Site TSS Removal = 0.80

6.02 GROUNDWATER RECHARGE VOLUME CALCULATIONS

Required Recharge Volume

Rv = F x New Impervious Area

Where:

Rv = Recharge Volume

F=Target Depth Factor associated with each Hydrologic Soil Group

(F=0.60-inch for Soil Type A)

Impervious Area = Proposed Pavement and Rooftop area on-site

Soil A: $Rv = \left(\frac{0.60\text{in}}{12}\right)(11{,}339\ \text{sft}) = 566.95\ \text{cf}$

Total Rv = 566.95 cf (required recharge volume)

Storage Provided

- (1) Drywell = 496 cubic feet provided.
- (2) Drywell = 496 cubic feet provided.
- Total Storage = 992 cubic feet provided.
  Refer to the HydroCAD print out provided for more information.

Stage-Area-Storage for Pond 1P: drywell 1

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
0.00	200	0	5.10	200	347
0.10	200	6	5.20	200	355
0.20	200	12	5.30	200	362
0.30	200	18	5.40	200	369
0.40	200	24	5.50	200	377
0.50	200	30	5.60	200	384
0.60	200	36	5.70	200	391
0.70	200	42	5.80	200	399
0.80	200	48	5.90	200	406
0.90	200	54	6.00	200	413
1.00	200	60	6.10	200	421
1.10	200	66	6.20	200	428
1.20	200	72	6.30	200	435
1.30	200	78	6.40	200	443
1.40	200	84	6.50	200	450
1.50	200	90	6.60	200	457
1.60	200	96	6.70	200	465
1.70	200	102	6.80	200	472
1.80	200	108	6.90	200	479
1.90	200	114	7.00	206	487
2.00	200	120	7.10	206	487
2.10	200	127	7.20	206	488
2.20	200	135	7.30	206	489
2.30	200	142	7.40	206	489
2.40	200	149	7.50	206	490
2.50	200	157	7.60	206	491
2.60	200	164	7.70	206	491
2.70	200	171	7.80	206	492
2.80	200	179	7.90	206	492
2.90	200	186	8.00	206	493
3.00	200	193	8.10	206	494
3.10	200	201	8.20	206	494
3.20	200	208	8.30	206	495
3.30	200	215	8.40	206	496
3.40	200	223	8.50	206	**496**
3.50	200	230			
3.60	200	237			
3.70	200	245			
3.80	200	252			
3.90	200	259			
4.00	200	267			
4.10	200	274			
4.20	200	281			
4.30	200	289			
4.40	200	296			
4.50	200	303			
4.60	200	311			
4.70	200	318			
4.80	200	325			
4.90	200	333			
5.00	200	340			

Stage-Area-Storage for Pond 2P: drywell 2

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
0.00	200	0	5.10	200	347
0.10	200	6	5.20	200	355
0.20	200	12	5.30	200	362
0.30	200	18	5.40	200	369
0.40	200	24	5.50	200	377
0.50	200	30	5.60	200	384
0.60	200	36	5.70	200	391
0.70	200	42	5.80	200	399
0.80	200	48	5.90	200	406
0.90	200	54	6.00	200	413
1.00	200	60	6.10	200	421
1.10	200	66	6.20	200	428
1.20	200	72	6.30	200	435
1.30	200	78	6.40	200	443
1.40	200	84	6.50	200	450
1.50	200	90	6.60	200	457
1.60	200	96	6.70	200	465
1.70	200	102	6.80	200	472
1.80	200	108	6.90	200	479
1.90	200	114	7.00	206	487
2.00	200	120	7.10	206	487
2.10	200	127	7.20	206	488
2.20	200	135	7.30	206	489
2.30	200	142	7.40	206	489
2.40	200	149	7.50	206	490
2.50	200	157	7.60	206	491
2.60	200	164	7.70	206	491
2.70	200	171	7.80	206	492
2.80	200	179	7.90	206	492
2.90	200	186	8.00	206	493
3.00	200	193	8.10	206	494
3.10	200	201	8.20	206	494
3.20	200	208	8.30	206	495
3.30	200	215	8.40	206	496
3.40	200	223	8.50	206	**496**
3.50	200	230			
3.60	200	237			
3.70	200	245			
3.80	200	252			
3.90	200	259			
4.00	200	267			
4.10	200	274			
4.20	200	281			
4.30	200	289			
4.40	200	296			
4.50	200	303			
4.60	200	311			
4.70	200	318			
4.80	200	325			
4.90	200	333			
5.00	200	340			

Drawdown Within 72-Hours

Drywell 1P & 2P (20' x 10' each)

Rv = Recharge Volume, cu.ft. (see above)

K = Saturated Hydraulic Conductivity, in/hr (from Rawls Table)

Bottom Area = Area of Infiltration System Bottom, sq.ft.

$$\text{Time} = \frac{\text{Rv}}{(\text{K})(\text{Bottom Area})}$$

$$\text{Time} = \left(\frac{496 \text{ cu. ft.}}{(\frac{2.41 \text{ in}}{\text{hr}})(\frac{1\text{ft}}{12\text{in}})(200 \text{ sq. ft.})} \right) =$$

$$\text{Time} = 12.3 \text{ hours}$$

- 12.3 hours < 72 hours

6.03 WATER QUALITY VOLUME CALCULATIONS

Water Quality Volume Calculation

V_{WQ} = (D_{WQ}/12 inches/foot) * (A_{IMP} square feet)

V_{WQ} = Required Water Quality Volume (in cubic feet)
D_{WQ} = Water Quality Depth: **1.0-inch**
A_{IMP} = Total Impervious Area (in acres) used for driveways, parking, etc.

Underground Infiltration Systems and Drywell Areas

A_{IMP} = 11,339 sq.ft.

V_{WQ} = (1.0 inches/12 inches/foot) * (11,339 sq.ft.)

V_{WQ} = 945 cubic feet (required volume), provided volume = 992 cubic feet in Drywell area (refer to the HydroCAD storage tables provided in groundwater recharge section).

6.04 ILLICIT DISCHARGE COMPLIANCE STATEMENT

Illicit Discharge Compliance Statement

This statement is to document that, to the best of my knowledge and belief, there are no and will be no illicit discharges to the stormwater management systems or protected wetland resource areas for the Marine Park Playground redevelopment on Farragut Road in Boston, Massachusetts.

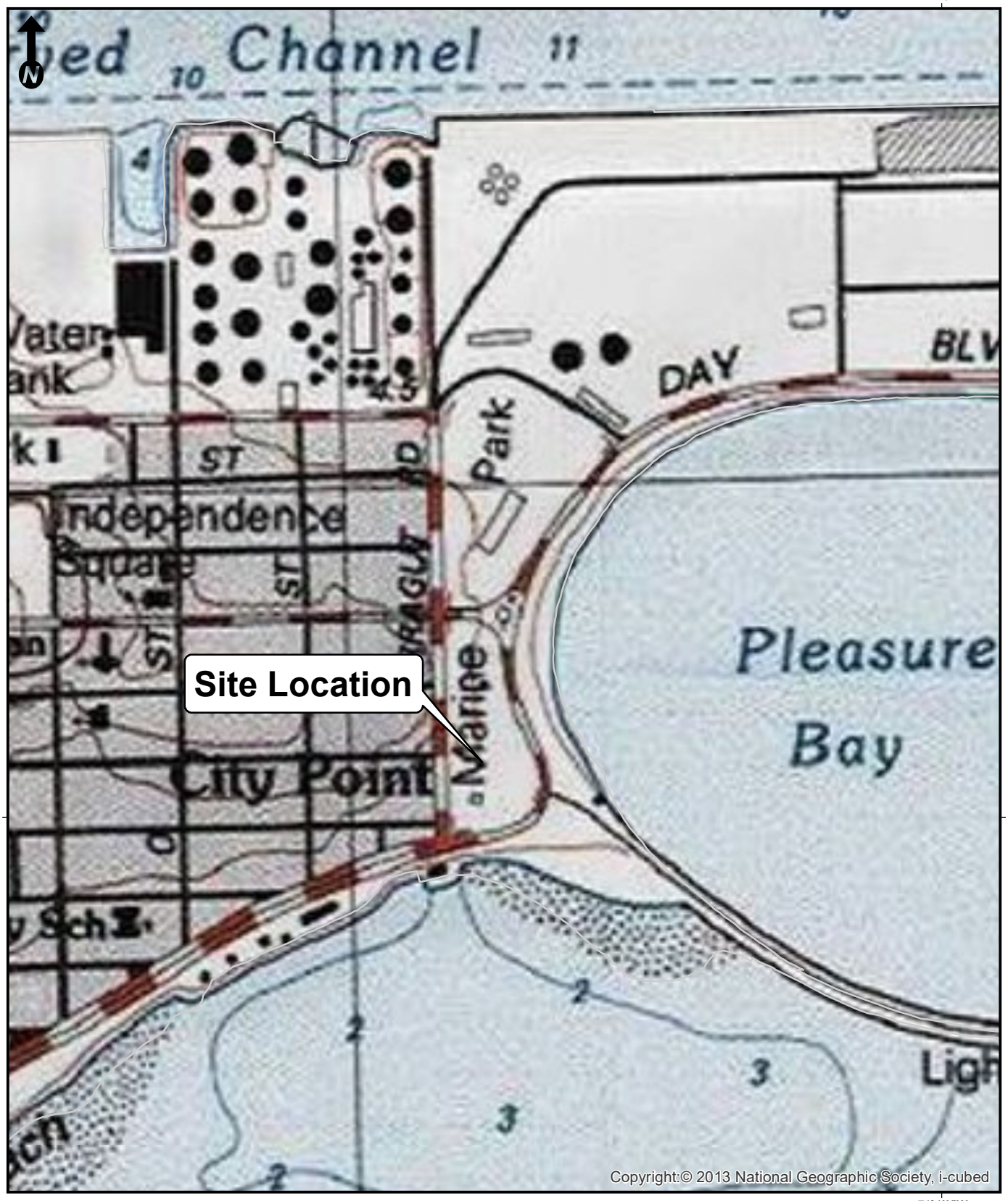
Authorized Signature/Title

Date

APPENDIX A

USGS LOCUS MAP

71°1'0"W



42°20'0"N

71°1'0"W

Scale:
1 inch = 833 feet
0 440 880
Feet
(page size: 8.5 X 11)

DCR MARINE PARK PLAYGROUND
FARRAGUT ROAD
BOSTON, MA

USGS Site Locus Map

Source: 2013 National Geographic Society, i-cubed

BSC GROUP

APPENDIX B

FEMA MAP

National Flood Hazard Layer FIRMette

FEMA

71°1'47"W 42°20'14"N

71°1'9"W 42°19'48"N

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

1:6,000

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

Legend

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

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

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

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

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

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

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

N

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

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 12/13/2021 at 10:21 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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

APPENDIX C

WEB SOIL SURVEY

Hydrologic Soil Group—Norfolk and Suffolk Counties, Massachusetts
(Marine Park Playground)

Map Scale: 1:1,930 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 25 50 100 150

Feet: 0 50 100 200 300

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

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

Soil Rating Polygons

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features

- Streams and Canals

Transportation

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

Background

- Aerial Photography

MAP INFORMATION

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

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

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

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

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

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

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

Soil Survey Area: Norfolk and Suffolk Counties, Massachusetts
Survey Area Data: Version 17, Sep 3, 2021

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

Date(s) aerial images were photographed: May 22, 2022—Jun 5, 2022

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

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
1	Water		4.2	22.6%
610	Beaches, sand		3.8	20.8%
626B	Merrimac-Urban land complex, 0 to 8 percent slopes	A	4.7	25.5%
655	Udorthents, wet substratum		5.7	31.1%
Totals for Area of Interest			**18.4**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

APPENDIX D

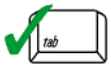
DEP STORMWATER CHECKLIST

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

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.

DEPARTMENT OF CONSERVATION AND RECREATION
DIVISION OF PLANNING AND ENGINEERING

IMPROVEMENTS TO MARINE PARK PLAYGROUND

PROJECT NO. 69 P20-3345 D1A

SOUTH BOSTON, MASSACHUSETTS

OCTOBER 05, 2022

PREPARED FOR:

dcr
Massachusetts

DEPARTMENT OF CONSERVATION & RECREATION
251 CAUSEWAY STREET
BOSTON, MA 02114

CHARLES D. BAKER	GOVERNOR
KARYN E. POLITO	LT. GOVERNOR
JIM MONTGOMERY	COMMISSIONER, DCR

SITE MAP

50 0 100 200 300 feet

SCALE: 1"=100'

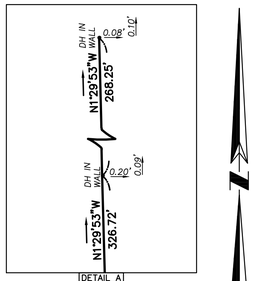
NOTICE OF INTENT SUBMISSION

COMMONWEALTH OF MASSACHUSETTS
DOMINIC R. RINALDI
CIVIL
No. 45074
REGISTERED
PROFESSIONAL ENGINEER

PREPARED BY:

BSC GROUP
803 Summer Street
Boston, Massachusetts
617 896 4300

JOB NO: 89572.03 DWG NO: SHEET ----



NAD83(12B)

GENERAL NOTES

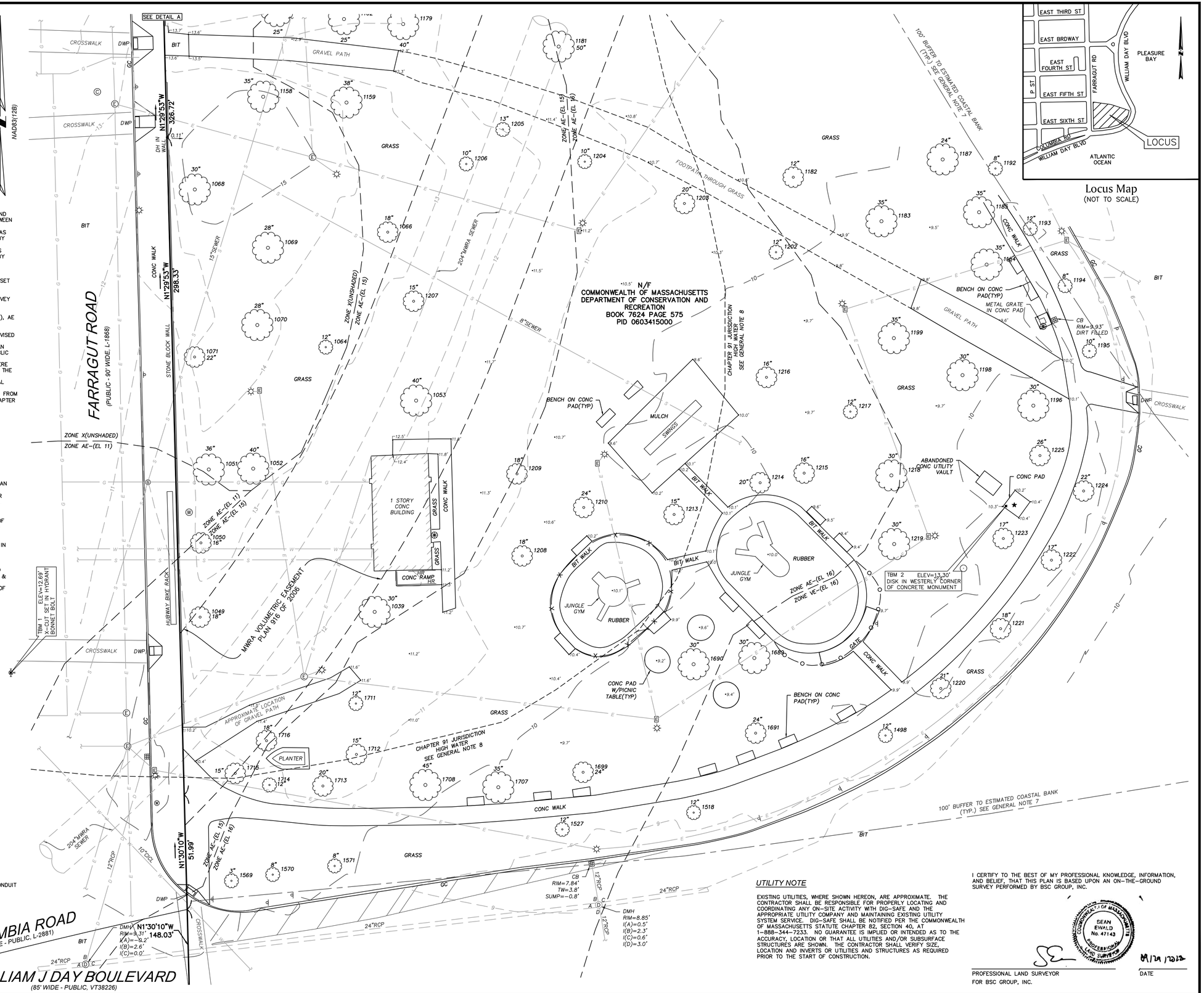
1. THIS PLAN IS BASED UPON AN ON-THE-GROUND SURVEY PERFORMED BY BSC GROUP, INC. BETWEEN MARCH AND APRIL 2020.
2. HORIZONTAL DATUM IS BASED UPON NAD '83 AS DERIVED VIA GPS OBSERVATIONS PERFORMED BY BSC GROUP, INC. IN MARCH 2020.
3. VERTICAL DATUM IS BASED UPON NAVD '88 AS DERIVED VIA GPS OBSERVATIONS PERFORMED BY BSC GROUP, INC. IN MARCH 2020.
   TBM1
   ELEV=12.69'
   DESC: X-CUT ON HYDRANT BONNET BOLT SET
   TBM2
   ELEV=13.31'
   DESC: BOSTON CITY PLANNING BOARD SURVEY CONTROL DISK IN WESTERLY CORNER OF CONCRETE MONUMENT
4. LOCUS IS LOCATED WITHIN ZONES X(UNSHADED), AE & VE AS GRAPHICALLY DEPICTED ON FLOOD INSURANCE RATE MAP NUMBER 25025C0084J, EFFECTIVE DATE SEPTEMBER 25, 2009 AND REVISED DATE MARCH 16, 2016.
5. LOCUS HAS DIRECT VEHICULAR AND PEDESTRIAN ACCESS TO WILLIAM J DAY BOULEVARD, A PUBLIC STREET IN THE CITY OF BOSTON.
6. NO RESPONSE REGARDING UTILITY RECORDS WERE RECEIVED FROM BOSTON FIRE AT THE TIME OF THE SURVEY.
7. ESTIMATED COASTAL BANK IS BASED ON AERIAL IMAGERY.
8. CHAPTER 91 JURISDICTION HIGH WATER LINE IS FROM MASS GIS LAYER "TIDELANDS JURISDICTION CHAPTER 91 CONTEMPORARY HIGH WATER" FROM MASS MAPPER.

PLAN REFERENCES

1. PLAN ENTITLED "PLAN OF LAND IN SOUTH BOSTON BEING CONVEYED TO THE METROPOLITAN DISTRICT" BY THE BOARD OF PARKS & RECREATION COMMISSIONERS, DATED DECEMBER 3, 1959, AND RECORDED IN PLAN BOOK 7485, PAGE 246.
2. PLAN ENTITLED "PLAN OF LAND TO BE TAKEN FROM THE CITY OF BOSTON" BY THE BOARD OF PARKS & RECREATION COMMISSIONERS, DATED JANUARY 10, 1962, AND RECORDED IN PLAN BOOK 7624, PAGE 575.
3. PLAN ENTITLED "MODIFICATION PLAN OF LAND IN BOSTON (SOUTH)" BY OTTE & DWYER, INC., SURVEYORS, DATED JANUARY 10, 1984, AND RECORDED AS LAND COURT PLAN 19575B-1.
4. PLAN ENTITLED "NORTH DORCHESTER BAY CSO STORAGE TUNNEL" BY PARSONS BRINKERHOFF & DOUGLAS, INC. AND METCALF & EDDY, DATED JULY 8, 2005, AND RECORDED AS PLAN 916 OF 2006.

LEGEND

- DRILL HOLE
- BENCHMARK
- (S) SEWER MANHOLE
- (D) DRAIN MANHOLE
- (W) WATER MANHOLE
- (E) ELECTRIC MANHOLE
- (T) TELEPHONE MANHOLE
- (C) CABLE MANHOLE
- MANHOLE
- CATCH BASIN
- HYDRANT
- WATER GATE
- WATER FOUNTAIN
- GAS GATE
- LIGHT POLE
- ELECTRIC HANDHOLE
- SIGN
- STATUE/ MONUMENT
- DECIDUOUS TREE
- BIT BITUMINOUS CONCRETE
- CONC CONCRETE
- DWP DETECTABLE WARNING PAD
- HR HANDRAIL
- I=, INV= INVERT
- TW TOP OF WATER
- S SEWER LINE
- D DRAIN LINE
- W WATER LINE
- G GAS LINE
- E UNDERGROUND ELECTRIC CONDUIT
- X CHAIN LINK FENCE
- IRON FENCE



Locus Map
(NOT TO SCALE)

UTILITY NOTE

EXISTING UTILITIES, WHERE SHOWN HEREON, ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY LOCATING AND COORDINATING ANY ON-SITE ACTIVITY WITH DIG-SAFE AND THE APPROPRIATE UTILITY COMPANY AND MAINTAINING EXISTING UTILITY SYSTEM SERVICE. DIG-SAFE SHALL BE NOTIFIED PER THE COMMONWEALTH OF MASSACHUSETTS STATUTE CHAPTER 82, SECTION 40, AT 1-888-344-7233. NO GUARANTEE IS IMPLIED OR INTENDED AS TO THE ACCURACY, LOCATION OR THAT ALL UTILITIES AND/OR SUBSURFACE STRUCTURES ARE SHOWN. THE CONTRACTOR SHALL VERIFY SIZE, LOCATION AND INVERTS OR UTILITIES AND STRUCTURES AS REQUIRED PRIOR TO THE START OF CONSTRUCTION.

I CERTIFY TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, INFORMATION, AND BELIEF, THAT THIS PLAN IS BASED UPON AN ON-THE-GROUND SURVEY PERFORMED BY BSC GROUP, INC.

SEAN EWALD No. 47143 REGISTERED PROFESSIONAL LAND SURVEYOR COMMONWEALTH OF MASSACHUSETTS

PROFESSIONAL LAND SURVEYOR FOR BSC GROUP, INC.

04/29/2022
DATE

EXISTING CONDITIONS PLAN

MARINE PARK PLAYGROUND
IN
BOSTON
MASSACHUSETTS
(SUFFOLK COUNTY)

APRIL 9, 2020

REVISIONS:

NO.	DATE	DESC.
1	9/29/22	ADDED 2 LINES TO PLAN

PREPARED FOR:
DEPARTMENT OF CONSERVATION & RECREATION
251 CAUSEWAY ST SUITE 9,
BOSTON, MA 02114

BSC GROUP
803 Summer Street
Boston, Massachusetts
02127
617 896 4300

SCALE: 1" = 20'
0 2.5 5 10 METERS
0 10 20 40 FEET

PROJ. MGR.:	A.SLOAT
FIELD:	M.GHANBARI, M.ZOMPETTI
CALC./DESIGN:	M.HASSANOVA
DRAWN:	S.BONIN
CHECK:	A.SLOAT, M.HASSANOVA
FILE:	P:\8957203\S\D\F\8957203EC_r1
DWG.:	8957203EC_r1
SHEET	1 OF 1
JOB. NO:	8-9572.03

FARRAGUT ROAD

(PUBLIC - 90' WIDE, L-1868)

HEAD ISLAND CAUS

WILLIAM J DAY BLVD

LEGEND

- LIMIT OF WORK
- TREE PROTECTION FENCE

NOTES:

1. TREES SELECTED FOR REMOVAL SHALL BE COMPLETELY REMOVED, INCLUDING TREE AND STUMP BY GENERAL CONTRACTOR.
2. ARBORIST OVERSIGHT REQUIRED WHENEVER CONSTRUCTION IS WITHIN CRITICAL ROOT ZONES OF TREES.
3. TREE PROTECTION FENCE SHALL BE INSTALLED PRIOR TO ANY WORK MAINTAINED THROUGHOUT THE PROJECT. NO STAGING OR MATERIALS STORAGE SHALL OCCUR WITH TREE PROTECTION FENCE.
4. SPECIAL "BY HAND" DEMOLITION PROCEDURES REQUIRED WHERE WORK IS DESIGNATED IN CRITICAL ROOT ZONES.
5. TRUNK PROTECTION REQUIRED ON TREES IN PROXIMITY TO WORK WITHIN CRITICAL ROOT ZONES.
6. APPROVED ACCESS, STAGING AND DUMPSTER LOCATIONS NEED TO BE DETERMINED. STAGING SHALL NOT OCCUR ON UNPROTECTED TREE ROOT AREAS. IF STAGING IS REQUIRED AND APPROVED BY PROJECT ARBORIST, ADDITIONAL MEASURES MAY BE REQUIRED.
7. PRE-CONSTRUCTION MEETING SHALL BE HELD PRIOR TO COMMENCEMENT OF DEMOLITION/CONSTRUCTION ACTIVITY WITH ALL CONTRACTOR EMPLOYEES.

COMMONWEALTH OF MASSACHUSETTS
DOMINIC R. RINALDI
CIVIL
No. 45074
REGISTERED PROFESSIONAL ENGINEER

NOTICE OF INTENT SUBMISSION

0 20 40 60 feet

SCALE: 1" = 20'

NORTH

REV.	DATE:	DESCRIPTION	SHEET #:

dcr Massachusetts

DESIGNER: BSC GROUP

CHECKED BY: RA

MASSACHUSETTS DEPARTMENT OF CONSERVATION AND RECREATION (DCR) PLANNING & ENGINEERING

PROJECT TITLE:

IMPROVEMENTS TO MARINE PARK PLAYGROUND

CITY/TOWN: BOSTON, MA

DRAWING TITLE: TREE PROTECTION PLAN

PROJECT NO.: 69 P20-3345-D1A

DATE: 10/05/2022

SHEET NO.: L 1.0

FARRAGUT ROAD

FARRAGUT ROAD
(PUBLIC - 90' WIDE, L-1668)

HEAD ISLAND CAUS

WILLIAM J DAY BLVD

STORAGE, STOCKPILE AND MACHINERY AREA

REMOVE AND STOCKPILE LIGHT POLE AND HAND HOLE. MAKE SAFE ELEC. WIRING

REMOVE AND STOCKPILE LIGHT POLE AND HAND HOLE. MAKE SAFE ELEC. WIRING

PROTECT EXISTING UNDERGROUND ELECTRICAL

R&D PLAY EQUIPMENT

PROTECT EXISTING UNDERGROUND ELECTRICAL

PROTECT EXISTING UNDERGROUND ELECTRICAL

REMOVE AND STOCKPILE PICNIC TABLE

PRESERVE AND PROTECT EXISTING CONCRETE WALK (TYP)

PRESERVE AND PROTECT EXISTING CONCRETE PADS AND BENCHES (TYP)

N/F
COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION
BOOK 7624 PAGE 575
PID 0603415000

100' BUFFER TO ESTIMATED COASTAL BANK (TYP.) SEE GENERAL NOTE 7

CHAPTER 91 JURISDICTION HIGH WATER SEE GENERAL NOTE 8

ZONE X(UNSHADED)
ZONE AE-(EL 11)
ZONE AE-(EL 15)
ZONE AE-(EL 16)

TBM 1 ELEV=12.69'
X-CUT SET IN HYDRANT BONNET BOLT

TBM 2 ELEV=13.30'
DISK IN WESTERLY CORNER OF CONCRETE MONUMENT

MWRA VOLUMETRIC EASEMENT PLAN 916 OF 2006

1 STORY CONC BUILDING

CONC RAMP

HUBWAY BIKE RACK

CONC WALK

STONE BLOCK WALL

15"SEWER

20"WIRE

204"WIRE SEWER

12"PCP

10"CI

PLANTER

METAL GRATE CONC PAD

CB RIM=+/-93' DIRT FILLED

JUNGLE GYM

RUBBER

GRASS

DWP

LEGEND

- LIMIT OF WORK
- DEMOLITION SAWCUT
- R&D FENCE
- R&D PAVEMENT
- R&D RESILIENT SURFACE
- R&D MULCH
- R&D PLAY EQUIPMENT
- REMOVE AND STOCKPILE TOPSOIL
- REMOVE AND STOCKPILE LIGHT POLES, BENCHES, PICNIC TABLES
- PROTECT SITE FEATURE TO REMAIN
- REMOVE SITE FEATURE

R&D - REMOVE AND DISPOSE - TO INCLUDE ASSOCIATED FOOTINGS AND/OR FOUNDATIONS

NOTES:

1. CONTRACTOR SHALL NOTIFY "DIG SAFE SYSTEM, INC." (1-888-344-7233) A MINIMUM OF 72 HOURS IN ADVANCE AND VERIFY UTILITY MARK-OUT WITH THE OWNER PRIOR TO THE INITIATION OF ANY SITE DISTURBANCE.
2. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR VERIFYING THE LOCATION AND NATURE OF ALL SUBSURFACE UTILITIES AT THE PROJECT WHICH MAY BE AFFECTED BY THE WORK. COORDINATE WITH RESPECTIVE UTILITY OWNERS AND PERFORM VERIFICATION OF TYPE, LOCATION AND INVERTS AS REQUIRED.
3. NOTIFY THE ENGINEER OF ANY AND ALL DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THE CONTRACT DOCUMENTS BEFORE PROCEEDING WITH THAT PORTION OF THE WORK.
4. THE LOCATIONS OF EXISTING SITE FEATURES AS SHOWN HAVE BEEN OBTAINED FROM MAPS, SURVEYS, FIELD INSPECTIONS, AND OTHER AVAILABLE INFORMATION. THEY MUST BE CONSIDERED APPROXIMATE BOTH TO LOCATION, SIZE, AND AS-BUILT CONDITION AND ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL FIELD CONDITIONS.
5. THE DIMENSIONS SHOWN ON THE PLANS, INCLUDING THE INTENDED DIMENSIONS OF THE WORK, MAY VARY FROM ACTUAL EXISTING CONDITIONS IN THE FIELD. THE CONTRACTOR SHALL TAKE APPROPRIATE MEASUREMENTS TO VERIFY ALL DIMENSIONS SHOWN ON THE DRAWINGS AS WELL AS OTHER DIMENSIONS HE MAY DEEM APPROPRIATE TO FACILITATE THE COMPLETION OF THE WORK. NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THE CONTRACT DOCUMENTS BEFORE PROCEEDING WITH THAT PORTION OF THE WORK.
6. IMPLEMENTING WORKER SAFETY AND/OR HEALTH PROTOCOLS THAT ADDRESS COMPLIANCE WITH RULES, LAWS, AND REGULATIONS PERTAINING TO CONSTRUCTION SAFETY AND/OR THE POTENTIAL AND/OR ACTUAL RISK OF EXPOSURE TO SITE-SPECIFIC PHYSICAL OR CHEMICAL HAZARDS IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.
7. ALL CONSTRUCTION FENCING AND WARNING SIGNS SHALL BE INSTALLED PRIOR TO ANY CONSTRUCTION. INSTALL CONSTRUCTION FENCING AT THE LIMIT OF WORK WHEN POSSIBLE.
8. PRIOR TO THE TERMINATION, ABANDONMENT, OR REMOVAL OF ANY UTILITY, VERIFY THAT APPLICABLE NOTIFICATIONS HAVE BEEN MADE TO THE UTILITY OWNER/OPERATOR AND THAT THE UTILITY HAS BEEN PROPERLY TERMINATED, CAPPED, OR PLUGGED AS REQUIRED.
9. PROTECT ALL IMPROVEMENTS NOT INCLUDED IN THE SCOPE OF SITE DEMOLITION. ANY IMPROVEMENT WHICH IS DAMAGED SHALL BE REPAIRED OR REPLACED IN-KIND TO THE OWNER'S SATISFACTION.

COMMONWEALTH OF MASSACHUSETTS
DOMINIC P. RINALDI
CIVIL
No. 45974
REGISTERED PROFESSIONAL ENGINEER

NOTICE OF INTENT SUBMISSION

0 20 40 60 feet
SCALE: 1" = 20'

NORTH

REV.	DATE:	DESCRIPTION	SHEET #:

dcr
Massachusetts

DESIGNER: BSC GROUP

CHECKED BY: RA

MASSACHUSETTS DEPARTMENT OF CONSERVATION AND RECREATION (DCR) PLANNING & ENGINEERING

PROJECT TITLE:
IMPROVEMENTS TO MARINE PARK PLAYGROUND

CITY/TOWN: BOSTON, MA

DRAWING TITLE: SITE PREPARATION AND DEMOLITION PLAN

PROJECT NO.: 69 P20-3345-D1A

DATE: 10/05/2022

SHEET NO.: L 2.0

MATERIALS LEGEND

SYMBOL	KEY	DESCRIPTION	DETAIL/SHEET
PAVING + CURBS			
	A1	CAST-IN-PLACE INTERGRAL COLOR CONCRETE PAVING 4" DEPTH	5/L7.0
	A2	BITUMINOUS CONCRETE WALKWAY	6/L7.0
	A3	BITUMINOUS CONCRETE WALKWAY (COLORED)	6/L7.0
	A4	RESILIENT RUBBERIZED PLAYGROUND SURFACING	4/L7.1
	A5	CAST-IN-PLACE FLUSH CONCRETE CURB	3/L7.1
	A6	EXISTING CONCRETE PAVING -TO REMAIN	3/L7.1

SYMBOL	KEY	DESCRIPTION	DETAIL/SHEET
SITE FURNISHINGS + IMPROVEMENTS			
	B1	4' HIGH ORNAMENTAL FENCE	1-3/L7.2
	B2	BENCH	1/L7.3
	B3	PICNIC TABLE	5/L7.3
	B4	PICNIC TABLE - ACCESSIBLE	X/L7.0
	B5	BIKE RACK	6/L7.1
	B6	8' WIDE ORNAMENTAL GATE WITH SELF CLOSING MECHANISM	3/L7.0
	B7	4' WIDE ORNAMENTAL GATE WITH SELF CLOSING MECHANISM	2/L7.0
LIGHTING			
	L1	LED LIGHTS	7/L7.1
PLANTING			
		PROPOSED CANOPY TREES	4/L7.3
UTILITIES			
	U1	AREA DRAIN	7/L7.1

LEGEND

- PROPERTY LINE
- LIMIT OF WORK
- PROPERTY SETBACK

Chaper 91 Impact Areas

Existing	Proposed
5,639 s.f.	4,043 s.f.

Area Subject to Coastal Storm Flowage Impact Areas

Existing	Proposed
9,436 s.f.	10,374 s.f.

CHAPTER 91 LIMITS

STORAGE, STOCKPILE AND MACHINERY AREA

AREA SUBJECT TO COASTAL FLOWAGE LIMITS

SEE SHEET L3.1 FOR PLAYGROUND ENLARGEMENT

FARRAGUT ROAD (PUBLIC - 90' WIDE, L-1868)

15" SEWER

STONE BLOCK WALL

ZONE X(UNSHADED)
ZONE AE-(EL 15)

ZONE X(UNSHADED)
ZONE AE-(EL 11)

1 STORY CONC BUILDING

MWRA VOLUMETRIC EASEMENT PLAN 916 OF 2006

CHAPTER 91 JURISDICTION HIGH WATER SEE GENERAL NOTE 8

100' BUFFER TO ESTIMATED COASTAL BANK (TYP.) SEE GENERAL NOTE 7

LIMIT OF WORK (TYP)

TYP OF 11

12" PROP

10" PROP

COMMONWEALTH OF MASSACHUSETTS
DOMINIC R. RINALDI
CIVIL
No. 45074
REGISTERED
PROFESSIONAL ENGINEER

Notice of Intent Submission

0 20 40 60 feet
SCALE: 1" = 20'

NORTH

REV.	DATE:	DESCRIPTION	SHEET #:

dcr Massachusetts

DESIGNER: BSC GROUP

CHECKED BY: RA

MASSACHUSETTS DEPARTMENT OF CONSERVATION AND RECREATION (DCR) PLANNING & ENGINEERING

PROJECT TITLE:
IMPROVEMENTS TO MARINE PARK PLAYGROUND

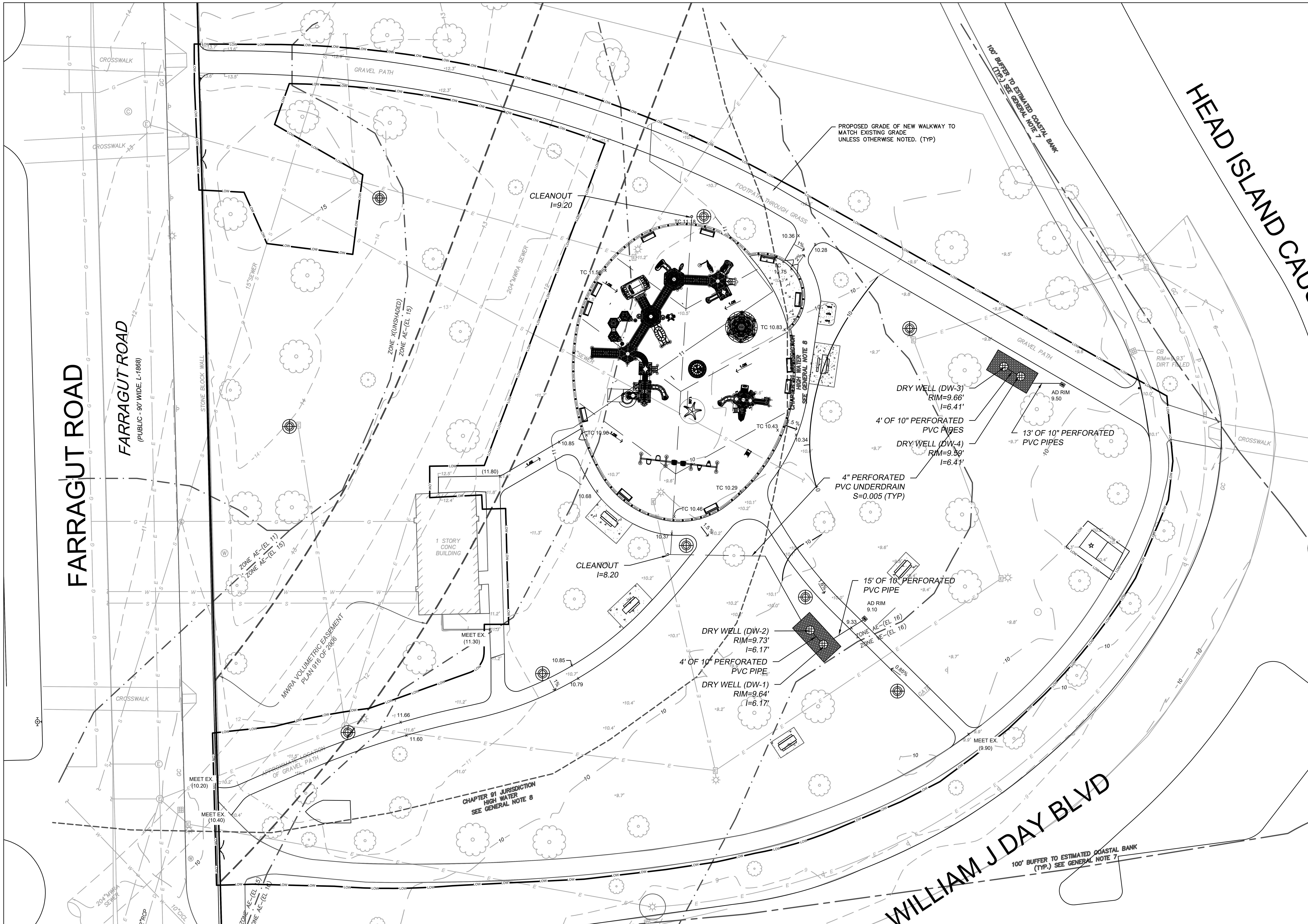
CITY/TOWN: BOSTON, MA

DRAWING TITLE: MATERIALS PLAN

PROJECT NO.: 69 P20-3345-D1A

DATE: 10/05/2022

SHEET NO.: L 3.0



LEGEND

- PROPERTY LINE
- LIMIT OF WORK
- TOPOGRAPHY: MAJOR INTERVAL
- TOPOGRAPHY: MINOR INTERVAL
- TOPOGRAPHY: PROPOSED SPOT ELEVATION
- TOPOGRAPHY: EXISTING SPOT ELEVATION
- STORM DRAINAGE PIPE
- AREA DRAIN
- UNDERDRAIN
- COLLECTOR DRAIN AND STONE
- OUTLET PROTECTION
- DRAINAGE SLOPE DIRECTION

COMMONWEALTH OF MASSACHUSETTS DOMINIC R. RINALDI CIVIL No. 45074 REGISTERED PROFESSIONAL ENGINEER

Notice of Intent Submission

SCALE: 1" = 20' (0 20 40 60 feet)

NORTH

REV.	DATE:	DESCRIPTION	SHEET #:

dcr Massachusetts

DESIGNER: BSC GROUP

CHECKED BY: RA

MASSACHUSETTS DEPARTMENT OF CONSERVATION AND RECREATION (DCR) PLANNING & ENGINEERING

PROJECT TITLE: IMPROVEMENTS TO MARINE PARK PLAYGROUND

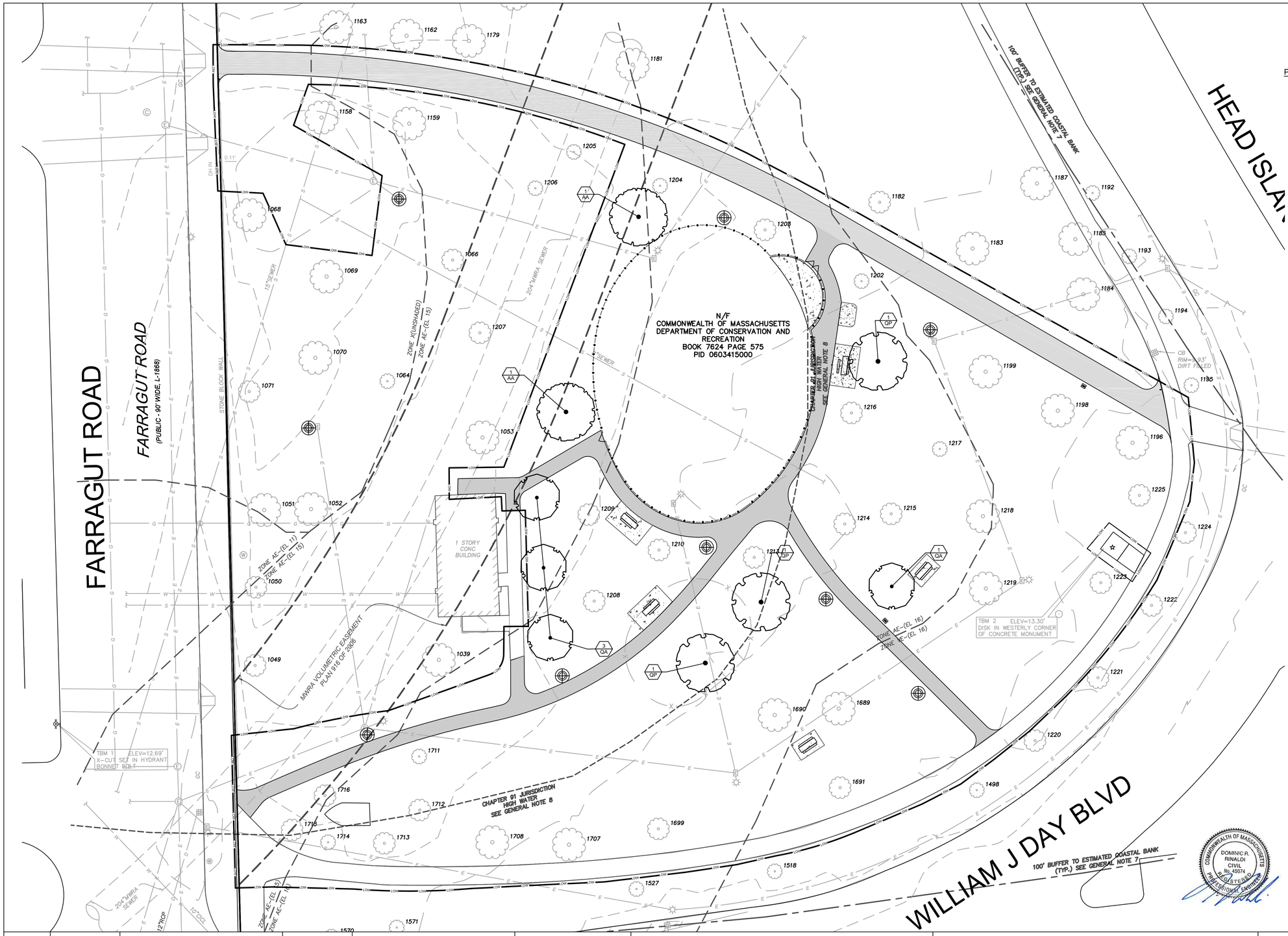
CITY/TOWN: BOSTON, MA

DRAWING TITLE: GRADING PLAN

PROJECT NO.: 69 P20-3345-D1A

DATE: 10/05/2022

SHEET NO.: L 4.0



LEGEND

- PROPERTY LINE
- LIMIT OF WORK

PLANTING NOTES

1. VERIFY EXISTING UTILITY LINES PRIOR TO PLANTING AND REPORT CONFLICTS TO THE OWNER OR HIS REPRESENTATIVE.
2. CONTRACTOR SHALL COORDINATE PLANTING INSTALLATION WITH WORK BEING DONE BY OTHERS.
3. THE CONTRACTOR SHALL REQUEST THAT THE ENGINEER REVIEW THE FINISHED GRADES BEFORE PLANTING AND SEEDING OPERATIONS BEGIN.
4. THE CONTRACTOR SHALL TAKE NECESSARY MEASURES TO PROTECT EXISTING VEGETATION THAT IS DESIGNATED, "TO REMAIN".
5. TREES TO BE SAVED SHALL BE PROTECTED. SEE SPECIFICATION FOR TREE PROTECTION REQUIREMENTS.
6. THE LANDSCAPE ARCHITECT SHALL APPROVE THE STAKING LOCATION OF PLANT MATERIAL PRIOR TO INSTALLATION.
7. NO PLANTING SHALL OCCUR PRIOR TO ACCEPTANCE OF FINAL GRADING.
8. PLANTS ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT BEFORE, DURING, AND AFTER INSTALLATION.
9. TOPSOIL STRIPPED FROM THE SITE AND PROPERLY STOCKPILED PRIOR TO APPLICATION MAY, UPON APPROVAL OF THE LANDSCAPE ARCHITECT, BE USED FOR PREPARATION OF LAWNS AND PLANTING BEDS. IT SHOULD BE FREE OF LARGE (ONE (1) INCH OR GREATER) COBBLES, ROOTS, OLD SOD, TRASH, WOOD OR OTHER CONTAMINANTS, AND BE OF A FRIABLE CONSISTENCY AND SUITABLE FOR PLANT GROWTH.
10. PROVIDE SOIL TEST REPORTS FOR ONSITE TOP SOIL TO BE REUSED AND FOR LOAM BORROW TO BE IMPORTED. SOIL TEST REPORT SHALL INCLUDE USDA TEXTURAL CLASSIFICATION, TEXTURAL SIEVE ANALYSIS, AS WELL AS NUTRIENT ANALYSIS, AND MICRO-NUTRIENTS.
11. PROVIDE SOIL AMENDMENTS AS DIRECTED BY THE LANDSCAPE ARCHITECT BASED UPON THE FINDINGS OF SOIL TESTS PROVIDED FOR EXISTING TOP SOIL TO BE REUSED AND OR IMPORTED MATERIAL. INCORPORATE COMMERCIALLY PREPARED MYCORRHIZA SPORES INTO PLANT PITS PER MANUFACTURER'S DIRECTIONS.
12. REMOVE ROCKS AND DEBRIS FROM SOIL SURFACE AND GRADE TO AN EVEN SURFACE. SEE SPECIFICATIONS.
13. PLANT MATERIAL SHALL CONFORM TO THE MINIMUM GUIDELINES ESTABLISHED BY THE AMERICAN STANDARD FOR NURSERY STOCK PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC. SEE SPECIFICATION FOR DETAILED REQUIREMENTS.
14. PROPOSED SUBSTITUTIONS OF PLANT MATERIAL SHALL BE MADE WITH MATERIAL EQUIVALENT TO THE DESIRED MATERIAL IN OVERALL FORM, HEIGHT, BRANCHING HABIT, FLOWER, LEAF, COLOR, FRUIT AND CULTURE. NO SUBSTITUTION OF PLANT SPECIES OR VARIETIES WILL BE ACCEPTABLE WITHOUT LANDSCAPE ARCHITECT'S WRITTEN APPROVAL.
15. OWNER'S REPRESENTATIVE TO APPROVE PLANT MATERIAL PRIOR TO DELIVERY TO SITE AND AGAIN AT THE PROJECT SITE PRIOR TO PLANTING.
16. COMPLETE QUANTITIES OF PLANTS FOR EACH AREA TO BE AVAILABLE ON SITE AT THE TIME OF PLANTING FOR FIELD LAYOUT BY OWNER'S REPRESENTATIVE. NO PARTIAL LAYOUT AND PLANTING OF AREAS WILL BE ACCEPTABLE.
17. PLANT QUANTITIES NOTED IN THE PLANT SCHEDULE ARE APPROXIMATE AND ARE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FURNISHING AND INSTALLATION OF PLANT MATERIALS NOTED ON THE PLANTING PLAN.
18. DO NOT OVERCOMPACT LOAM AREAS OR WORK SOIL IN A WET OR FROZEN STATE.
19. PLANTED AREAS SHALL BE PITCHED A MINIMUM OF TWO PERCENT (2%)
20. SHRUB BED AREAS SHALL RECEIVE 12" PLANTING SOIL MINIMUM THROUGHOUT. SEE PLANTING DETAILS.
21. INSTALL PLANTS WITH ROOT FLARES FLUSH WITH GRADE. IMMEDIATELY REPLANT PLANTS WHICH SETTLE OUT OF PLUMB OR BELOW FINISH GRADE. CAUTION SHALL BE USED NOT TO EXTEND MULCH LAYER ABOVE SOIL LEVEL AT TRUNKS/STEMS OF INSTALLED PLANT MATERIAL.
22. PROVIDE FOUR (4) FOOT DIAMETER MULCH CIRCLE AROUND INDIVIDUAL TREE PLANTINGS AND CONTINUOUS MULCH BED AROUND SHRUB, PERENNIAL AND GROUNDCOVER PLANTINGS, UNLESS OTHERWISE NOTED. DO NOT MOUND SOIL OR MULCH AT TRUNKS.
23. LOOSE OR CRACKED ROOTBALLS SHALL BE REJECTED.
24. PLANTING SHALL BE DONE UNDER FULL SUPERVISION OF CERTIFIED ARBORIST, NURSERYMAN, OR LICENSED LANDSCAPE ARCHITECT.
25. LOAM AND SEED DISTURBED AREAS UNLESS OTHERWISE NOTED ON THE PLANS.
26. THE CONTRACTOR IS RESPONSIBLE FOR FULLY MAINTAINING PLANTING (INCLUDING BUT NOT LIMITED TO: WATERING, SPRAYING, MULCHING, FERTILIZING, ETC.) OF THE PLANTING AREAS UNTIL THE WORK IS ACCEPTED IN TOTAL BY THE OWNER. PROVIDE A MINIMUM EQUIVALENT OF 1" OF RAIN PER WEEK DURING THE ESTABLISHMENT PERIOD.
27. CONTRACTOR SHALL PROVIDE CLEAN POTABLE WATER, HOSES AND NECESSARY EQUIPMENT FOR WATERING ASSOCIATED WITH THE PLANTING AND SEEDING OPERATIONS.
28. CERTIFIED ARBORISTS TO TAG DEAD AND IN POOR CONDITIONS TREES FOR SELECTIVE PRUNING AND REMOVAL BY CONTRACTOR.
29. PLANT MATERIAL WHICH DIES, TURNS BROWN, OR DEFOLIATES (PRIOR TO TOTAL ACCEPTANCE OF THE WORK) SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, AND SIZE AND MEET PLANT LIST SPECIFICATIONS.
30. THE CONTRACTOR SHALL COMPLETELY GUARANTEE PLANT MATERIAL FOR A PERIOD OF ONE (1) YEAR BEGINNING ON THE DATE OF TOTAL ACCEPTANCE. THE CONTRACTOR SHALL PROMPTLY MAKE REPLACEMENTS BEFORE OR AT THE END OF THE GUARANTEE PERIOD, AS DIRECTED BY THE OWNER.

PLANT_SCHEDULE

TREES	QTY	BOTANICAL / COMMON NAME	SIZE	SIZE
	2	ACER RUBRUM 'ARMSTRONG' ARMSTRONG RED MAPLE	B & B	2.5-3"
	4	QUERCUS ALBA WHITE OAK	B & B	2.5-3"
	3	QUERCUS COCCINEA 'SPLENDENS' SPLENDENS SCARLET OAK	B & B	2.5-3"

Notice of Intent Submission

COMMONWEALTH OF MASSACHUSETTS
DOMINIC R. RINALDI
CIVIL
No. 45074
REGISTERED PROFESSIONAL ENGINEER

0 20 40 60 feet
SCALE: 1" = 20'

NORTH

REV.	DATE:	DESCRIPTION	SHEET #:

dcr Massachusetts

DESIGNER: BSC GROUP

CHECKED BY: RA

MASSACHUSETTS DEPARTMENT OF CONSERVATION AND RECREATION (DCR) PLANNING & ENGINEERING

PROJECT TITLE: IMPROVEMENTS TO MARINE PARK PLAYGROUND

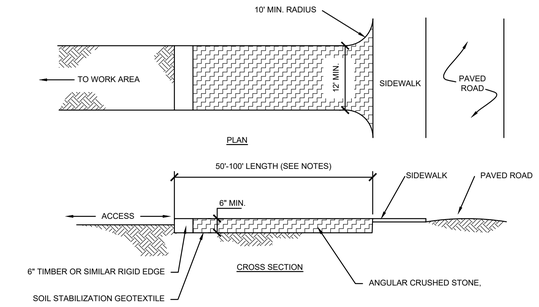
CITY/TOWN: BOSTON, MA

DRAWING TITLE: PLANTING PLAN

PROJECT NO.: 69 P20-3345-D1A

DATE: 10/05/2022

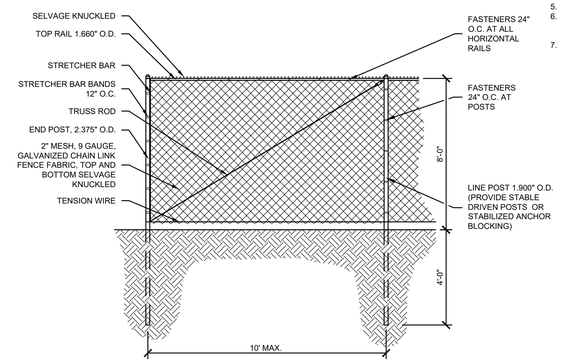
SHEET NO.: L 5.0

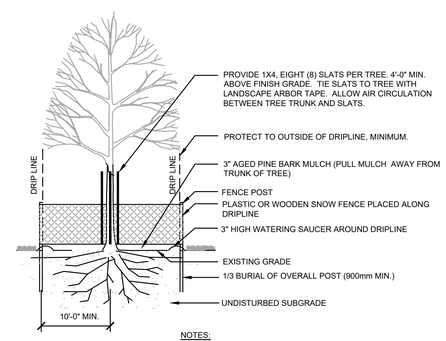


NOTES:

1. REMOVE TOPSOIL AND ORGANICS PRIOR TO CRUSHED STONE PLACEMENT.
2. INSTALL SUB-BASE OF FREE DRAINING BACKFILL OR ROAD STABILIZATION GEOTEXTILE AS NECESSARY ON UNSTABLE SOILS.
3. LENGTH SHALL BE 50 FOOT MINIMUM. WHERE TRACKED SEDIMENTS CONTAIN LESS THAN 80% SAND, LENGTH SHALL BE 100 FOOT MINIMUM.
4. IF THE GRADE OF THE CONSTRUCTION ENTRANCE DRAINS TO THE PAVED SURFACE AND IT EXCEEDS 2% SLOPE, CONSTRUCT ENTRANCE AT LEASE 15 FEET FROM ITS ENTRANCE ONTO THE PAVED SURFACE WHILE DIVERTING RUN-OFF WATER TO A SETTLING OR FILTERING AREA.
5. CONSTRUCT ANY DRAINAGE AND SETTLING FACILITIES REQUIRED TO ACCOMMODATE VEHICLE WASHING OPERATIONS. DIVERT ALL WASH WATER AWAY FROM ENTRANCE TO THE SETTLING AREA.
6. MAINTAIN ENTRANCE IS A CONDITION THAT WILL PREVENT WASHING OF SEDIMENT ONTO PAVED SURFACES.

1 CONSTRUCTION ENTRANCE



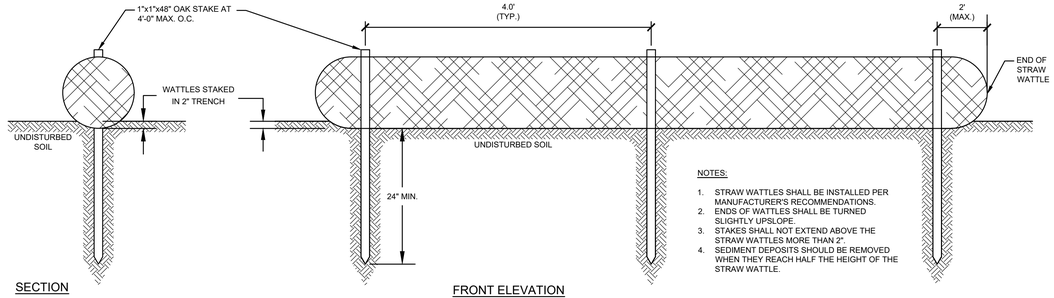


NOTES:

1. COORDINATE LOCATION OF FENCE WITH PROJECT ENGINEER.
2. IF EXCAVATION OCCURS WITHIN DRIPLINE, EXISTING ROOTS SHALL BE CLEANLY CUT PRIOR TO EXCAVATION BY A CERTIFIED ARBORIST AND TREES SHALL BE WATERED.

2 EXISTING TREE PROTECTION

3 STRAW WATTLE

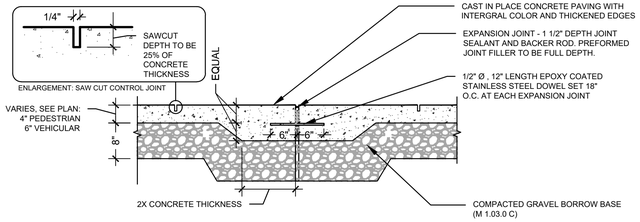


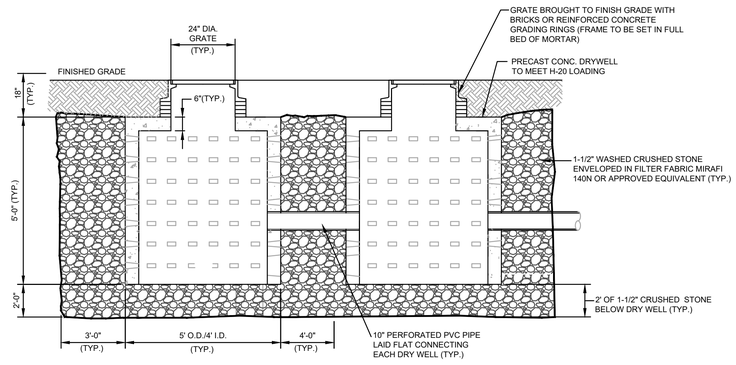
NOTES:

1. STRAW WATTLES SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
2. ENDS OF WATTLES SHALL BE TURNED SLIGHTLY UPSLOPE.
3. STAKES SHALL NOT EXTEND ABOVE THE STRAW WATTLES MORE THAN 2".
4. SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN THEY REACH HALF THE HEIGHT OF THE STRAW WATTLE.

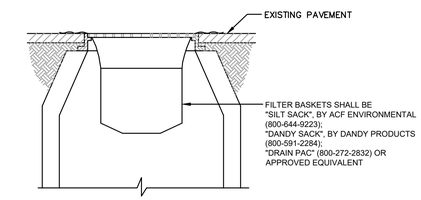
NOTES:

1. SUPPLY EXPANSION JOINT WITH SEALANT WHERE SIDEWALK ABUTS CURBS, WALLS, AND BUILDING FACES OR DISSIMILAR MATERIALS. INSTALL EXPANSION JOINTS @+-20'-0" O.C. OR AS SHOWN ON DRAWING. EVENLY SPACE CONTROL JOINTS BETWEEN EXPANSION JOINTS.
2. THICKEN CONCRETE TO DOUBLE THICKNESS AT EDGE WHERE IT MEETS WALLS, CURBS, BUILDING FACES, PLANTING AREAS, AND BITUMINOUS PAVING.
3. PRIOR TO INITIATION OF CONCRETE FLATWORK, SUBMIT PROPOSED CONSTRUCTION JOINT PLAN TO THE ENGINEER FOR REVIEW AND APPROVAL. COORDINATE SUCH PLAN WITH THE JOINT PATTERNS DEPICTED ON THE DRAWINGS.
4. FORM CONSTRUCTION JOINTS WITH BULKHEAD/FORMWORK TO ENSURE A SMOOTH, CLEAN EDGE FREE OF SAGS OR IRREGULARITIES
5. ENSURE PROPER CURING OF THE VERTICAL FACE AFTER REMOVAL OF BULKHEAD/FORMWORK BY APPLYING A LIQUID CURING COMPOUND OR PLASTIC SHEETING.
6. UNLESS OTHERWISE SPECIFIED, CONSTRUCTION JOINTS SHALL BE CONSTRUCTED WITH JOINT FILLER. JOINT FILLER SHALL EXTEND THE FULL DEPTH OF THE SLAB AND SHALL EXTEND THE FULL LENGTH OF THE JOINT. USE OF MULTIPLE PIECES OF JOINT MATERIAL OF LESSER DIMENSIONS TO MAKE UP REQUIRED DEPTH AND WIDTH OF JOINT WILL NOT BE PERMITTED.
7. WHERE JOINTS ARE TO RECEIVE FILLER, RECESS JOINT FILLER 1/4-INCH BELOW FINISH SURFACE OR AS OTHERWISE INDICATED ON THE DRAWINGS.





6 DRYWELL

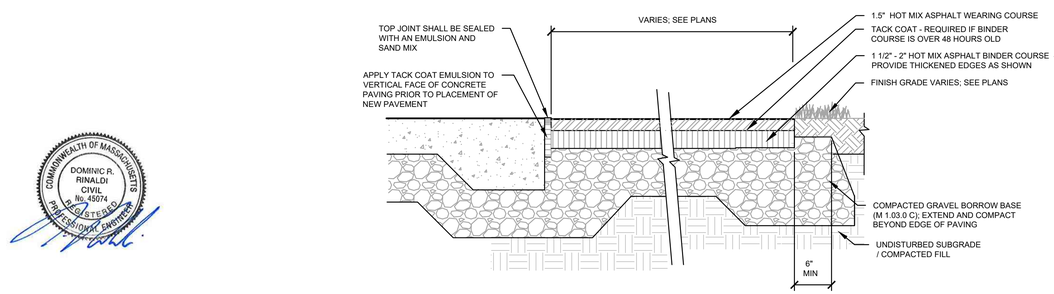


NOTE:

1. FILTER BASKETS TO BE PLACED IN ALL CATCH BASINS IN THE VICINITY OF NEW CONSTRUCTION. CATCH BASINS ARE TO BE PROTECTED AS SHOWN, WITH MINIMUM WEEKLY MAINTENANCE, OR AS REQUIRED AND REPLACED IF NECESSARY.

4 TEMPORARY CONSTRUCTION FENCE

5 CAST IN PLACE COLORED CONCRETE PAVING



8 BITUMINOUS CONCRETE WALKWAY

7 CATCH BASIN INLET PROTECTION

SCALE: NONE

COMMONWEALTH OF MASSACHUSETTS
DOMINIC R. RINALDI
CIVIL
No. 45074
REGISTERED PROFESSIONAL ENGINEER

NOTICE OF INTENT SUBMISSION

0 1 2 3 feet

SCALE: AS NOTED

NORTH

REV.	DATE:	DESCRIPTION	SHEET #:

dcr Massachusetts

DESIGNER: BSC GROUP

CHECKED BY: RA

MASSACHUSETTS DEPARTMENT OF CONSERVATION AND RECREATION (DCR) PLANNING & ENGINEERING

PROJECT TITLE:

IMPROVEMENTS TO MARINE PARK PLAYGROUND

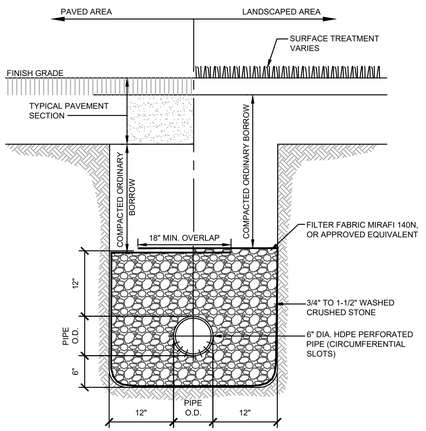
CITY/TOWN: BOSTON, MA

DRAWING TITLE: DETAILS

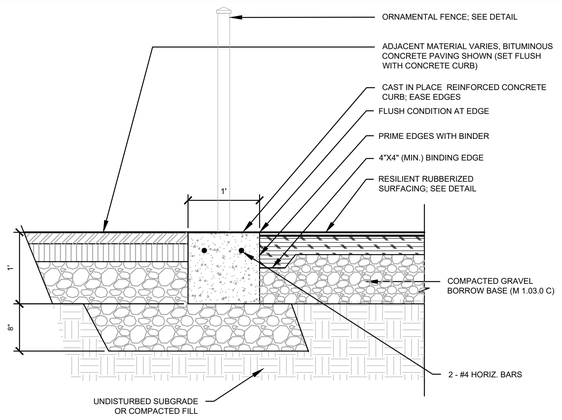
PROJECT NO.: 69 P20-3345-D1A

DATE: 10/05/2022

SHEET NO.: L 6.0

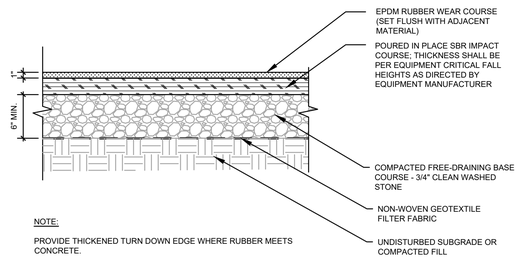


1 SUBDRAIN



2 FLUSH CONCRETE CURB

SCALE: NONE

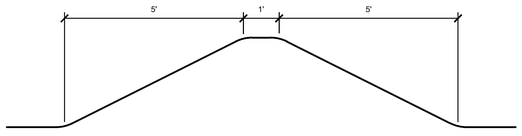


NOTE:

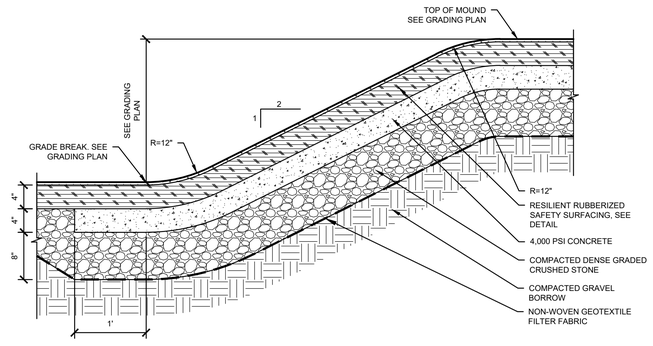
PROVIDE THICKENED TURN DOWN EDGE WHERE RUBBER MEETS CONCRETE.

3 RESILIENT RUBBERIZED SURFACING

SCALE: NONE



MOUND SECTION



4 RESILIENT RUBBERIZED SURFACE PLAY MOUND

NOTES:

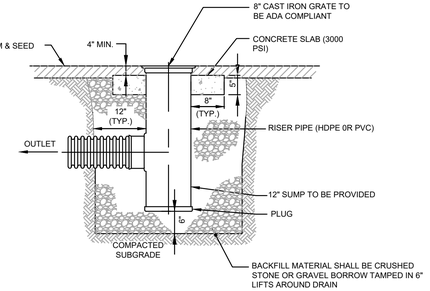
1. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
2. CONTRACTOR RESPONSIBLE FOR MAINTAINING TREES IN A PLUMB CONDITION.
3. SAUCER SHALL BE FLOODED TWICE DURING THE FIRST 24 HOURS AFTER PLANTING.

5 DECIDUOUS TREE PLANTING

NOTES:

1. SEE SPECIFICATION FOR SEED MIX APPLICATION AND PLANTING MEDIUM PREPARATION.
2. WHERE HYDRO-SEEDING IS NOT EMPLOYED, LOAMED AREAS SHALL BE RAKED TO LOOSEN SOILS, SEED AND STARTER FERTILIZER SHALL BE SPREAD, AND THE ENTIRE SURFACE SHALL BE ROLLED TO BOND SEED TO SOIL SURFACE.

6 LAWN (LOAM AND SEED)



7 AREA DRAIN

NOTICE OF INTENT SUBMISSION

0 1 2 3 feet

SCALE: AS NOTED

NORTH

REV.	DATE:	DESCRIPTION	SHEET #:

dcr Massachusetts

DESIGNER: BSC GROUP

CHECKED BY: RA

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CITY/TOWN: BOSTON, MA

DRAWING TITLE: DETAILS

PROJECT NO.: 69 P20-3345-D1A

DATE: 10/05/2022

SHEET NO.: L 6.1