



westonandsampson.com

55 Walkers Brook Drive, Suite 100
Reading, MA 01867
tel: 978.532.1900

Notice of Intent



May 2023

FRED GREEN MEMORIAL FIELD TURF REPLACEMENT

PREPARED FOR:
CITY OF MELROSE

SUBMITTED TO:
MELROSE CONSERVATION COMMISSION



May 22, 2023

Melrose Conservation Commission
Melrose City Hall
562 Main Street
Melrose, MA 02176

Re:*NOI Filing
 Fred Green Memorial Field Turf Replacement
 Lynn Fells Parkway/Tremont Street*

Dear Members of the Commission:

On behalf of the City of Melrose Parks Department, Weston & Sampson Engineers, Inc. is hereby enclosing eight (8) copies (including original) of the Notice of Intent submittal (including plans) to fulfill the requirements of the Massachusetts Wetlands Protection Act, M.G.L. Chapter 131, Section 40 submittal requirements and the City of Melrose submittal requirements. This submittal is a formal Notice of Intent for the turf replacement at Fred Green Memorial Field.

As part of the filing, we have attached the following:

- Appendix A: Project Description
- Appendix B: Stormwater Report
- Appendix C: Project Maps
- Appendix D: Applicable Technical Specifications
- Appendix E: Abutters Information
- Appendix F: Wetlands Memorandum
- Appendix G: Photographs
- Appendix H: PFAS Memorandum

If you have any questions regarding this submittal, please contact me at (978) 532-1900.

Very truly yours,

WESTON & SAMPSON



Alexandra Gaspar
Environmental Scientist



Enter your transmittal number

X289778

Transmittal Number

Your unique Transmittal Number can be accessed online:

<http://www.mass.gov/eea/agencies/massdep/service/approvals/transmittal-form-for-payment.html>

Massachusetts Department of Environmental Protection

Transmittal Form for Permit Application and Payment

1. Please type or print. A separate Transmittal Form must be completed for each permit application.

2. Make your check payable to the Commonwealth of Massachusetts and mail it with a copy of this form to: MassDEP, P.O. Box 4062, Boston, MA 02211.

3. Three copies of this form will be needed.

Copy 1 - the original must accompany your permit application. **Copy 2** must accompany your fee payment. **Copy 3** should be retained for your records

4. Both fee-paying and exempt applicants must mail a copy of this transmittal form to:

MassDEP
P.O. Box 4062
Boston, MA
02211

* **Note:**
For BWSC Permits, enter the LSP.

A. Permit Information

WPA Form 3

wetlands

1. Permit Code: 4 to 7 character code from permit instructions

2. Name of Permit Category

turf replacement

3. Type of Project or Activity

B. Applicant Information – Firm or Individual

City of Melrose Parks Department

1. Name of Firm - Or, if party needing this approval is an individual enter name below:

2. Last Name of Individual

3. First Name of Individual

4. MI

100 Slayton Road

5. Street Address

Melrose

MA

02176

781-979-4169

6. City/Town

7. State

8. Zip Code

9. Telephone #

10. Ext. #

Joan Bell

jbell@cityofmelrose.org

11. Contact Person

12. e-mail address

C. Facility, Site or Individual Requiring Approval

Fred Green Turf Replacement

1. Name of Facility, Site Or Individual

129 Tremont Street

2. Street Address

Melrose

MA

02176

3. City/Town

4. State

5. Zip Code

6. Telephone #

7. Ext. #

8. DEP Facility Number (if Known)

9. Federal I.D. Number (if Known)

10. BWSC Tracking # (if Known)

D. Application Prepared by (if different from Section B)*

Weston & Sampson Engineers

1. Name of Firm Or Individual

55 Walkers Brook Dr , Suite 100

2. Address

Reading

MA

01876

978-532-1900

3. City/Town

4. State

5. Zip Code

6. Telephone #

7. Ext. #

Alexandra Gaspar

8. Contact Person

9. LSP Number (BWSC Permits only)

E. Permit - Project Coordination

1. Is this project subject to MEPA review? yes no
If yes, enter the project's EOE file number - assigned when an Environmental Notification Form is submitted to the MEPA unit:

EOEA File Number

F. Amount Due

Special Provisions:

1. Fee Exempt (city, town or municipal housing authority)(state agency if fee is \$100 or less).
There are no fee exemptions for BWSC permits, regardless of applicant status.
2. Hardship Request - payment extensions according to 310 CMR 4.04(3)(c).
3. Alternative Schedule Project (according to 310 CMR 4.05 and 4.10).
4. Homeowner (according to 310 CMR 4.02).

DEP Use Only

Permit No:

Rec'd Date:

Reviewer:

Check Number

Dollar Amount

Date



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands

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Provided by MassDEP:

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City/Town

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



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

A. General Information

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

<u>129 Tremont Street</u>	<u>Melrose</u>	<u>02176</u>
a. Street Address	b. City/Town	c. Zip Code
Latitude and Longitude:	<u>42deg27'51.149"N</u>	<u>71deg4'6.606"W</u>
	d. Latitude	e. Longitude
<u>C10</u>	<u>3</u>	
f. Assessors Map/Plat Number	g. Parcel /Lot Number	

2. Applicant:

<u>Joan</u>	<u>Bell</u>	
a. First Name	b. Last Name	
<u>City of Melrose Parks Department</u>		
c. Organization		
<u>100 Slayton Road</u>		
d. Street Address		
<u>Melrose</u>	<u>MA</u>	<u>02176</u>
e. City/Town	f. State	g. Zip Code
<u>781-979-4169</u>	<u>jbelle@cityofmelrose.org</u>	
h. Phone Number	i. Fax Number	j. Email Address

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

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

4. Representative (if any):

<u>Alexandra</u>	<u>Gaspar</u>	
a. First Name	b. Last Name	
<u>Weston & Sampson Engineers</u>		
c. Company		
<u>55 Walkers Brook Drive Suite 100</u>		
d. Street Address		
<u>Reading</u>	<u>MA</u>	<u>01867</u>
e. City/Town	f. State	g. Zip Code
<u>978-532-1900</u>	<u>gaspara@wseinc.com</u>	
h. Phone Number	i. Fax Number	j. Email address

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

<u>exempt</u>	<u></u>	<u></u>
a. Total Fee Paid	b. State Fee Paid	c. City/Town Fee Paid



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

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A. General Information (continued)

6. General Project Description:

Turf replacement (See Appendix A for additional information)

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

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

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

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

2. Limited Project Type

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

8. Property recorded at the Registry of Deeds for:

Middlesex

a. County

5633

c. Book

b. Certificate # (if registered land)

569

d. Page Number

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

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

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



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

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

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

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
d. <input checked="" type="checkbox"/> Bordering Land Subject to Flooding	83,490	83,490
	1. square feet	2. square feet
	0	0
e. <input type="checkbox"/> Isolated Land Subject to Flooding	3. cubic feet of flood storage lost	4. cubic feet replaced
	1. square feet	
f. <input type="checkbox"/> Riverfront Area	2. cubic feet of flood storage lost	3. cubic feet replaced
	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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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.

<u>Resource Area</u>	<u>Size of Proposed Alteration</u>	<u>Proposed Replacement (if any)</u>
a. <input type="checkbox"/> Designated Port Areas	Indicate size under Land Under the Ocean, below	
b. <input type="checkbox"/> Land Under the Ocean	_____	
	1. square feet	

	2. cubic yards dredged	
c. <input type="checkbox"/> Barrier Beach	Indicate size under Coastal Beaches and/or Coastal Dunes below	
d. <input type="checkbox"/> Coastal Beaches	_____	_____
	1. square feet	2. cubic yards beach nourishment
e. <input type="checkbox"/> Coastal Dunes	_____	_____
	1. square feet	2. cubic yards dune nourishment
	<u>Size of Proposed Alteration</u>	<u>Proposed Replacement (if any)</u>
f. <input type="checkbox"/> Coastal Banks	_____	
	1. linear feet	
g. <input type="checkbox"/> Rocky Intertidal Shores	_____	
	1. square feet	
h. <input type="checkbox"/> Salt Marshes	_____	_____
	1. square feet	2. sq ft restoration, rehab., creation
i. <input type="checkbox"/> Land Under Salt Ponds	_____	
	1. square feet	

	2. cubic yards dredged	
j. <input type="checkbox"/> Land Containing Shellfish	_____	
	1. square feet	
k. <input type="checkbox"/> 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. <input type="checkbox"/> Land Subject to Coastal Storm Flowage	_____	
	1. square feet	
4. <input type="checkbox"/> 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. <input type="checkbox"/> 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**

- 2023 _____
b. Date of map

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

- c. Submit Supplemental Information for Endangered Species Review*

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

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

* Some projects **not** in Estimated Habitat may be located in Priority Habitat, and require NHESP review (see <https://www.mass.gov/endangered-species-act-mesa-regulatory-review>).

Priority Habitat includes habitat for state-listed plants and strictly upland species not protected by the Wetlands Protection Act.

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



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 Bureau of Resource Protection - Wetlands
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 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

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

(c) MESA filing fee (fee information available at <https://www.mass.gov/how-to/how-to-file-for-a-mesa-project-review>).
 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, <https://www.mass.gov/service-details/exemptions-from-review-for-projectsactivities-in-priority-habitat>; 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:

North Shore - Hull to New Hampshire border:

Division of Marine Fisheries -
 Southeast Marine Fisheries Station
 Attn: Environmental Reviewer
 836 South Rodney French Blvd.
 New Bedford, MA 02744
 Email: dmf.envreview-south@mass.gov

Division of Marine Fisheries -
 North Shore Office
 Attn: Environmental Reviewer
 30 Emerson Avenue
 Gloucester, MA 01930
 Email: dmf.envreview-north@mass.gov

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.

c. Is this an aquaculture project? d. Yes No

If yes, include a copy of the Division of Marine Fisheries Certification Letter (M.G.L. c. 130, § 57).



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

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Provided by MassDEP:
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Melrose
City/Town

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

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

- 4. Is any portion of the proposed project within an Area of Critical Environmental Concern (ACEC)?
 a. Yes No If yes, provide name of ACEC (see instructions to WPA Form 3 or MassDEP Website for ACEC locations). **Note:** electronic filers click on Website.
 b. ACEC

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

D. Additional Information

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

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

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

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



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D. Additional Information (cont'd)

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

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

Fred Green Memorial Field Turf Replacement

a. Plan Title

Weston & Sampson Engineers

Brandon Kunkel, RLA

b. Prepared By

c. Signed and Stamped by

April 2023

1" = 20'

d. Final Revision Date

e. Scale

f. Additional Plan or Document Title

g. Date

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

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

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

8. Attach NOI Wetland Fee Transmittal Form

9. Attach Stormwater Report, if needed.

E. Fees

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

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

2. Municipal Check Number

3. Check date

4. State Check Number

5. Check date

6. Payor name on check: First Name

7. Payor name on check: Last Name



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F. Signatures and Submittal Requirements

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

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


1. Signature of Applicant


2. Date


5. Signature of Representative (if any)

4. Date
5/17/2023
6. Date

For Conservation Commission:

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

For MassDEP:

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

Other:

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

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



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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:

129 Tremont Street

a. Street Address

exempt

c. Check number

Melrose

b. City/Town

d. Fee amount

2. Applicant Mailing Address:

Joan

a. First Name

City of Melrose Parks Department

c. Organization

100 Slayton Road

d. Mailing Address

Melrose

e. City/Town

781-979-4169

h. Phone Number

i. Fax Number

MA

f. State

02176

g. Zip Code

jbell@cityofmelrose.org

j. Email Address

3. Property Owner (if different):

a. First Name

b. Last Name

c. Organization

d. Mailing Address

e. City/Town

f. State

g. Zip Code

h. Phone Number

i. Fax Number

j. Email Address

B. Fees

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

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

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

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

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

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

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

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



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 Bureau of Resource Protection - Wetlands
NOI Wetland Fee Transmittal Form
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B. Fees (continued)

Step 1/Type of Activity	Step 2/Number of Activities	Step 3/Individual Activity Fee	Step 4/Subtotal Activity Fee
exempt			

Step 5/Total Project Fee: _____

Step 6/Fee Payments:

Total Project Fee: _____
 a. Total Fee from Step 5

State share of filing Fee: _____
 b. 1/2 Total Fee **less** \$12.50

City/Town share of filing Fee: _____
 c. 1/2 Total Fee **plus** \$12.50

C. Submittal Requirements

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

Department of Environmental Protection
 Box 4062
 Boston, MA 02211

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

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

Appendix A

PROJECT DESCRIPTION

Background

The existing synthetic turf field is located at Fred Green Memorial Field adjacent to Melrose Middle School, 360 Lynn Fells Parkway, Melrose MA 02176. The turf field has reached the end of its useful and safe life cycle. The City of Melrose Parks Department is planning to replace the synthetic turf field with new synthetic turf.

Site Description

The specific project area is to the west of Melrose Middle School. The field is surrounded by Tremont Street and Lynn Fells Parkway. The project site is in an urban area with no natural wetlands, streams or other water bodies within conservation commission jurisdiction. The majority of the site falls within the 100-year floodzone.

Scope of Work

The existing synthetic turf field's replacement will include removal of the existing field infill materials, the synthetic turf carpet, and selective areas of subsurface drainage stone within the synthetic turf field footprint. Following the removal of the existing carpet and infill material, new synthetic turf carpet will be installed in kind. The existing infill will be reused and supplemented as necessary to meet the required quantity. All activities required for the replacement of the existing field are to remain within the existing footprints of the field with no permanent work to be completed beyond the limits of the field area. There will be no change in grades upon project completion.

The anticipated means and methods to perform this work is typical in that the contractor will vacuum out the existing infill and remove the existing turf. All materials to be demolished will be stockpiled into industrial sacks or removed immediately outside the jurisdictional setbacks and properly disposed of. All materials to be salvaged will be stockpiled into industrial sacks and stored for reuse once the new carpet is installed. Following the removal of the infill, and the field carpet, additional stormwater infiltration tests will be performed within the field area limits to verify the subsurface drainage stone is performing to the standards specified. In the event the testing results show the drainage layers are underperforming, it is anticipated that up to twelve inches of drainage stone will be strategically removed and replaced with new drainage stone specific to the areas that do not meet the specifications. The minimal requirements for new subsurface drainage stone are 50-inches of infiltration per hour minimally. The drainage stone layer will be rolled, and the subsurface stone layer elevations will be adjusted throughout the field areas to ensure proper drainage of the new finished carpet and reused infill. The City of Melrose Parks Department is responsible for all operations and maintenance of the fields and surrounding stormwater drain system including the catch basins. Cleanout and maintenance protocols are in place and will remain in place following the completion of this project.

The synthetic carpet will be rolled onto the drainage stone subsurface and adhered to the perimeter curb. Following the placement of the carpet, it will be infilled with a 50/50 mix of sand and virgin rubber. The synthetic turf is comprised of a 2 ¼"-2 ½" extruded plastic filament adhered to a woven and or non-woven backing placed directly atop of the subbase drainage stone layer and infilled with an equal parts (50/50) virgin rubber and

silica sand infill to a two-inch depth using a spreader. Typical infiltration rates within the synthetic turf carpet profile are to be 10-inches/hour minimally.

There will be no trees removed to perform this scope of work that has been outlined herein. Any tree that is within proximity of work to be conducted will be protected using snow fence at the dripline of the tree and no material storage or equipment is permitted to work within the critical root zone of the tree unless authorized by the owner or the project engineer.

Erosion control in the form of straw wattles will be used around the perimeter of the site. In addition, catch basin protection will be used on all catch basins within the project area.

Stockpiling of materials will occur in the northwestern corner of the site and will be surrounded by straw wattles to prevent any materials migration off site. See Sheet L500 for erosion control details.

Environmental Considerations

This project will result in temporary impact to Bordering Land Subject to Flooding (BLSF), a resource area protected by the MA Wetlands Protection Act and the City of Melrose Wetland Bylaw. Below please find the General Performance Standards for BLSF and how this project complies.

1. **Compensatory storage shall be provided for all flood storage volume that will be lost as the result of a proposed project within Bordering Land Subject to Flooding, when in the judgment of the issuing authority said loss will cause an increase or will contribute incrementally to an increase in the horizontal extent and level of flood waters during peak flows.**

Compensatory storage shall mean a volume not previously used for flood storage and shall be incrementally equal to the theoretical volume of flood water at each elevation, up to and including the 100-year flood elevation, which would be displaced by the proposed project. Such compensatory volume shall have an unrestricted hydraulic connection to the same waterway or water body. Further, with respect to waterways, such compensatory volume shall be provided within the same reach of the river, stream or creek.

As this is a turf replacement project, post-construction grade will be identical to pre-construction grade. Therefore, no flood storage will be lost as part of this project.

2. **Work within Bordering Land Subject to Flooding, including that work required to provide the above-specified compensatory storage, shall not restrict flows so as to cause an increase in flood stage or velocity.**

See above. As site grade will be identical pre and post construction, the work will not restrict flows.

3. **Work in those portions of bordering land subject to flooding found to be significant to the protection of wildlife habitat shall not impair its capacity to provide important wildlife habitat functions. Except for work which would adversely affect vernal pool habitat, a project or projects on a single lot, for which Notice(s) of Intent is filed on**

or after November 1, 1987, that (cumulatively) alter(s) up to 10% or 5,000 square feet (whichever is less) of land in this resource area found to be significant to the protection of wildlife habitat, shall not be deemed to impair its capacity to provide important wildlife habitat functions. Additional alterations beyond the above threshold, or altering vernal pool habitat, may be permitted if they will have no adverse effects on wildlife habitat, as determined by procedures contained in 310 CMR 10.60.

The work area consists of already developed area (turf field, pavement, driveways) so it is assumed that there is no wildlife habitat within the limits of work.

Appendix B



Checklist for Stormwater Report

A. Introduction

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



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

The Stormwater Report must include:

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

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

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

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

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

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



Checklist for Stormwater Report

B. Stormwater Checklist and Certification

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

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

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

Registered Professional Engineer's Certification

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

Registered Professional Engineer Block and Signature



5/17/2023

Signature and Date

Checklist

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

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



Checklist for Stormwater Report

Checklist (continued)

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

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

Standard 1: No New Untreated Discharges

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



Checklist for Stormwater Report

Checklist (continued)

Standard 2: Peak Rate Attenuation

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

Standard 3: Recharge

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

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



Checklist for Stormwater Report

Checklist (continued)

Standard 3: Recharge (continued)

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

Standard 4: Water Quality

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

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



Checklist for Stormwater Report

Checklist (continued)

Standard 4: Water Quality (continued)

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

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

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

Standard 6: Critical Areas

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



Checklist for Stormwater Report

Checklist (continued)

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

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

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

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

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



Checklist for Stormwater Report

Checklist (continued)

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

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

Standard 9: Operation and Maintenance Plan

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

Standard 10: Prohibition of Illicit Discharges

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

Stormwater Report
To Be Submitted with the Notice of Intent

Applicant/Project Name: City of Melrose Parks Department

Project Address: 129 Tremont Street, Melrose, MA

Application Prepared by:

Firm: Weston & Sampson, Inc.
Registered PE Jesse Johnson, P.E.

Below is an explanation concerning Standards 1-10 as they apply to the City of Melrose Parks Department Fred Green Memorial Field turf replacement project.

General:

The existing synthetic turf field's replacement will include removal of the existing field infill materials, the synthetic turf carpet, and selective areas of subsurface drainage stone within the synthetic turf field footprint. Following the removal of the existing carpet and infill material, new synthetic turf carpet will be installed in kind. The existing infill will be reused and supplemented as necessary to meet the required quantity. All activities required for the replacement of the existing field are to remain within the existing footprints of the field with no permanent work to be completed beyond the limits of the field area.

The anticipated means and methods to perform this work is typical in that the contractor will vacuum out the existing infill and remove the existing turf. All materials to be demolished will be stockpiled into industrial sacks or removed immediately outside the jurisdictional setbacks and properly disposed of. All materials to be salvaged will be stockpiled into industrial sacks and stored for reuse once the new carpet is installed. Following the removal of the infill, and the field carpet, additional stormwater infiltration tests will be performed within the field area limits to verify the subsurface drainage stone is performing to the standards specified. In the event the testing results show the drainage layers are underperforming, it is anticipated that up to twelve inches of drainage stone will be strategically removed and replaced with new drainage stone specific to the areas that do not meet the specifications. The minimal requirements for new subsurface drainage stone are 50-inches of infiltration per hour minimally. The drainage stone layer will be rolled, and the subsurface stone layer elevations will be adjusted throughout the field areas to ensure proper drainage of the new finished carpet and reused infill. The City of Melrose Parks Department is responsible for all operations and maintenance of the fields and surrounding stormwater drain system including the catch basins. Cleanout and maintenance protocols are in place and will remain in place following the completion of this project.

Standard 1: No New Untreated Discharges

The proposed project will create no new untreated discharges. No new impervious area will be created during this project.

Standard 2: Peak Rate Attenuation

Since there will be no increase in impervious area, post-development (post-improvement) peak discharge rates will not exceed pre-development (pre-improvement) peak discharge rates.

To ensure that the work incorporates the performance standards recommended in the DEP's Stormwater Management Policy, necessary erosion and sedimentation control measures will be utilized during construction. These measures will include straw wattles and inlet sediment control.

Standard 3: Recharge

As noted in the **Standard 2** explanation, the impervious area in the work area will not be increased at the completion of the project. Therefore, recharge rates will not change in the work area at the end of the project.

Standard 4: Water Quality

The proposed work will not change water quality at the site. There will be no increase in stormwater flow, and the design will not increase soil erosion. During the project, appropriate BMPs will be used to minimize sedimentation and soil erosion.

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

Not Applicable. There are no LUHPPLs in the work area.

Standard 6: Critical Areas

There will be no new discharge to critical areas.

Standard 7: Redevelopments and Other Projects Subject to the Standards Only to the Maximum Extent Practicable

This is a re-development project which will minimize disturbance to existing trees and shrubs.

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

A detailed Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan is included. To ensure that the work incorporates the performance standards recommended in the DEP's Stormwater Management Policy, necessary erosion and sedimentation control measures will be utilized during construction. These measures will include straw wattles and inlet sediment control.

Standard 9: Operation and Maintenance Plan

An operations and maintenance plan is not needed since there will not be any new stormwater management systems put in place in the project work area.

Standard 10: Prohibition of Illicit Discharges

By the nature of the proposed work, there will be no illicit discharges. There will be no opportunity for illicit discharges into the system.

Registered Professional Engineer's Certification

I have reviewed the Stormwater Report, including any relevant soil evaluations, computations, Long-term Pollution Prevention Plan, the Construction Period Erosion and Sedimentation Control Plan, the Long-term Post-Construction Operation and Maintenance Plan, the Illicit Discharge Compliance Statement 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



5/17/2023

Signature and Date

Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan

SECTION 1: Introduction

The existing synthetic turf field's replacement will include removal of the existing field infill materials, the synthetic turf carpet, and selective areas of subsurface drainage stone within the synthetic turf field footprint. Following the removal of the existing carpet and infill material, new synthetic turf carpet will be installed in kind. The existing infill will be reused and supplemented as necessary to meet the required quantity. All activities required for the replacement of the existing field are to remain within the existing footprints of the field with no permanent work to be completed beyond the limits of the field area.

The anticipated means and methods to perform this work is typical in that the contractor will vacuum out the existing infill and remove the existing turf. All materials to be demolished will be stockpiled into industrial sacks or removed immediately outside the jurisdictional setbacks and properly disposed of. All materials to be salvaged will be stockpiled into industrial sacks and stored for reuse once the new carpet is installed. Following the removal of the infill, and the field carpet, additional stormwater infiltration tests will be performed within the field area limits to verify the subsurface drainage stone is performing to the standards specified. In the event the testing results show the drainage layers are underperforming, it is anticipated that up to twelve inches of drainage stone will be strategically removed and replaced with new drainage stone specific to the areas that do not meet the specifications. The minimal requirements for new subsurface drainage stone are 50-inches of infiltration per hour minimally. The drainage stone layer will be rolled, and the subsurface stone layer elevations will be adjusted throughout the field areas to ensure proper drainage of the new finished carpet and reused infill. The City of Melrose Parks Department is responsible for all operations and maintenance of the fields and surrounding stormwater drain system including the catch basins. Cleanout and maintenance protocols are in place and will remain in place following the completion of this project.

As part of this project, this "Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan" has been created to ensure that no further disturbance to the wetland resource is created during the project.

SECTION 2: Construction Period Pollution Prevention Measures

Best Management Practices (BMPs) will be utilized as Construction Period Pollution Prevention Measures to reduce potential pollutants and prevent any off-site discharge. The objectives of the BMPs for construction activity are to minimize the disturbed areas, stabilize any disturbed areas, control the site perimeter and retain sediment. Both erosion and sedimentation controls and non-stormwater best management measures will be used to minimize site disturbance and ensure compliance with the performance standards of the WPA and Stormwater Standards. Measures will be taken to minimize the area disturbed by construction activities to reduce the potential for soil erosion and stormwater pollution problems. In addition, good housekeeping measures will be followed for the day-to-day operation of the construction site under the control of the contractor to minimize the impact of construction. This section describes the control practices that will be in place during construction activities. Recommended control practices will comply with the standards set in the MA DEP Stormwater Policy Handbook.

2.1 Minimize Disturbed Area and Protect Natural Features and Soil

In order to minimize disturbed areas, work will be completed within well-defined work limits. These work limits are shown on the construction plans. The Contractor shall not disturb native vegetation in the undisturbed wetland area without prior approval from the Engineer. The Contractor will be responsible to make sure that all of their workers and any subcontractors know the proper work limits and do not extend their work into the undisturbed areas. The protective measures are described in more detail in the following sections.

2.2 Control Stormwater Flowing onto and through the project

Construction areas will be lined with appropriate sediment and erosion control measures. Straw wattles will be inspected daily for sediment build-up and accumulated silt will be removed as needed.

2.3 Stabilize Soils

The Contractor shall limit the area of land which is exposed and free from vegetation during construction. In areas where the period of exposure will be greater than two (2) months, mulching, the use of erosion control mats, or other protective measures shall be provided as specified.

The Contractor shall take account of the conditions of the soil where erosion control seeding will take place to ensure that materials used for re-vegetation are adaptive to the sediment control.

2.4 Proper Storage and Cover of Any Stockpiles

The location of the Contractor's storage areas for equipment and/or materials shall require written approval of the Engineer.

Adequate measures for erosion and sediment control such as the placement of straw wattles around the perimeter of stockpiles shall be employed to protect any areas from siltation.

There shall be no storage of equipment or materials in areas designated as wetlands.

The Engineer may designate a particular area or areas where the Contractor may store materials used in his operations.

2.5 Perimeter Controls and Sediment Barriers

Erosion control lines as described in Section 5 will be utilized to ensure that sedimentation does not occur outside the perimeter of the work area.

2.6 Storm Drain Inlet Protection

Inlet protection will be utilized on all storm drains in the project area.

2.7 Retain Sediment On-Site

The Contractor will be responsible to monitor erosion control measures. Whenever necessary the Contractor will clear sediment from the straw wattles that have been silted up during construction. Daily monitoring should be conducted using the attached Monitoring Form. The following good housekeeping practices will be followed on-site during the construction project:

2.8 Material Handling and Waste Management

Materials stored on-site will be stored in a neat, orderly manner in appropriate containers. Materials will be kept in their original containers with the original manufacturer's label. Substances will not be mixed with one another unless recommended by the manufacturer.

Waste materials will be collected and stored in a securely lidded metal container from a licensed management company. The waste and any construction debris from the site will be hauled off-site daily and disposed of properly. The contractor will be responsible for waste removal. Manufacturer's recommendations for proper use and disposal will be followed for materials. Sanitary waste will be collected from the portable units a minimum of once a week, by a licensed sanitary waste management contractor.

2.9 Designated Washout Areas

The Contractor shall use washout facilities at their own facilities, unless otherwise directed by the Engineer.

2.10 Proper Equipment/Vehicle Fueling and Maintenance Practices

On-site vehicles will be monitored for leaks and receive regular preventative maintenance to reduce the risk of leakage. To ensure that leaks on stored equipment do not contaminate the site, oil-absorbing mats will be placed under oil-containing equipment during storage. Regular fueling and service of the equipment may be performed using approved methods and with care taken to minimize chance of spills. Repair of equipment or machinery within the 100' water resources area shall not be allowed without the prior approval of the Engineer. Any petroleum products will be stored in tightly sealed containers that are clearly labeled with spill control pads/socks placed under/around their perimeters.

2.11 Equipment/Vehicle Washing

The Contractor will be responsible to ensure that no equipment is washed on-site.

SECTION 3: Spill Prevention and Control Plan

The Contractor will be responsible for preventing spills in accordance with the project specifications and applicable federal, state and local regulations. The Contractor will identify a properly trained site employee, involved with the day-to-day site operations to be the spill prevention and cleanup coordinator. The name(s) of the responsible spill personnel will be posted on-site. Each employee will be instructed that all spills are to be reported to the spill prevention and cleanup coordinator.

3.1 Spill Control Equipment

Spill control/containment equipment will be kept in the Work Area. Materials and equipment necessary for spill cleanup will be kept either in the Work Area or in an otherwise accessible on-site location. Equipment and materials will include, but not be limited to, absorbent booms/mats, brooms, dust pans, mops, rags, gloves, goggles, sand, plastic and metal containers specifically for this purpose. It is the responsibility of the Contractor to ensure the inventory will be readily accessible and maintained.

3.2 Notification

Workers will be directed to inform the on-site supervisor of a spill event. The supervisor will assess the incident and initiate proper containment and response procedures immediately upon notification. Workers should avoid direct contact with spilled materials during the containment procedures. Primary notification of a spill should be made to the local Fire Department and Police Departments. Secondary Notification will be to the certified cleanup contractor if deemed necessary by Fire and/or Police personnel. The third level of notification (within 1 hour) is to the DEP or municipality's Licensed Site Professional (LSP). The specific cleanup contractor to be used will be identified by the Contractor prior to commencement of construction activities.

3.3 Spill Containment and Clean-Up Measures

Spills will be contained with granular sorbent material, sand, sorbent pads, booms or all of the above to prevent spreading. Certified cleanup contractors should complete spill cleanup. The material manufacturer's recommended methods for spill cleanup will be clearly posted and on-site personnel will be made aware of the procedures and the location of the information and cleanup supplies.

3.4 Hazardous Materials Spill Report

The Contractor will report and record any spill. The spill report will present a description of the release, including the quantity and type of material, date of the spill, circumstances leading to the release, location of spill, response actions and personnel, documentation of notifications and corrective measures implemented to prevent reoccurrence.

This document does not relieve the Contractor of the Federal reporting requirements of 40 CFR Part 110, 40 CFR Part 117, 40 CFR Part 302 and the State requirements specified under the Massachusetts Contingency Plan (M.C.P) relating to spills or other releases of oils or hazardous substances. Where a release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117 or 40 CFR Part 302, occurs during a twenty-four (24) hour period, the Contractor is required to comply with the response requirements of the above mentioned regulations. Spills of oil or hazardous material in excess of the reportable quantity will be reported to the National Response Center (NRC).

SECTION 4: Contact Information/Responsible Parties

Owner/Operator:

City of Melrose Parks Department
Joan Bell
100 Slayton Road
Melrose MA 02176
781-979-4169

Engineer:

James Pearson, PE
Weston & Sampson Engineers, Inc.
55 Walkers Brook Dr, Suite 100
Reading, MA 01867
978-532-1900 ex. 2346

Site Inspector:

TBD

Contractor:

TBD

SECTION 5: Erosion and Sedimentation Control

Erosion and Sedimentation Control Drawings can be found in the attached project plans. In addition a technical specification (***Section 01570 Environmental Protection***) has been included as part of Appendix D, which details all Erosion and Sedimentation controls.

SECTION 6: Site Development Plan

The Site Development Plan is included in the attached plans.

SECTION 7: Operation and Maintenance of Erosion Control

The erosion control measures will be installed as detailed in the technical specification ***01570 Environmental Protection***. If there is a failure to the controls the Contractor, under the supervision of the Engineer, will be required to stop work until the failure is repaired.

Periodically throughout the work, whenever the Engineer deems it necessary, the sediment that has been deposited against the controls will be removed to ensure that the controls are working properly.

SECTION 8: Inspection Schedule

During construction, the erosion and sedimentation controls will be inspected daily. Once the Contractor is selected, an onsite inspector will be selected to work closely with the Engineer to ensure that erosion and sedimentation controls are in place and working properly. An Inspection Form is included.

Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan

Fred Green Memorial Field

Inspection Form

Inspected By: _____ Date: _____ Time: _____

YES	NO	DOES NOT APPLY	ITEM
			Do any erosion/siltation control measures require repair or clean out to maintain adequate function?
			Is there any evidence that sediment is leaving the site and entering the wetlands?
			Are any temporary soil stockpiles or construction materials located in non-approved areas?
			Are on-site construction traffic routes, parking, and storage of equipment and supplies located in areas not specifically designed for them?

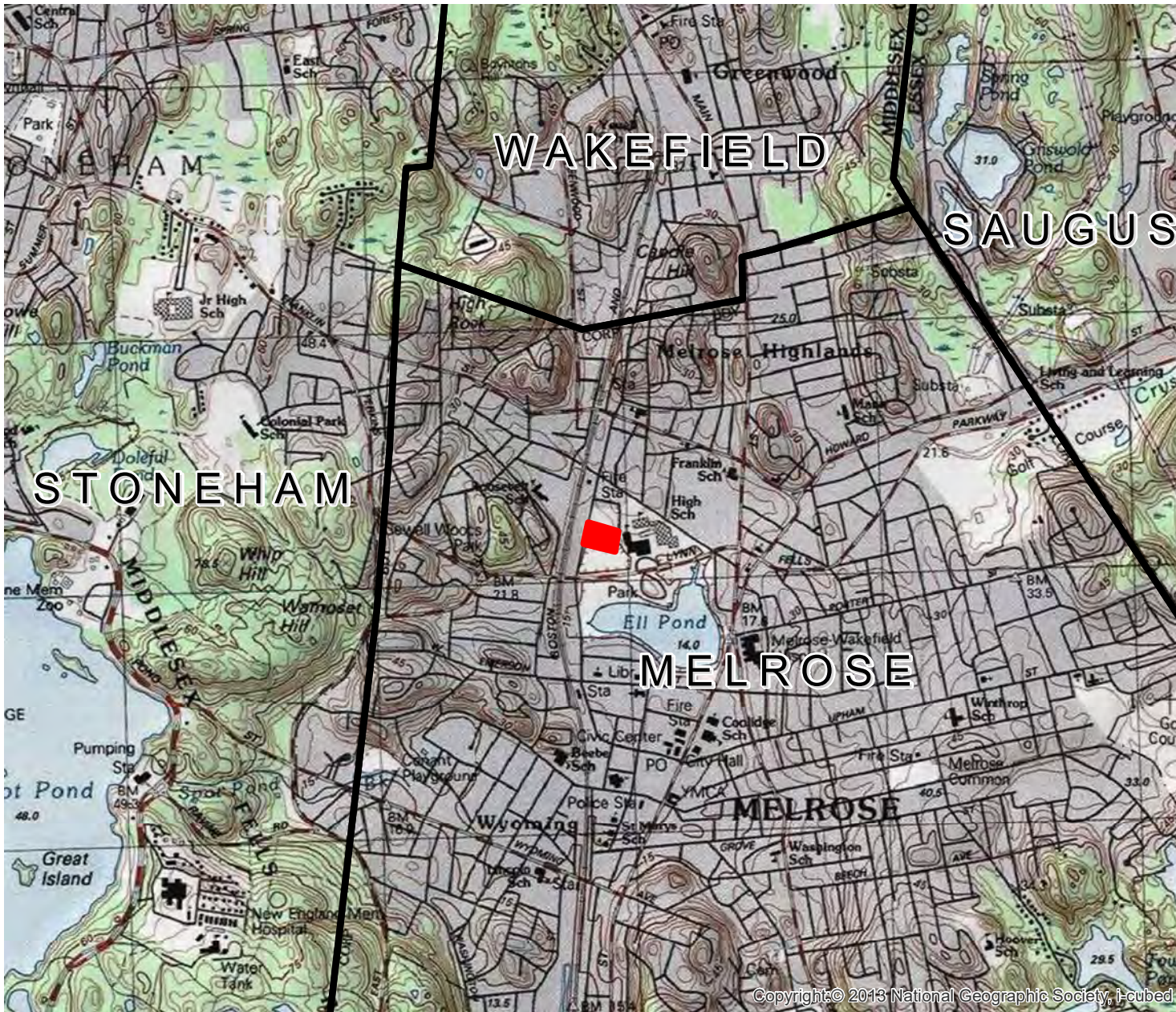
Specific location, current weather conditions, and action to be taken:

Other Comments:

Pending the actions noted above I certify that the site is in compliance with the Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan.

Signature: _____ Date: _____

Appendix C



Legend

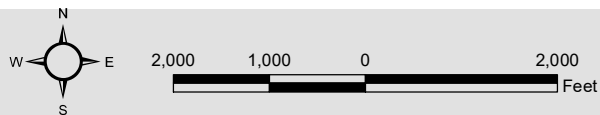
 Work Area

FIGURE 1

Fred Green Field
Melrose, MA

Locus Map

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Data Source: Office of Geographic and Environmental Information (MassGIS),
Commonwealth of Massachusetts Executive Office of Environmental Affairs





Legend

- Work Area
- Perennial Stream
- Intermittent Stream
- Marsh/Bog
- Wooded marsh
- Cranberry Bog
- Salt Marsh
- Open Water
- Reservoir (with PWSID)
- Tidal Flats
- Beach/Dune

ACECs

- ACECs

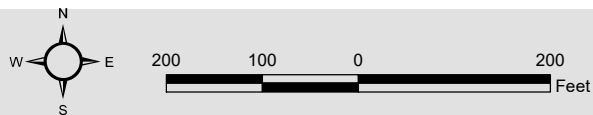
NHESP Habitats

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

Outstanding Resource Waters

- Public Water Supply Contributor
- ORW for ACEC
- ORW for both Water Supply and Other

FIGURE 2
 Fred Green Field
 Melrose, MA
 Environmental
 Resource Map



Data Source: Office of Geographic and Environmental Information (MassGIS),
 Commonwealth of Massachusetts Executive Office of Environmental Affairs



National Flood Hazard Layer FIRMette



71°42'5"W 42°28'3"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, X, 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 Water Surface Elevation
- 17.5 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

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

Legend
 Work Area

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 4/26/2023 at 11:38 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 undomered areas cannot be used for regulatory purposes.

FIGURE 3
 Fred Green Field
 Melrose, MA
 FEMA Map

Appendix D

SECTION 01562

DUST CONTROL

PART 1 - GENERAL

1.01 DESCRIPTION:

This section of the specification covers the control of dust via water, complete.

PART 2 - PRODUCTS

2.01 WATER:

- A. Water shall not be brackish and shall be free from oil, acid, and injurious alkali or vegetable matter.

PART 3 - EXECUTION

3.01 APPLICATION:

- A. Water may be sprinkler applied with equipment including a tank with gauge-equipped pressure pump and a nozzle-equipped spray bar.
- B. Water shall be dispersed through the nozzle under a minimum pressure of 20 pounds per square inch, gauge pressure.

END OF SECTION

SECTION 01570

ENVIRONMENTAL PROTECTION

PART 1 – GENERAL

1.01 DESCRIPTION:

- A. The work covered by this section of the specifications consists of furnishing all labor, materials, tools and equipment and performing all work required for the prevention of environmental pollution during and as a result of construction operations under this contract.
- B. The requirements set forth in this section of the specifications apply to construction in and adjacent to wetlands, unless otherwise specifically stated.
- C. All work under this Contract shall be in accordance with the Conservation Commissions' Orders of Conditions as well as any conditional requirements applied, all of which are attached to Section 00890, PERMITS.
- D. Prior to commencement of work, the Contractor shall meet with representatives of the Engineer to develop mutual understandings relative to compliance of the environmental protection program.

1.02 SUBMITTALS:

- A. The Contractor shall submit for approval six sets of details and literature fully describing environmental protection methods to be employed in carrying out construction activities within 100 feet of wetlands or across areas designated as wetlands.

PART 2 - PRODUCTS

2.01 STRAW WATTLES:

- A. Straw Wattles shall consist of a 100% biodegradable exterior jute or coir netting with 100% wheat straw interior filling as manufactured by Granite Environmental, Inc., Sebastian, Florida (Phone: 888-703-9889; website: www.GraniteEnvironmental.com), or approved equal.

2.02 CATCH BASIN PROTECTION:

- A. To trap sediment and to prevent sediment from clogging drainage systems, catch basin protection in the form of a siltation sack (Silt sack as manufactured by ACF Environmental, Inc. or approved equal) shall be provided as approved by the Engineer.

PART 3- EXECUTION

3.01 NOTIFICATION AND STOPPAGE OF WORK:

- A. The Engineer will notify the Contractor in writing of any non-compliance with the provisions of the Order of Conditions. The Contractor shall, after receipt of such notice, immediately take corrective action. Such notice, when delivered to the Contractor or his authorized representative at the site of the work, shall be deemed sufficient for the purpose. If the Contractor fails to act promptly, the Owner may order stoppage of all or part of the work through the Engineer until satisfactory corrective action has been taken. No claim for an extension of time or for excess costs or damage incurred by the Contractor as a result of time lost due to any stop work orders shall be made unless it was later determined that the Contractor was in compliance.

3.02 AREA OF CONSTRUCTION ACTIVITY:

- A. Insofar as possible, the Contractor shall confine his construction activities to those areas defined by the plans and specifications. All land resources within the project boundaries and outside the limits of permanent work performed under this contract shall be preserved in their present condition or be restored to a condition after completion of construction at least equal to that which existed prior to work under this contract.

3.03 PROTECTION OF WATER RESOURCES:

- A. The Contractor shall not pollute streams, lakes or reservoirs with fuels, oils, bitumens, calcium chloride, acids or other harmful materials. It is the Contractor's responsibility to comply with all applicable Federal, State, County and Municipal laws regarding pollution of rivers and streams.
- B. Special measures should be taken to insure against spillage of any pollutants into public waters.

3.04 LOCATION OF STORAGE AREAS:

- A. The location of the Contractor's storage areas for equipment and/or materials shall be upon cleared portions of the job site or areas to be cleared as a part of this project, and shall require written approval of the Engineer. Plans showing storage facilities for equipment and materials shall be submitted for approval of the Engineer.
- B. No excavated materials or materials used in backfill operations shall be deposited within a minimum distance of one hundred (100) feet of any watercourse or any drainage facility. Adequate measures for erosion and sediment control such as the placement of baled straw or line of straw wattles or compost filter tubes around the downstream perimeter of stockpiles shall be employed to protect any downstream areas from siltation.
- C. There shall be no storage of equipment or materials in areas designated as wetlands.
- D. The Engineer may designate a particular area or areas where the Contractor may store

materials used in his operations.

3.05 PROTECTION OF LANDSCAPE:

- A. The Contractor shall not deface, injure, or destroy trees or shrubs nor remove or cut them without written authority from the Owner. No ropes, cables, or guys shall be fastened to or attached to any existing nearby trees for anchorages unless specifically authorized by the Engineer. Excavating machinery and cranes shall be of suitable type and be operated with care to prevent injury to trees which are not to be removed, particularly overhanging branches and limbs. The Contractor shall, in any event, be responsible for any damage resulting from such use.
- B. Branches, limbs, and roots shall not be cut except by permission of the Engineer. All cutting shall be smoothly and neatly done without splitting or crushing. When there is unavoidable injury to branches, limbs and trunks of trees, the injured portions shall be neatly trimmed and covered with an application of grafting wax or tree healing paint as directed.
- C. Where, in the opinion of the Engineer, trees may possibly be defaced, bruised, injured, or otherwise damaged by the Contractor's equipment or by his blasting or other operations, the Engineer may require the Contractor to adequately protect such trees by placing boards, planks, poles or fencing around them. Any trees or landscape feature scarred or damaged by the Contractor's equipment or operations shall be restored as nearly as possible to its original condition at the expense of the Contractor. The Engineer will decide what method of restoration shall be used, and whether damaged trees shall be treated and healed or removed and disposed of under the provisions of Section 02230, CLEARING AND GRUBBING.
- D. Cultivated hedges, shrubs, and plants which could be injured by the Contractor's operations shall be protected by suitable means or shall be dug up, balled and temporarily replanted and maintained. After construction operations have been substantially completed, they shall be replanted in their original positions and cared for until growth is re-established. If cultivated hedges, shrubs, and plants are injured to such a degree as to affect their growth or diminish their beauty or usefulness, they shall be replaced by items of a kind and quality at least equal to that existing at the start of the work.

3.06 CLEARING AND GRUBBING:

- A. The Contractor shall clear and grub only on the Owner's land or the Owner's easements, and only the area required for construction operations, as approved by the Engineer. Removal of mature trees (4 inches or greater DBH) will not be allowed on temporary easements.

3.07 DISCHARGE OF DEWATERING OPERATIONS:

- B. Under no circumstances shall the Contractor discharge water to the areas designated as wetlands. When constructing in a wetlands area, the Contractor shall discharge water from dewatering operations directly to the nearest drainage system, stream, or waterway

after filtering by an approved method.

- C. The pumped water shall be filtered through filter fabric and baled straw, a vegetative filter strip or a vegetated channel to trap sediment occurring as a result of the construction operations. The vegetated channel shall be constructed such that the discharge flow rate shall not exceed a velocity of more than 1 foot per second. Accumulated sediment shall be cleared from the channel periodically.

3.08 DUST CONTROL:

- A. During the progress of the work, the Contractor shall conduct his operations and maintain the area of his activities, including sweeping and sprinkling of streets as necessary, to minimize creation and dispersion of dust.
- B. Calcium Chloride shall not be used for dust control within a drainage basin or in the vicinity of any source of potable water.

3.09 CATCH BASIN PROTECTION:

- A. Catch basin protection shall be used for every catch basin, shown on the plans or as required by the Engineer, to trap sediment and prevent it from clogging drainage systems and entering wetlands. Siltation sacks shall be securely installed under the catch basin grate. Care shall be taken to keep the siltation sacks from breaking apart or clogging. All deposited sediment shall be removed periodically and at times prior to predicted precipitation to allow free drainage flow. Prior to working in areas where catch basins are to be protected, each catch basin sump shall be cleaned of all debris and protected. The Contractor shall properly dispose of all debris at no additional cost to the Owner.

3.10 STRAW WATTLES:

- A. The wattles will be placed in a shallow trench (2-3 inches deep) and staked in the ground using wooden stakes driven at 4-foot intervals. The wooden stakes will be placed at a minimum depth of 24-inches into the ground.

END OF SECTION

SECTION 01740

CLEANING UP

PART 1 - GENERAL

1.01 DESCRIPTION:

The Contractor must employ at all times during the progress of its work adequate cleanup measures and safety precautions to prevent injuries to persons or damage to property. The Contractor shall immediately, upon request by the Engineer provide adequate material, equipment and labor to cleanup and make safe any and all areas deemed necessary by the Engineer.

1.02 RELATED WORK:

- A. Section 00700 GENERAL CONDITIONS
- B. Section 01110 CONTROL OF WORK AND MATERIALS
- C. Section 01140 SPECIAL PROVISIONS
- D. Section 01570 ENVIRONMENTAL PROTECTION

PART 2 - PRODUCTS

Not applicable

PART 3 - EXECUTION

3.01 DAILY CLEANUP:

- A. The Contractor shall clean up, at least daily, all refuse, rubbish, scrap and surplus material, debris and unneeded construction equipment resulting from the construction operations and sweep the area. The site of the work and the adjacent areas affected thereby shall at all times present a neat, orderly and workmanlike appearance.
- B. Upon written notification by the Engineer, the Contractor shall within 24 hours clean up those areas, which in the Engineer's opinion are in violation of this section and the above referenced sections of the specifications.
- C. If in the opinion of the Engineer, the referenced areas are not satisfactorily cleaned up, all other work on the project shall stop until the cleanup is satisfactory.

3.02 MATERIAL OR DEBRIS IN DRAINAGE FACILITIES:

- A. Where material or debris has washed or flowed into or has been placed in existing watercourses, ditches, gutters, drains, pipes, structures, such material or debris shall be

entirely removed and satisfactorily disposed of during progress of the work, and the ditches, channels, drains, pipes, structures, and work shall, upon completion of the work, be left in a clean and neat condition.

3.03 REMOVAL OF TEMPORARY BUILDINGS, STRUCTURES AND EQUIPMENT:

- A. On or before completion of the work, the Contractor shall, unless otherwise specifically required or permitted in writing, tear down and remove all temporary buildings and structures it built; shall remove all temporary works, tools and machinery or other construction equipment it furnished; shall remove all rubbish from any grounds which it has occupied; shall remove silt fences and hay bales used for trapping sediment; and shall leave the roads and all parts of the property and adjacent property affected by its operations in a neat and satisfactory condition.

3.04 RESTORATION OF DAMAGED PROPERTY:

- A. The Contractor shall restore or replace, when and as required, any property damaged by its work, equipment or employees, to a condition at least equal to that existing immediately prior to the beginning of operations. To this end the Contractor shall do as required all necessary highway or driveway, walk and landscaping work. Materials, equipment, and methods for such restoration shall be as approved by the Engineer.

3.05 FINAL CLEANUP:

- A. Before acceptance by the Owner, the Contractor shall perform a final cleanup to bring the construction site to its original or specified condition. This cleanup shall include removing all trash and debris off of the premises. Before acceptance, the Engineer shall approve the condition of the site.

END OF SECTION

\\Wse03.local\WSE\Projects\MA\Melrose MA\Fred Green Turf Replacement\Permitting\NOI\Appendix D Specs\SECTION 01740-Cleaning Up.docx

Appendix E

AFFIDAVIT OF SERVICE

Under the Massachusetts Wetlands Protection Act

I, Alexandra Gaspar, hereby certify under the Pains and Penalties of Perjury that on May 22, 2023 I gave notification 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 has been filed under the Massachusetts Wetlands Protection Act by the City of Melrose Parks Department with the Melrose Conservation Commission on May 22, 2023 for property located at Fred Green Field (129 Tremont St) in Melrose.

The completed notification and a list of the abutters to whom it was given and their addresses, are attached to this Affidavit of Service.



Name: Alexandra Gaspar
Title: Environmental Scientist
Organization: Weston & Sampson Engineers, Inc

May 22, 2023
DATE

Notification to Abutters Under the Massachusetts Wetlands Protection Act

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

A. The name of the applicant is: **City of Melrose Parks Department**
100 Slayton Road
Melrose MA 02176

B. The name of the owner is: same as above.

C. The applicant has filed a Notice of Intent with the Melrose Conservation Commission seeking permission to alter an Area Subject to Protection under the Wetlands Protection Act (General Laws Chapter 131, Section 40). **The work includes the turf replacement at Fred Green Field at 129 Tremont Street.**

D. The address of the lot(s) where the activity is proposed: **129 Tremont Street**

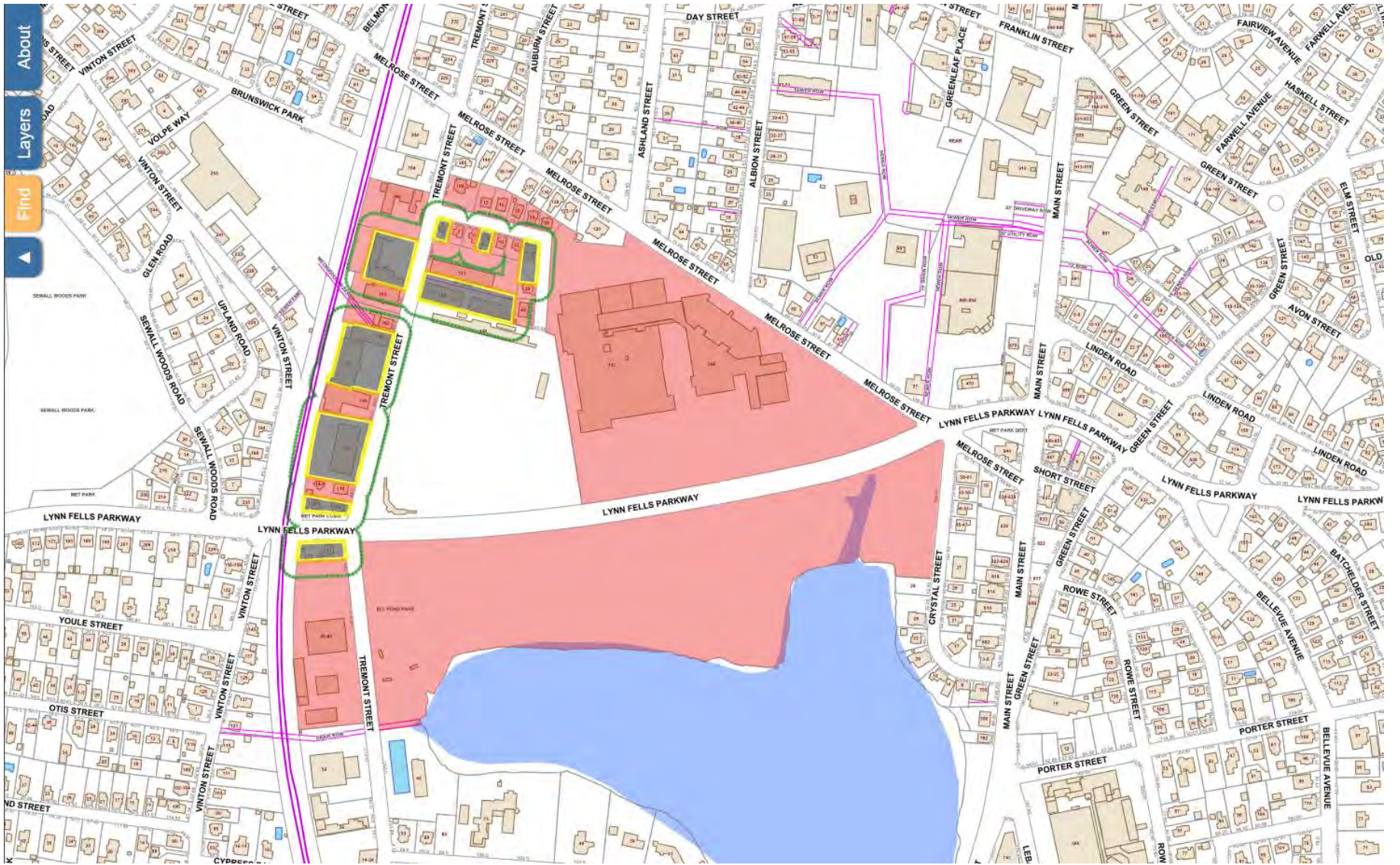
E. Copies of the Notice of Intent may be examined at **562 Main Street** between the hours of **8:30 AM** and **4:00 PM** on Monday – Thursday and **8:30 AM** and **12:30 PM** on Friday. For more information call the Melrose Conservation Commission at (781) 979 - 4312.

F. Information regarding the project, date, time and place of the public hearing may be obtained from Weston & Sampson Engineers, by contacting Alexandra Gaspar at 978-532-1900 between the hours of **8:00 – 4:00** on the following days of the week: Monday – Friday or the Melrose Conservation Commission at (781) 979 - 4312 between the hours of **8:30 AM** and **4:00 PM** on Monday – Thursday and **8:30 AM** and **12:30 PM** on Friday.

NOTE: Notice of the public hearing, including its date, time, and place, will be published at least five (5) days prior to the hearing date in the local paper.

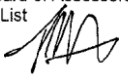
NOTE: Notice of the meeting of the Conservation Commission, including its date, time and place will be posted in the Town Hall not less than forty-eight (48) hours in advance of the meeting.

NOTE: You also may contact your local Conservation Commission or the Department of Environmental Protection Regional Office for more information about this application or the Wetlands Protection Act.



City of Melrose Abutters List

abutters_id_field	abutters_owner1	abutters_owner2	abutters_address	abutters_address2	abutters_town	abutters_state	abutters_zip	abutters_bookpage	abutters_location
B10 0 64	LANIER,REV VERONICA H	SCOTT E MACAULAY JTRTSVR	102 TREMONT ST		MELROSE	MA	02176	25108-563	102 TREMONT ST
B10 0 65-66+	CITY OF MELROSE,CITY YD		68-72-78 TREMONT ST		MELROSE	MA	02176	4387-324	68 TREMONT ST
B10 0 67-1	RECKER, DANIEL, IND.		116R TREMONT ST		MELROSE	MA	02176	71907-100	116 TREMONT ST
B10 0 67-2	SHAH, POOJA	SANGRAM R. YADAV, HWTE	112 TREMONT STREET		MELROSE	MA	02176	68596-263	112 TREMONT ST
B10 0 68-1	MARTIN, NICHOLAS W.		118A TREMONT ST.		MELROSE	MA	02148	72898-232	118 TREMONT ST
B10 0 68-2	KNIGHT RACHAEL		114REAR TREMONT ST		MELROSE	MA	02176	78986-484	114 TREMONT ST
B10 0 73-74	LONGMUIR,STEPHEN A		140 TREMONT ST		MELROSE	MA	02176	30947-431	140 TREMONT ST
B11 0 70	TREMONT MELROSE, LLC		140 TREMONT STREET		MELROSE	MA	02176	56766-30	152 TREMONT ST
B11 0 71	SHOEI CORP.		12 CATALPA ST.		WAKEFIELD	MA	01880	51656-2	162 TREMONT ST
B11 0 72	FINN ASSOCIATES LLC	THE 166 TREMONT STREET TRUST	8 VALDORA DRIVE		STONEHAM	MA	02180	41424-389	166 TREMONT ST
B11 0 74	TERNULLO,DOMENIC TRS	178-182 TREMONT ST RLTY TRUST	182 TREMONT ST		MELROSE	MA	02176	29920-568	178 TREMONT ST
B11 0 75	NEW YORK CAPITAL INVMT GRP LLC	C/O TITANIUM GROUP LLC	500 TURNPIKE ST		CANTON	MA	02021	73485-447	TREMONT ST
B11 0 76	NEW YORK CAPITAL INVST GRP LLC	C/O TITANIUM GROUP LLC	500 TURNPIKE STREET		CANTON	MA	02021	73485-447	186 TREMONT ST
C10 0 1	ELL POND PARK,(PAVILLION,BLDG	+BATHHOUSE)	LYNN FELS PKWY		MELROSE	MA	02176	2727-231	LYNN FELS PKWY
C10 0 3	MELROSE HIGH,SCHOOL		350 LYNN FELS PKWY		MELROSE	MA	02176	5633-569	350 LYNN FELS PKWY
C11 0 104	SAVAGE, ANDREW T.	BETH A. SAVAGE, HWTE	199 TREMONT ST.		MELROSE	MA	02176	70263-445	199 TREMONT ST
C11 0 105	BENDER PETER	BENDER KATHRYN	12 UNION ST		MELROSE	MA	02176	77792-501	12 UNION ST
C11 0 106	TISEI,ROBERT A	GAYLE A TISEI	16 UNION ST		MELROSE	MA	02176	13903-105	16 UNION ST
C11 0 107	MAHONEY, SUSAN		20 UNION STREET		MELROSE	MA	02176	1558-12	20 UNION ST
C11 0 108	PLUMER, MICHAEL P.		24 UNION STREET		MELROSE	MA	02176	55855-68	24 UNION ST
C11 0 109	TSOUKALAS,ANTHONY	ANNE L TSOUKALAS	28 UNION ST		MELROSE	MA	02176	9466-487	28 UNION ST
C11 0 116117	GUY RANDY	GUY CHRISTINE	43 UNION STREET		MELROSE	MA	02176	79900-562	43 UNION ST
C11 0 118	MERULLO,CHRISTOPHER P	CHRISTY M MERULLO HWTE	39 UNION ST		MELROSE	MA	02176	33809-108	39 UNION ST
C11 0 119	ROMAN B+ JULIE B SZLOCH F T LE	SZLOCH ADAM	2527 UNION ST		MELROSE	MA	02176	75621-342	25 UNION ST
C11 0 120	URILLO, ANGELA A	RALPH MOORE JTRTSVR	23 UNION ST		MELROSE	MA	02176	43931-118	23 UNION ST
C11 0 121	MAROTTA, JESSICA	MICHAEL MAROTTA, HWTE	19 UNION ST		MELROSE	MA	02176	69191-390	19 UNION ST
C11 0 122	MADIGAN,GREGORY P	THERESA R.MADIGAN HW TE	15 UNION ST		MELROSE	MA	02176	21119-327	15 UNION ST
C11 0 123	THOMPSON, MICHAEL	PATRICK GROULX, TE	11 UNION ST		MELROSE	MA	02176	61876-428	11 UNION ST
C11 0 124	CONNOLLY,RICHARD E. LF EST	ELLEN P CONNOLLY, LF EST	7 UNION ST		MELROSE	MA	02176	60996-237	7 UNION ST
C11 0 125	ASPETTI, ANDREW P.	KARA L. ASPETTI, HWTE	3 UNION ST		MELROSE	MA	02176	66230-571	3 UNION ST
C11 0 126	TREMONT STREET MELROSE, LLC		6 SHIPLEY COURT		MIDDLETON,	MA	01949	66535-418	171 TREMONT ST
C11 0 127	THE TREMONT STREET AUTO, LLC		165 TREMONT STREET		MELROSE	MA	02176	79972-475	165 TREMONT ST
B10 0 70-100	WHITE, ISABELLA L.		130 TREMONT ST. #100		MELROSE	MA	02176	68084-259	130 TREMONT ST UNIT 100
B10 0 70-101	LAMORE, PAUL	THERESA A. LAMORE, HWTE	130 TREMONT ST.#101		MELROSE	MA	02176	67418-562	130 TREMONT ST UNIT 101
B10 0 70-201	PETERSON, BRETT D.		130 TREMONT ST.#201		MELROSE	MA	02176	73939-337	130 TREMONT ST UNIT 201
B10 0 70-202	BAGNALL MATTHEW		130 TREMONT ST		MELROSE	MA	02176	77828-403	130 TREMONT ST UNIT 202
B10 0 70-203	SORRENTINO FAM TRUST	ROMANO CONSTANCE	130 TREMONT ST		MELROSE	MA	02176	75839-427	130 TREMONT ST UNIT 203
B10 0 70-204	ANDERSON, EMILY		130 TREMONT ST #204		MELROSE	MA	02176	68065-143	130 TREMONT ST UNIT 204
B10 0 70-205	WU AILU	HUANG DANZHE	130 TREMONT ST		MELROSE	MA	02176	76835-8	130 TREMONT ST UNIT 205
B10 0 70-206	JAISHANKAR DEEPA		130 TREMONT ST		MELROSE	MA	02176	78975-314	130 TREMONT ST UNIT 206
B10 0 70-207	WANG, JINQUAN	WEN SHI, HWTE	130 TREMONT ST. #207		MELROSE	MA	02176	67553-202	130 TREMONT ST UNIT 207
B10 0 70-208	SCHLUNTZ NANCY	SANDSTROM ANNA	130 TREMONT ST		MELROSE	MA	02176	75517-483	130 TREMONT ST UNIT 208
B10 0 70-301	HINGE, VAIBHAV	TINA S. PATIL, HWTE	130 TREMONT ST. #301		MELROSE	MA	02176	68869-225	130 TREMONT ST UNIT 301
B10 0 70-302	MOHAN, TARA		130 TREMONT ST. #302		MELROSE	MA	02176	67218-206	130 TREMONT ST UNIT 302
B10 0 70-303	VARGHESE SNEHA		130 TREMONT STREET		MELROSE	MA	02176	80296-554	130 TREMONT ST UNIT 303
B10 0 70-304	JORDAN JESSICA		130 TREMONT ST		MELROSE	MA	02176	75562-31	130 TREMONT ST UNIT 304
B10 0 70-305	DOXSEY LAUREN		130 TREMONT ST		MELROSE	MA	02176	78188-33	130 TREMONT ST UNIT 305
B10 0 70-306	MARATHE, SAMEER	SAMPADA MARATHE, HWTE	79 SALEM ST		READING	MA	01867	35049-437	130 TREMONT ST UNIT 306
B10 0 70-307	PEGORARO, CAROLE M.		130 TREMONT ST.#307		MELROSE	MA	02176	67053-16	130 TREMONT ST UNIT 307
B10 0 70-308	DHAMNE SAMEER		130 TREMONT ST		MELROSE	MA	02176	78489-119	130 TREMONT ST UNIT 308
B10 0 70-401	VERMA, VAIBHAV	SHEFALI VERMA, HWTE	130 TREMONT ST. #401		MELROSE	MA	02176	74273-554	130 TREMONT ST UNIT 401
B10 0 70-402	VAIDHEESWARAN SANKARAN	MANOHAR PREETHI	130 TREMONT ST		MELROSE	MA	02176	77966-271	130 TREMONT ST UNIT 402
B10 0 70-403	XIANG BOWEN	WANG TIANQI	130 TREMONT ST		MELROSE	MA	02176	78822-289	130 TREMONT ST UNIT 403
B10 0 70-404	SARAZEN, JAMES M.		130 TREMONT ST.#404		MELROSE	MA	02176	24230-169	130 TREMONT ST UNIT 404
B10 0 70-405	SANDRA M BROWN IR TR LIF ES	BROWN KURT	130 TREMONT ST		MELROSE	MA	02176	75137-528	130 TREMONT ST UNIT 405
B10 0 70-406	ANGELA M FERRARI LV TR	FERRARI ANGELA	130 TREMONT ST		MELROSE	MA	02176	75779-482	130 TREMONT ST UNIT 406
B10 0 70-407	LIN, STUART	RENEE LIN, HWTE	130 TREMONT ST. #407		MELROSE	MA	02176	73256-302	130 TREMONT ST UNIT 407
B10 0 70-408	THOMPSON LYNNE		130 TREMONT ST		MELROSE	MA	02176	76925-404	130 TREMONT ST UNIT 408
B10 0 68-3	BALLES, DANIEL	LILLIAN EDEN, TC	118 TREMONT ST. UB		MELROSE	MA	02148	73956-478	118 TREMONT ST

abutters_id_field	abutters_owner1	abutters_owner2	abutters_address	abutters_address2	abutters_town	abutters_state	abutters_zip	abutters_bookpage	abutters_location
	City of Melrose Board of Assessors Certified Abutters List	4/27/2023							
									

Appendix F

WETLAND DELINEATION DISCUSSION

Because there are no vegetated wetlands, streams, buffer zones, riverfront areas, etc. within conservation commission jurisdiction at the proposed work area, a wetland delineation report was not created for this project/work area. Please see Figures 2 and 3 in Appendix C for mapping of environmental resource areas and flood zones.

Appendix G



Appendix H

MEMORANDUM

TO: Interested Stakeholders

FROM: Steven LaRosa, Senior Technical Leader,
Brandon Kunkel, Practice Leader.
Marie Rudiman, Senior Risk Assessor, Weston & Sampson, Engineers, Inc.

DATE: May 18, 2023

SUBJECT: Opinion of Exposure Risk to PFAS in Synthetic Turf

Since 2019, Weston & Sampson has actively been following the best available science regarding PFAS use in synthetic turf manufacturing and the potential for PFAS to be released from synthetic turf carpet systems. We have reached out to synthetic turf manufacturers, the Massachusetts DEP (MassDEP) for potential guidance¹, and performed in house review of many peer reviewed papers and articles focused on PFAS use in synthetic turf. In addition, we have had several synthetic turf manufacturers provide us with PFAS analysis results for products being installed at our projects. We also have an emerging contaminants workgroup that follows PFAS and industry organizations such as ITRC and federal/state/institutional (higher education) research and reporting.

The following references are used extensively by Weston and Sampson, Inc. regarding PFAS, their potential presence in artificial turf, environmental fate and potential risk to health and the environment.

- 1) Interstate Technology and Regulatory Council (ITRC) PFAS Guidance Document, June 2022. <https://pfas-1.itrcweb.org/wp-content/uploads/2022/09/PFAS-Guidance-Document-9-2022.pdf>
- 2) PFAS Background in Vermont Shallow Soils, 2019; University of Vermont and Sanborn, Head & Associates. <https://anrweb.vt.gov/PubDocs/DEC/PFOA/Soil-Background/PFAS-Background-Vermont-Shallow-Soils-03-24-19.pdf>
- 3) Background Levels of PFAS and PAHS in Maine Shallow Soils; Sanborn, Head & Associates, Inc. https://www.maine.gov/dep/spills/topics/pfas/Maine_Background_PFAS_Study_Report.pdf

¹ In a phone conversation with C. Mark Smith from MassDEP (October 18, 2019), he indicated: 1) that the synthetic turf field data was from a news article and not a study that could be vetted through peer review, 2) two samples is too small a sampling size to make any scientific conclusions, and 3) MassDEP is primarily focusing on potential human exposure to PFAS via drinking water at this time. MassDEP has not put out a formal statement on PFAS in synthetic turf fields.

- 4) Synthetic Turf Laboratory Testing and Analysis Summary Report for Martha's Vineyard Commission, TetraTech, February 26, 2021.
https://www.oakbluffsma.gov/DocumentCenter/View/7435/TetraTech-MVC-2021-02-26-TurfAnalysisReport_FINAL
- 5) Synthetic Turf Laboratory Testing and Analysis Summary Report Martha's Vineyard Regional High School, Horsley Witten Group, March 1, 2021.
https://www.oakbluffsma.gov/DocumentCenter/View/7657/Horsley-Witten_Synthetic-Turf-LaboratoryTesting-and-Analysis-Report
- 6) Evaluation of PFAS in Synthetic Turf Memorandum for City of Portsmouth, TRC, June 7, 2022.
https://www.cityofportsmouth.com/sites/default/files/2022-06/Technical%20Memorandum_Portsmouth_Final.pdf
- 7) EPA Fact Sheet: 2010/2015 PFOA Stewardship Program.
<https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/fact-sheet-20102015-pfoa-stewardship-program>
- 8) Agency for Toxic Substances and Disease Registry, PFAS and Your Health
<https://www.atsdr.cdc.gov/pfas/health-effects/index.html>

ARE THERE REGULATIONS FOR PFAS IN MATERIALS LIKE SYNTHETIC TURF?

The short answer is not specifically for synthetic turf. Manufacturers in the US have voluntarily phased out the use of PFOA and PFOS. PFAS use in materials is beginning to be regulated by some individual states. For example, Vermont currently prohibits intentionally added PFAS in firefighting foam, personal protective equipment (PPE), food packaging, rugs, carpets and ski wax. However, synthetic turf is not included in this ban. PFAS use in materials is also restricted by California Prop-65 and the European Union's REACH Standards. Prop-65 requires manufacturers to provide warnings on products which contain certain PFAS. The EU REACH requires manufacturers to provide notification of substances of "Very High Concern" in their products at concentrations over 0.1% by weight. Several PFAS are on the REACH Candidate List. A summary of the PFAS of concern for Prop-65 and EU REACH is included below:

Compound	CAS #	Reference
PFBS	375-73-5	REACH
PFHxS	355-46-4	REACH, MassDEP
PFOA	335-67-1	REACH, Prop 65, MassDEP
PFHpA and Salts	375-85-9	REACH, MassDEP
PFOS	1763-23-1	Prop 65, MassDEP
PFOS precursors	various	Prop 65
PFNA	375-95-1	REACH, Prop 65, MassDEP
PFDA	335-76-2	REACH, MassDEP
PFUnDA	2058-94-8	REACH
PFTTrDA	72629-94-8	REACH
PFTDA	376-06-7	REACH

As of 3/17/23

HAS SYNTHETIC TURF BEEN ANALYZED FOR PFAS?

We are aware of a number of studies performed on synthetic turf components for PFAS content. Currently only between 30 and 70 individual PFAS can be identified and quantified by commercial laboratory methods. The identified PFAS include all of those in the table above (MassDEP, REACH, Prop 65).

We have had PFAS analyses performed on synthetic turf at several of our projects and have access to the data collected at several other projects. The lab data for the synthetic turf products analyzed consistently show individual PFAS concentrations less than or slightly above detection levels. The majority of the concentrations reported are so low that they are “estimated” by the laboratory. The concentrations reported in synthetic turf are below the “background” concentrations reported in rural area soils likely through atmospheric deposition.

Destructive testing of the synthetic turf components has also been performed during studies at Portsmouth, NH and Martha’s Vineyard, MA (TOP Assay). This analysis exposes the materials being tested to a caustic solution (think something like Drano) and high heat (185 F) to breakdown “precursor” PFAS into “terminal” PFAS that are measurable by the laboratory methods. Please note the preparation of the sample does not represent natural conditions. It is a method to enhance the destruction of the turf under extreme conditions. Also, this is a very simplified description of the method and data interpretation. The TOP analyses of synthetic turf components also report PFAS at “estimated” concentrations to concentrations just above the detection levels.

The Martha’s Vineyard report (*Synthetic Turf Laboratory Testing and Analysis Summary Report for Martha’s Vineyard Commission, TetraTech, February 26, 2021*) indicates that the concentrations of PFAS observed by all of the analyses performed on synthetic turf components are “...consistent with background concentrations in natural soil or at concentrations well below referenced risk-based standards...”

A third-party consultant hired by Martha’s Vineyard reviewed the study and concluded “...Based on the results presented...PFAS...have been detected in the field components at concentrations consistent with background and/or below the applicable comparison values. We agree with the report conclusion that the overall risk to human health through a direct contact exposure with the field components is de minimis.”

Portsmouth, NH related testing of synthetic turf components has included testing the components as received, via the TOP method and through a leaching procedure. This study concluded: “Based on this evaluation, the detection of very low levels of a limited number of PFAS in the synthetic turf components does not represent a human health risk to those using the synthetic turf ballfields.”

WESTON & SAMPSON SUMMARY

Based upon the information we have reviewed to date, the trace concentrations of PFAS identified in synthetic turf components which we have tested or reviewed pose No Significant Health Risk to field users or the environment.