NOTICE OF INTENT FOR DISCHARGE PURSUANT TO MASSACHUSETTS REMEDIATION GENERAL PERMIT MAG9100000

65 NORMAN STREET
EVERETT, MASSACHUSETTS

MARCH 30, 2022

Prepared For:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF ECOSYSTEM PROTECTION
5 POST OFFICE SQUARE, SUITE 100
MAIL CODE OEP06-01
BOSTON, MA 02109-3912

On Behalf Of:

LMC Artemas Holdings, LLC
99 Summer Street
Boston, MA 02110

PROJECT NO. 6646

2269 Massachusetts Avenue
Cambridge, MA 02140
www.mcphailgeo.com
(617) 868-1420

March 30, 2022

United States Environmental Protection Agency
Office of Ecosystem Protection
5 Post Office Square, Suite 100
Mail Code OEP06-01
Boston, MA 02109-3912

Attention: EPA RGP Applications Coordinator

Reference: Lennar Multifamily Builders; 65 Norman Street, Everett, MA;
Notice of Intent for Temporary Construction Dewatering Discharge;
Massachusetts Remediation General Permit MAG910000

On behalf of LMC Artemas Holdings, LLC, McPhail Associates, LLC (McPhail) has prepared the attached Notice of Intent (NOI) for coverage under the Remediation General Permit (RGP) MAG910000 for the discharge of construction dewatering effluent into an unnamed tributary to the Malden River which is planned to occur during redevelopment of the 65 Norman Street property located in Everett, Massachusetts (project site). Refer to **Figure 1** for the general site locus.

These services were performed, and this permit application was prepared in accordance with the authorization of LMC Artemas Holdings, LLC. These services are subject to the limitations contained in **Appendix A**.

This project is considered Activity Category III-G as defined in the RGP. Category III-G is defined as Contaminated Site Dewatering from Sites with Known Contamination. Based on current groundwater analysis completed at the project site and site history, the constituents of concern (COCs) are those identified under Type A: Inorganics, Type C: Halogenated Volatile Organic Compounds and Type D: Non-Halogenated Semi-Volatile Organic Compounds. The Notice of Intent (NOI) Form contained in the RGP permit is included in **Appendix B**.

Applicant/Operator

The applicant for the Notice of Intent-Remediation General Permit is:

LMC Artemas Holdings, LLC
99 Summer Street
Boston, MA 02110

Attention: Mark Flint; Director of Construction
Phone: 646-504-1780

Existing Conditions

The project site occupies an approximate 7-acre parcel bound by industrial and commercial properties to the north and west, Norman Street to the south, and Air Force Road to the east. The project site is currently clear in preparation of redevelopment. The project site is bounded by commercial properties including Duncan Galvanizing to the north, Night Shift Brewing to the west and various commercial properties to the south and east. Two (2) Massachusetts Water Resources Authority (MWRA) sewer easements run north to south through the project site. The first consists of a 30-foot-wide easement which runs along Air Force Road, just east of the center of the project site. The second consists of a 20-foot-wide easement that runs through the eastern portion of the project site. An approximately 15-foot-wide City of Everett sewer easement also runs north to south through the eastern portion of the site, between the two MWRA sewer easements.

The project site is at approximate latitude and longitude 42° 24' 24.05" N and 71° 03' 57.26" W, respectively, and the Universal Transverse Mercator (UTM) coordinates are 329,994 meters east and 4,697,005 meters north in Zone 19.

The limits of the project site are shown on **Figure 2**, which was prepared from a 40-scale Drawing entitled "Overall Site Plan" dated October 16, 2020, provided by The Architectural Team, Inc.

Proposed Scope of Site Development

We understand that the proposed development will consist of a residential 4-story structure with two large central courtyards. The proposed construction does not include below-grade space, other than localized elevator and mechanical pits.

The lowest level slab will be located at approximate Elevation +11, which corresponds to the ground floor.

Site Environmental Setting and Surrounding Historical Places

Based on an on-line edition of the Massachusetts Geographic Information Systems MassDEP Phase I Site Assessment Map viewed on February 1, 2022, the project site is not located within the boundaries of a Sole Source Aquifer, Potentially Productive Aquifer or within a Zone II, Interim Wellhead Protection Area as defined by the Massachusetts Department of Environmental Protection. Further, there are no public drinking water supply wells, no Areas of Critical Environmental Concern, no fish habitats and no Threatened or Endangered Species within 500 feet of the subject site. Located within 500 feet of the subject site is a medium yield non potential drinking water source area. Further away, within 0.5 miles of the subject site is freshwater wetlands. A non-potential drinking water source area is located within 0.5 miles of the subject site to the southeast. Located approximately 1,200 feet to the west of the subject site is the Mystic River, the closest surface water body. A solid waste landfill is indicated as being within 1,000 feet of the subject site. A copy of the Massachusetts Phase I Site Assessment Map is included in **Appendix C**.

A review of information provided by the U.S. Fish and Wildlife Service in an Information for Planning and Conservation (IPaC) Trust Resource Report for the project site did not identify the presence of threatened or endangered species at or in the vicinity of the discharge location and/or discharge outfall. Further, the Trust Resource Report did not identify the presence of a critical habitat in the vicinity of the discharge outfall and/or discharge location. Based upon the above, the project area is considered a criterion A site pursuant to Appendix IV of the RGP. A copy of the IPaC Trust Resource Report and U.S. Fish and Wildlife Service's Nationwide Standard Conservation Measures are included in **Appendix C**.

As further discussed below, treated construction dewatering effluent will be discharged into an unnamed tributary of the Malden River. The dewatering of groundwater at the site will be temporary and intermittent. Groundwater discharged as part of the proposed project will be controlled and monitored. Treatment systems will consist of temporary structures. According to the Massachusetts Cultural Resource Information System (MACRIS), the project site is not located within a Conservation district, Historical District or National Register. Therefore, based on the anticipated duration of construction dewatering and the location of its discharge into the unnamed tributary of the Malden River, construction dewatering activities are not anticipated to affect historical listings. Hence, the site meets Permit Eligibility Criterion A in accordance with Appendix III of the RGP. A MACRIS map and report for the project site and outfall area are included in **Appendix C**.

Site History

The project site has been occupied by various residential, commercial and industrial businesses since the 1890's including a pattern shop, pattern storage and Carbon Steel Castings. In 1950, two (2) dwellings and a L.J. Barwood MFG Co. occupied the southeastern portion of the project site.

Construction Site Dewatering

Portions of the excavation for the proposed below areas may extend to depths up to approximately 11 feet below ground surface which is approximately 6 feet below the surface of groundwater. Hence, construction dewatering will be necessary within proposed excavations to facilitate construction of the proposed below grade levels and additional foundation elements.

It is anticipated that the average rate of construction dewatering to facilitate excavation activities will be on the order of 35 gallons per minute (gpm), intermittently. However, this estimate does not include potential surface run-off during periods of high precipitation or dewatering in areas which may experience a high rate of groundwater infiltration. As a result, a maximum dewatering rate of 500 gpm has been conservatively established for the project.

Given that the footprint of the proposed building will occupy most of the project site, temporary on-site collection and recharge of groundwater is not feasible as part of the proposed construction activities. As a result, construction dewatering will require the discharge of collected groundwater into the municipal storm drain system under the requested RGP.

The location of the relevant stormwater catch basins in relation to the project site and the flow paths of the discharge are shown in plans provided by the City of Everett regarding its drainage system which are included in **Figures 2 and 3**. A review of available subgrade utility plans provided by the City of Everett indicates that stormwater is collected within catch basins along Air Force Road and Norman Street that connect to the stormwater drain system. The stormwater drain beneath Air Force Road runs south to Norman Street, west to Kelvin Street, beneath Bizarro Lane to Outfall No. 09-01 into an unnamed tributary of the Malden River.

Summary of Groundwater Analysis

On March 7, 2022, McPhail Associates, LLC obtained a sample of groundwater from monitoring well B-10(OW) located within the approximate center of the project site. The groundwater sample was submitted to a certified laboratory for analysis for the presence of compounds required under the EPA's RGP application, including total suspended solids (TSS), total residual chlorine, total cyanide, pH, nitrogen and total recoverable metals.

Results of the analysis identified a total suspended solids concentration of 36,000 micrograms per liter (µg/l) which exceeds the EPA water quality-based effluent limit (WQBEL) of 30,000 µg/l; a total iron concentration of 18,500 ug/l which exceeds the WQBEL of 1,000 ug/l; a cyanide concentration of 8 which exceeds the WQBEL of 5.2 ug/l. Results concerning the remaining analytes did not identify concentrations which exceed the applicable WQBELs. The results of the laboratory analysis are summarized in **Table 1**, and laboratory data report is included in **Appendix D**.

Pursuant to Section 4.2.2 of the EPA 2017 RGP, one (1) receiving water sample was obtained from the Unnamed tributary of the Malden River. On March 7, 2022, sample "SW" was collected from the unnamed tributary of the Malden River at 42° 24' 09.16 N, 71° 04' 19.94" W), which is located approximately 2,000 feet downstream of the 09-01 discharge location. The receiving water sample was analyzed for the presence of total recoverable metals, pH, hardness. The results of the surface water testing are summarized on **Table 2** and the laboratory data report is included in the enclosed **Appendix D**.

A Dilution Factor (DF) was calculated pursuant to the procedure contained in RGP MAG910000, Appendix V. The purpose of the DF calculation is to establish Total Recoverable Limits for metals, taking into consideration the anticipated dilution of the detected analyte upon discharge into the unnamed tributary of the Malden River. Based on our correspondence with the DEP, since StreamStats cannot calculate a 7Q10 flow for the segment of the Malden River, the dilution factor should be 1 or 0, meaning no dilution. A copy of the correspondence with the DEP is in **Appendix B**.

In accordance with the RGP, the proposed dewatering associated with this permit application is considered Contaminated/Formerly Contaminated Site Dewatering (Category III). Given that the site contamination is considered "Known," this project is considered Activity Category III-G as defined in the RGP. Based on the activity category, and in accordance with the RGP, contamination Type A: Inorganics, Type C: Halogenated Volatile Organic Compounds and Type D: Non-Halogenated Semi-Volatile Organic Compounds as defined in Table 2 of the RGP apply to the discharge.

Groundwater Treatment

Based upon the anticipated rates of construction dewatering in conjunction with the results of the above referenced groundwater analyses, it is our opinion that treatment using one 10,000-gallon capacity settling tank and bag filters will allow the effluent to meet the limits established by the US EPA prior to off-site discharge. However, granular activated carbon (GAC) filters will be available if additional treatment is necessary. A schematic of the treatment system is shown on **Figure 4**.

A Best Management Practices Plan (BMPP) has been prepared as **Appendix E** to the RGP and will be posted at the site during the time period that temporary construction dewatering is occurring at the site.

Summary and Conclusions

The purpose of this report is to summarize site environmental conditions and groundwater data to support a Notice of Intent under the Remediation General Permit for the off-site discharge of dewatered groundwater which will be encountered during construction of a 4-story building at 65 Norman Street in Everett, Massachusetts. The groundwater testing results reported in this application have been provided to the site owner.

Based on the results of the above referenced groundwater analyses, treatment of construction dewatering will be necessary to meet the effluent limits established by the US EPA prior to off-site discharge. The proposed construction dewatering effluent treatment system will consist of one 10,000-gallon capacity settling tank and bag filters in series. However, should the effluent monitoring results identify concentrations of contaminants that are in excess of the limits established by the RGP, additional mitigative measures will be implemented to meet the allowable discharge limits.

We trust that the above satisfies your present requirements. Should you have any questions or comments concerning the above, please do not hesitate to contact us.

Sincerely,

McPHAIL ASSOCIATES, LLC

Brian Fong-Murdock

Thomas J. Fennick, P.E., L.S.P.

\\McPhail-fs2\McPhail\Working Documents\Reports\6646_65 Norman Street_RGP_03172022.docx
BFM/tjf

FIGURES

FIGURE 1

McPHAIL ASSOCIATES, LLC
Geotechnical and Geoenvironmental Engineers
2269 Massachusetts Avenue
Cambridge, MA 02140
617/868-1420
617/868-1423 (Fax)
www.mcphailgeo.com

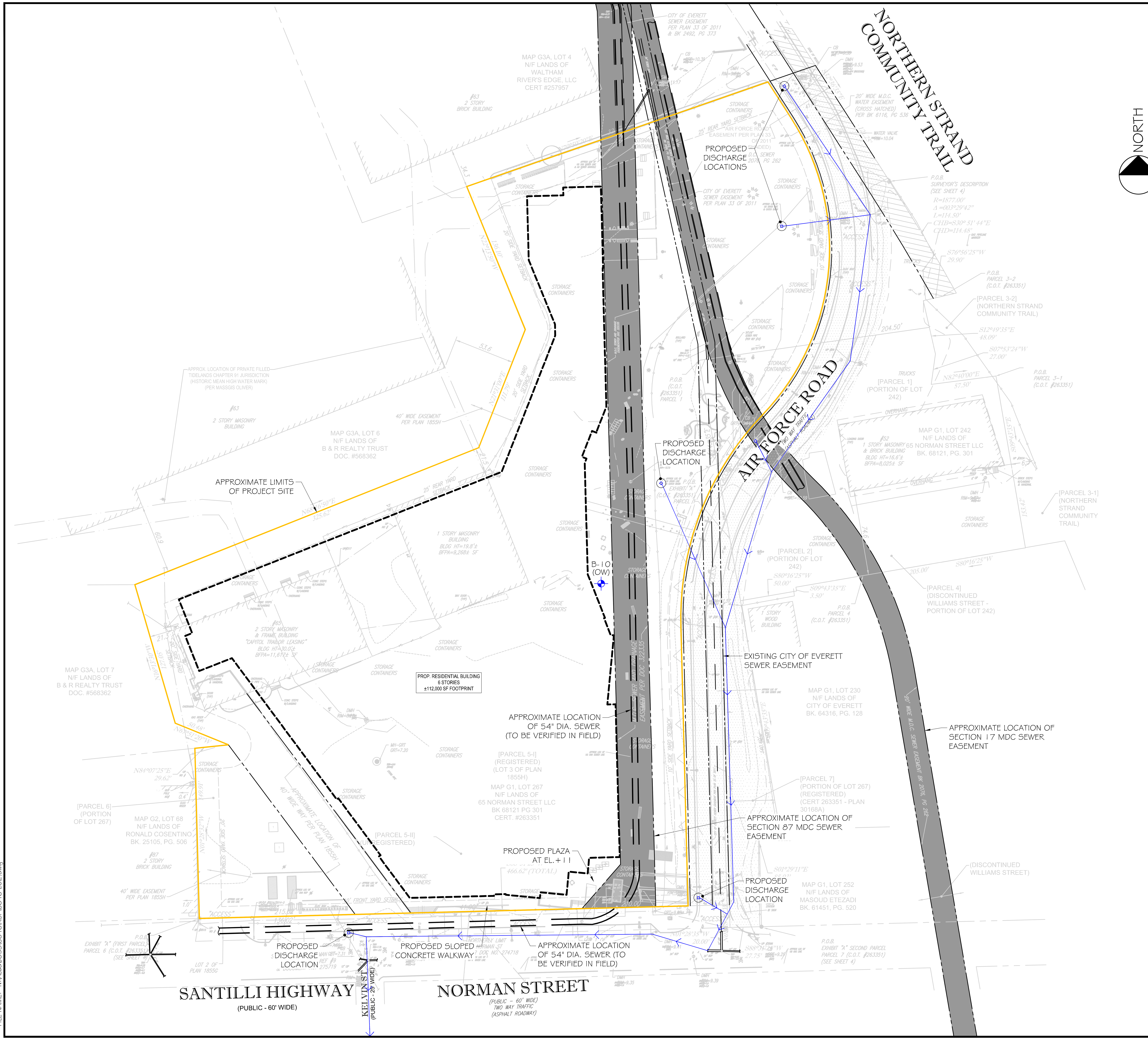
N

SCALE 1:25,000

PROJECT LOCATION PLAN

65 NORMAN STREET (ARTEMAS)

EVERETT MASSACHUSETTS



LEGEND

- APPROXIMATE LOCATION OF BORING PERFORMED BY CARR-DEE CORP. FROM JULY 17 TO JULY 25, 2019 FOR McPHAIL ASSOCIATES, LLC
- (OW) — INDICATES OBSERVATION WELL INSTALLED WITHIN COMPLETED BORING
- INDICATES APPROXIMATE LOCATION OF CATCH BASIN USED FOR DISCHARGE
- INDICATES DIRECTION OF FLOW

NOTES:

1. ELEVATION LISTED HEREIN ARE REFERENCED TO THE NAVD88 DATUM.
2. INFORMATION AND DETAILS FOR EASEMENT AND ASSOCIATED SEWER TAKEN FROM "METROPOLITAN DISTRICT COMMISSION SEWERAGE DIVISION - RECORD PLAN SECTION 87 MALDEN RELIEF SEWER" DATED MARCH 1974.

REFERENCE: THIS PLAN WAS PREPARED FROM A 40-SCALE DRAWING ENTITLED, "OVERALL SITE PLAN" DATED OCTOBER 16, 2020 PREPARED BY THE ARCHITECTURAL TEAM, INC.

GRAPHIC SCALE: 40 0 40 80 160

McPHAIL ASSOCIATES, LLC
Geotechnical and Geoenvironmental Engineers
2269 Massachusetts Avenue Cambridge, MA 02140
617/868-1420
617/868-1423 (Fax)
www.mcphailgeo.com

65 NORMAN STREET (ARTEMAS)

EVERETT MASSACHUSETTS

SITE PLAN

FOR

LMC ARTEMAS HOLDINGS, LLC

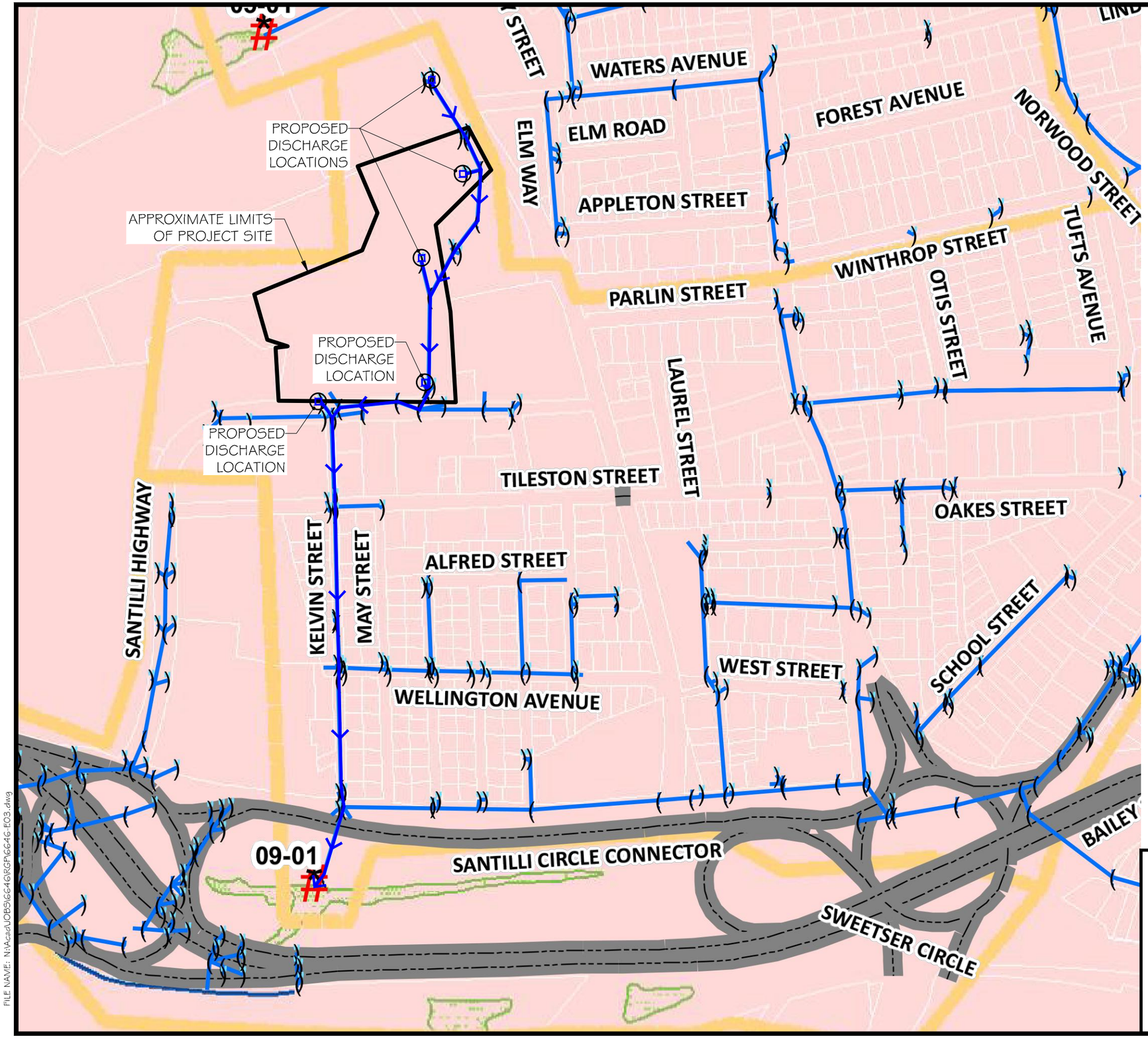
BY

McPHAIL ASSOCIATES, LLC

Date: MARCH 2022	Dwn: M.B.S.	Chkd: B.F.M.	Scale: 1" = 40'
Project No: 6646			FIGURE 2

FILE NAME: N:\Acad\DB\6646\GRP6646-E02.dwg

FIGURE 3



NORTH

LEGEND

□ — INDICATES APPROXIMATE LOCATION OF CATCH BASIN USED FOR DISCHARGE

→ — INDICATES DIRECTION OF FLOW

REFERENCE: THIS PLAN WAS PREPARED FROM A DRAWING ENTITLED, "STORM SEWER MAP" DATED JUNE 2019 PROVIDED BY THE CITY OF EVERETT, MASSACHUSETTS

McPHAIL ASSOCIATES, LLC
Geotechnical and Geoenvironmental Engineers
2269 Massachusetts Avenue
Cambridge, MA 02140
617/868-1420
617/868-1423 (Fax)
www.mcphailgeo.com

65 NORMAN STREET (ARTEMAS)
EVERETT MASSACHUSETTS

DISCHARGE LOCATION PLAN

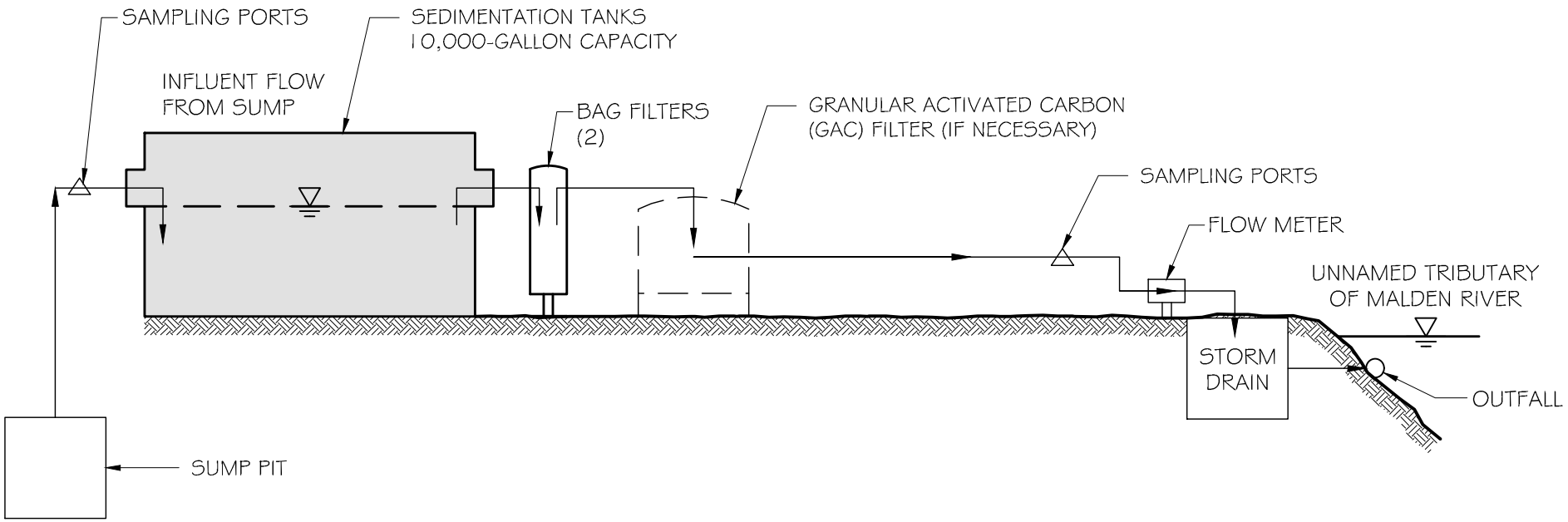
FOR
LMC ARTEMAS HOLDINGS, LLC
BY
McPHAIL ASSOCIATES, LLC

Date: MARCH 2022	Dwn: M.B.S.	Chkd: B.F.M.	Scale: N.T.S.
Project No: 6646			

FILE NAME: N:\Acad\JOBS\6646\RGP\6646-F03.dwg

FILE NAME: N:\Acad\JOBS\6646\RGP\6646-E04.dwg

FIGURE 4



McPHAIL ASSOCIATES, LLC
Geotechnical and
Geoenvironmental Engineers
2269 Massachusetts Avenue
Cambridge, MA 02140
617/868-1420
617/868-1423 (Fax)
www.mcphailgeo.com

65 NORMAN STREET (ARTEMAS)

EVERETT MASSACHUSETTS

SCHEMATIC OF TREATMENT SYSTEM

FOR

LMC ARTEMAS HOLDINGS, LLC

BY

McPHAIL ASSOCIATES, LLC

CONSULTING GEOTECHNICAL ENGINEERS

Date: MARCH 2022	Dwn: M.B.S.	Chkd: B.F.M.	Scale: N.T.S.
Project No: 6646			

TABLES

TABLE 1
Laboratory Analytical Results - Groundwater

65 Norman Street, Everett MA
McPhail Project No. 6646

LOCATION	**Chemical-Specific Effluent Limitations and Monitor-Only Requirements**		**B-10 (OW)**
SAMPLING DATE			**3/7/2022**
LAB SAMPLE ID			**L2211849-01**
SAMPLE TYPE	**TBEL**	**WQBEL (FW)**	**WATER**
General Chemistry			
pH (H)	6.5 to 8.3	6.5 to 8.3	7
A. Inorganics (ug/l)			
Ammonia (as nitrogen)	Report	Report	590
Chloride	Report	Report	67000
Chlorine, Total Residual	200	11	ND(20)
Solids, Total Suspended	30000	30000	36000
Antimony, Total	206	640	ND(4)
Arsenic, Total	104	10	1.2
Cadmium, Total	10.2	0.25	ND(0.2)
Chromium, Total	323	11	ND(1)
Chromium, Trivalent	332	74	ND(10)
Chromium, Hexavalent	323	11	ND(10)
Copper, Total	242	9	ND(1)
Iron, Total	5000	1000	18500
Lead, Total	160	2.5	ND(1)
Mercury, Total	0.739	0.77	ND(0.2)
Nickel, Total	1450	52	ND(2)
Selenium, Total	235.8	5	ND(5)
Silver, Total	35.1	3.2	ND(0.4)
Zinc, Total	420	120	ND(10)
Cyanide, Total	178000	5.2	8
Hardness	---	---	204000
B. Non-Halogenated Violatile Organic Compounds (ug/l)			
Benzene	100	100	ND(1)
Toluene	Total BTEX	Total BTEX	ND(1)
Ethylbenzene	Total BTEX	Total BTEX	ND(1)
p/m-Xylene	Total BTEX	Total BTEX	ND(2)
o-xylene	Total BTEX	Total BTEX	ND(1)
Xylenes, Total	Total BTEX	Total BTEX	ND(1)
Total BTEX	100	100	ND
1,4-Dioxane	200	200	ND(5)
Acetone	7.97	7.97	ND(10)
Phenolics, Total	1080	300	ND(30)
C. Halogenated Volatile Organic Compounds (ug/l)			
Carbon tetrachloride	4.4	1.6	ND(1)
1,2-Dichlorobenzene	600	600	ND(5)
1,3-Dichlorobenzene	320	320	ND(5)
1,4-Dichlorobenzene	5	5	ND(5)
1,2-Dibromoethane	---	---	ND(0.01)
1,1-Dichloroethane	70	70	ND(1.5)
1,2-Dichloroethane	5	5	ND(1.5)
1,1-Dichloroethene	3.2	3.2	ND(1)
Methylene chloride	4.6	4.6	ND(1)
1,1,1-Trichloroethane	200	200	ND(2)
1,1,2-Trichloroethane	5	5	ND(1.5)
Trichloroethene	5	5	ND(1)
Tetrachloroethene	5	3.3	ND(1)
cis-1,2-Dichloroethene	70	70	ND(1)
Vinyl chloride	2	2	ND(1)
D. Non-Halogenated Semi-Volatile Organic Compounds (ug/l)			
Bis(2-ethylhexyl)phthalate	Total phthalates	Total phthalates	ND(2.2)
Butyl benzyl phthalate	Total phthalates	Total phthalates	ND(5)
Di-n-butylphthalate	Total phthalates	Total phthalates	ND(5)
Di-n-octylphthalate	Total phthalates	Total phthalates	ND(5)
Diethyl phthalate	Total phthalates	Total phthalates	ND(5)
Dimethyl phthalate	Total phthalates	Total phthalates	ND(5)
Total Phthalates	190	3	
Group I Polycyclic Aromatic Hydrocarbons	1	---	
Benzo(a)anthracene	0.0038	0.0038	ND(0.1)
Benzo(a)pyrene	0.0038	0.0038	ND(0.1)
Benzo(b)fluoranthene	0.0038	0.0038	ND(0.1)
Benzo(k)fluoranthene	0.0038	0.0038	ND(0.1)
Chrysene	0.0038	0.0038	ND(0.1)
Dibenzo(a,h)anthracene	0.0038	0.0038	ND(0.1)
Indeno(1,2,3-cd)pyrene	0.0038	0.0038	ND(0.1)
Group II Polycyclic Aromatic Hydrocarbons	100	100	ND
Acenaphthene	Total Group II	Total Group II	ND(0.1)
Acenaphthylene	Total Group II	Total Group II	ND(0.1)
Anthracene	Total Group II	Total Group II	ND(0.1)
Benzo(ghi)perylene	Total Group II	Total Group II	ND(0.1)
Fluoranthene	Total Group II	Total Group II	ND(0.1)
Fluorene	Total Group II	Total Group II	ND(0.1)
Naphthalene	Total Group II	Total Group II	ND(0.1)
Phenanthrene	Total Group II	Total Group II	ND(0.1)
Pyrene	Total Group II	Total Group II	ND(0.1)
E. Halogenated Semi-Volatile Organic Compunds (ug/l)			
Total Polychlorinated Biphenyls	0.000064	0.000064	ND
Pentachlorophenol	1	1	ND(1)
F. Fuel Parameters (ug/l)			
TPH, SGT-HEM	5000	5000	ND(3600)
Methyl tert butyl ether	70	20	ND(10)
Tert-Butyl Alcohol	120	120	ND(100)
Tertiary-Amyl Methyl Ether	90	90	ND(20)

ND - Not detected in excess of
the detection limit
(#) - Detection limit
TBEL - Technology-based effluent limitations
WQBEL - Water quality-based effluent limitation
FW - Freshwater

TABLE 2
Laboratory Analytical Results - Receiving Water

65 Norman Street, Everett MA
McPhail Project No. 6646

LOCATION	EPA Freshwater Aquatic Life Chronic Criteria	MALDEN RIVER-
SAMPLING DATE		3/7/2022
LAB SAMPLE ID		L2211849-02
SAMPLE TYPE		SURFACE WATER
General Chemistry		
pH (H)	---	7.6
A. Inorganics (ug/l)		
Ammonia (as nitrogen)	---	194
Antimony, Total	---	ND(4)
Arsenic, Total	150	ND(1)
Cadmium, Total	0.25	ND(0.2)
Chromium, Total	---	1.06
Chromium, Hexavalent	11	ND(10)
Chromium, Trivalent	74	ND(10)
Copper, Total		3.9
Iron, Total	1000	576
Lead, Total	2.5	1.29
Mercury, Total	0.77	ND(0.2)
Nickel, Total	52	ND(2)
Selenium, Total	5	ND(5)
Silver, Total	---	ND(0.4)
Zinc, Total	120	34.44
Chloride	230000	626000
Chlorine, Total Residual	---	ND(20)
Cyanide, Total	5.2	ND(5)
Solids, Total Suspended	---	11000
Hardness	---	171000

ND - Not detected in excess of the laboratory detection limit
(#) - Detection Limit
NT - Not tested

APPENDIX A:

LIMITATIONS

LIMITATIONS

The purpose of this report is to present the results of testing of a groundwater sample obtained from a monitoring well located at the parcel listed with the address of 65 Norman Street in Everett, Massachusetts, in support of an application for approval of construction site dewatering discharge into surface waters of the Commonwealth of Massachusetts under EPA's Massachusetts Remediation General Permit MAG910000.

The observations were made under the conditions stated in this report. The conclusions presented above were based on these observations. If variations in the nature and extent of subsurface conditions between the spaced subsurface explorations become evident in the future, it will be necessary to re-evaluate the conclusions presented herein after performing on-site observations and noting the characteristics of any variations.

The conclusions submitted in this report are based in part upon laboratory test data obtained from analysis of groundwater samples, and are contingent upon their validity. The data have been reviewed, and interpretations have been made in the text. It should also be noted that fluctuations in the types and levels of contaminants and variations in their flow paths may occur due to changes in the seasonal water table, past practices used at the site, and other factors.

Laboratory analyses have been performed for specific constituents during this assessment, as described in the text.

This report and application have been prepared on behalf of and for the exclusive use of LMC Artemas Holdings, LLC. This report and the findings contained herein shall not, in whole or in part, be disseminated or conveyed to any other party, other than submission to relevant governmental agencies, nor used in whole or in part by any other party without the prior written consent of McPhail Associates, LLC.

APPENDIX B:

NOTICE OF INTENT TRANSMITTAL FORM

II. Suggested Format for the Remediation General Permit Notice of Intent (NOI)

A. General site information:

<table>
<tr><td rowspan="2">1. Name of site:
65 Norman Street</td><td colspan="3">Site address: 65 Norman Street
Street:</td></tr>
<tr><td>City: Everett</td><td>State: MA</td><td>Zip:</td></tr>
<tr><td rowspan="4">2. Site owner
LMC Artemas Holdings, LLC

Owner is (check one): ☐ Federal ☐ State/Tribal ■ Private
☐ Other; if so, specify:</td><td colspan="3">Contact Person: Dan Lee</td></tr>
<tr><td colspan="2">Telephone: 561-596-5618</td><td>Email: dan.lee@livelmc.com</td></tr>
<tr><td colspan="3">Mailing address: 99 Summer Street
Street:</td></tr>
<tr><td>City: Boston</td><td>State: MA</td><td>Zip: 02110</td></tr>
<tr><td rowspan="4">3. Site operator, if different than owner
LMC Artemas Holdings, LLC</td><td colspan="3">Contact Person: Mark Flint</td></tr>
<tr><td colspan="2">Telephone: 646-504-1780</td><td>Email: mark.flint@livelmc.com</td></tr>
<tr><td colspan="3">Mailing address:
Street: 99 Summer Street</td></tr>
<tr><td>City: Boston</td><td>State: MA</td><td>Zip: 02110</td></tr>
<tr><td>4. NPDES permit number assigned by EPA:
MAG9100000

NPDES permit is (check all that apply: ■ RGP ☐ DGP ■ CGP
☐ MSGP ☐ Individual NPDES permit ☐ Other; if so, specify:</td><td colspan="3">5. Other regulatory program(s) that apply to the site (check all that apply):
■ MA Chapter 21e; list RTN(s):
3-37079, 3-37083
☐ NH Groundwater Management Permit or Groundwater Release Detection Permit:
☐ CERCLA
☐ UIC Program
☐ POTW Pretreatment
☐ CWA Section 404</td></tr>
</table>

B. Receiving water information:

1. Name of receiving water(s):	Waterbody identification of receiving water(s):	Classification of receiving water(s):
Unnamed tributary to Madlen River	NA (Malden River: MA71-05)	NA (Malden River: Class B)

Receiving water is (check any that apply): ☐ Outstanding Resource Water ☐ Ocean Sanctuary ☐ territorial sea ☐ Wild and Scenic River

2. Has the operator attached a location map in accordance with the instructions in B, above? (check one): ■ Yes ☐ No

Are sensitive receptors present near the site? (check one): ☐ Yes ■ No
If yes, specify:

3. Indicate if the receiving water(s) is listed in the State's Integrated List of Waters (i.e., CWA Section 303(d)). Include which designated uses are impaired, and any pollutants indicated. Also, indicate if a final TMDL is available for any of the indicated pollutants. For more information, contact the appropriate State as noted in Part 4.6 of the RGP. NA (Malden River: clordane, PCBs, DDT, in fish tissue, E. Coli, dissolved oxygen, TSS, total phosphorus, high pH, fecal coliform)

4. Indicate the seven day-ten-year low flow (7Q10) of the receiving water determined in accordance with the instructions in Appendix V for sites located in Massachusetts and Appendix VI for sites located in New Hampshire.	0
5. Indicate the requested dilution factor for the calculation of water quality-based effluent limitations (WQBELs) determined in accordance with the instructions in Appendix V for sites in Massachusetts and Appendix VI for sites in New Hampshire.	1

6. Has the operator received confirmation from the appropriate State for the 7Q10and dilution factor indicated? (check one): ■ Yes ☐ No
If yes, indicate date confirmation received: 3/24/2022

7. Has the operator attached a summary of receiving water sampling results as required in Part 4.2 of the RGP in accordance with the instruction in Appendix VIII? (check one): ■ Yes ☐ No

C. Source water information:

1. Source water(s) is (check any that apply):

■ Contaminated groundwater Has the operator attached a summary of influent sampling results as required in Part 4.2 of the RGP in accordance with the instruction in Appendix VIII? (check one): ■ Yes ☐ No	☐ Contaminated surface water Has the operator attached a summary of influent sampling results as required in Part 4.2 of the RGP in accordance with the instruction in Appendix VIII? (check one): ☐ Yes ☐ No	☐ The receiving water ☐ A surface water other than the receiving water; if so, indicate waterbody:	☐ Potable water; if so, indicate municipality or origin: ☐ Other; if so, specify:

2. Source water contaminants: Unknowwn	
a. For source waters that are contaminated groundwater or contaminated surface water, indicate are any contaminants present that are not included in the RGP? (check one): ☐ Yes ■ No If yes, indicate the contaminant(s) and the maximum concentration present in accordance with the instructions in Appendix VIII.	b. For a source water that is a surface water other than the receiving water, potable water or other, indicate any contaminants present at the maximum concentration in accordance with the instructions in Appendix VIII? (check one): ☐ Yes ☐ No NA
3. Has the source water been previously chlorinated or otherwise contains residual chlorine? (check one): ☐ Yes ■ No	

D. Discharge information

1.The discharge(s) is a(n) (check any that apply): ☐ Existing discharge ■ New discharge ☐ New source	
Outfall(s): City of Everett - 09-01	Outfall location(s): (Latitude, Longitude) 09-01: 42.4022, -71.0066
Discharges enter the receiving water(s) via (check any that apply): ☐ Direct discharge to the receiving water ■ Indirect discharge, if so, specify: Stormwater drain beneath Air Force Road runs south to Norman Street, west to Kelvin Street, beneath Bizarro Lane to Outfall No. 09-01 into an unnamed ☐ A private storm sewer system ■ A municipal storm sewer system If the discharge enters the receiving water via a private or municipal storm sewer system: Has notification been provided to the owner of this system? (check one): ■ Yes ☐ No Has the operator has received permission from the owner to use such system for discharges? (check one): ■ Yes ☐ No, if so, explain, with an estimated timeframe for obtaining permission: Has the operator attached a summary of any additional requirements the owner of this system has specified? (check one): ☐ Yes ■ No	
Provide the expected start and end dates of discharge(s) (month/year): 04/2022 - 4/2023 Indicate if the discharge is expected to occur over a duration of: ☐ less than 12 months ■ 12 months or more ☐ is an emergency discharge	
Has the operator attached a site plan in accordance with the instructions in D, above? (check one): ■ Yes ☐ No	

<table>
<tr><td>2. Activity Category: (check all that apply)</td><td colspan="2">3. Contamination Type Category: (check all that apply)</td></tr>
<tr><td rowspan="4">☐ I – Petroleum-Related Site Remediation
☐ II – Non-Petroleum-Related Site Remediation
■ III – Contaminated Site Dewatering
☐ IV – Dewatering of Pipelines and Tanks
☐ V – Aquifer Pump Testing
☐ VI – Well Development/Rehabilitation
☐ VII – Collection Structure Dewatering/Remediation
☐ VIII – Dredge-Related Dewatering</td><td colspan="2">a. If Activity Category I or II: (check all that apply)

☐ A. Inorganics
☐ B. Non-Halogenated Volatile Organic Compounds
☐ C. Halogenated Volatile Organic Compounds
☐ D. Non-Halogenated Semi-Volatile Organic Compounds
☐ E. Halogenated Semi-Volatile Organic Compounds
☐ F. Fuels Parameters</td></tr>
<tr><td colspan="2">b. If Activity Category III, IV, V, VI, VII or VIII: (check either G or H)</td></tr>
<tr><td>■ G. Sites with Known Contamination</td><td>☐ H. Sites with Unknown Contamination</td></tr>
<tr><td>c. If Category III-G, IV-G, V-G, VI-G, VII-G or VIII-G: (check all that apply)

■ A. Inorganics
☐ B. Non-Halogenated Volatile Organic Compounds
■ C. Halogenated Volatile Organic Compounds
■ D. Non-Halogenated Semi-Volatile Organic Compounds
☐ E. Halogenated Semi-Volatile Organic Compounds
☐ F. Fuels Parameters</td><td>d. If Category III-H, IV-H, V-H, VI-H, VII-H or VIII-H Contamination Type Categories A through F apply</td></tr>
</table>

4. Influent and Effluent Characteristics

Parameter	Known or believed absent	Known or believed present	# of samples	Test method (#)	Detection limit (µg/l)	Influent		Effluent Limitations	
						Daily maximum (µg/l)	Daily average (µg/l)	TBEL	WQBEL
A. Inorganics									
Ammonia		✔	1	121,4500	75	590		Report mg/L	---
Chloride		✔	1	4,4300	12500	67000		Report µg/l	---
Total Residual Chlorine	✔		1	1214500	20	ND		0.2 mg/L	11
Total Suspended Solids		✔	1	1212540	5000	36000		30 mg/L	---
Antimony	✔		1	3,200.8	4	ND		206 µg/L	640
Arsenic		✔	1	3,200.8	1	1.2		104 µg/L	10
Cadmium	✔		1	3,200.8	0.2	ND		10.2 µg/L	0.25
Chromium III	✔		1	107	10	ND		323 µg/L	74
Chromium VI	✔		1	107	10	ND		323 µg/L	11
Copper	✔		1	3,200.8	1	ND		242 µg/L	9
Iron		✔	1	19200.7	50	18500		5,000 µg/L	1000
Lead	✔		1	3,200.8	1	ND		160 µg/L	2.5
Mercury	✔		1	3,245.1	0.2	ND		0.739 µg/L	0.77
Nickel	✔		1	3,200.8	2	ND		1,450 µg/L	52
Selenium	✔		1	3,200.8	5	ND		235.8 µg/L	5
Silver	✔		1	3,200.8	0.4	ND		35.1 µg/L	3.2
Zinc	✔		1	3,200.8	10	ND		420 µg/L	120
Cyanide		✔	1	121,4500	5	8		178 mg/L	5.2
B. Non-Halogenated VOCs									
Total BTEX		✔	1	128,624.1	NA	ND		100 µg/L	---
Benzene	✔		1	128,624.1	1	ND		5.0 µg/L	---
1,4 Dioxane	✔		1	128,624.1	5	ND		200 µg/L	---
Acetone	✔		1	128,624.1	10	ND		7.97 mg/L	---
Phenol	✔		1	128,624.1	30	ND		1,080 µg/L	300

Parameter	Known or believed absent	Known or believed present	# of samples	Test method (#)	Detection limit (µg/l)	Influent		Effluent Limitations	
						Daily maximum (µg/l)	Daily average (µg/l)	TBEL	WQBEL
C. Halogenated VOCs									
Carbon Tetrachloride	✔		1	128.624.1	1	ND		4.4 µg/L	1.6
1,2 Dichlorobenzene	✔		1	128.624.1	5	ND		600 µg/L	---
1,3 Dichlorobenzene	✔		1	128.624.1	5	ND		320 µg/L	---
1,4 Dichlorobenzene	✔		1	128.624.1	5	ND		5.0 µg/L	---
Total dichlorobenzene	✔		1	128.624.1	NA	ND		763 µg/L in NH	---
1,1 Dichloroethane	✔		1	128.624.1	1.5	ND		70 µg/L	---
1,2 Dichloroethane	✔		1	128.624.1	1.5	ND		5.0 µg/L	---
1,1 Dichloroethylene	✔		1	128.624.1	1	ND		3.2 µg/L	---
Ethylene Dibromide			0					0.05 µg/L	---
Methylene Chloride	✔		1	128.624.1	1	ND		4.6 µg/L	---
1,1,1 Trichloroethane	✔		1	128.624.1	2	ND		200 µg/L	---
1,1,2 Trichloroethane	✔		1	128.624.1	1.5	ND		5.0 µg/L	---
Trichloroethylene	✔		1	128.624.1	1	ND		5.0 µg/L	---
Tetrachloroethylene	✔		1	128.624.1	1	ND		5.0 µg/L	3.3
cis-1,2 Dichloroethylene	✔		1	128.624.1	1	ND		70 µg/L	---
Vinyl Chloride		✔	1	128.624.1	1	ND		2.0 µg/L	---
D. Non-Halogenated SVOCs									
Total Phthalates	✔		1	129.625.1	NA	ND		190 µg/L	NS
Diethylhexyl phthalate	✔		0					101 µg/L	
Total Group I PAHs	✔		1	625.1-SIM	NA	ND		1.0 µg/L	---
Benzo(a)anthracene		✔	1	625.1	0.1	ND		As Total PAHs	0.0038
Benzo(a)pyrene		✔	1	625.1	0.1	ND			0.0038
Benzo(b)fluoranthene		✔	1	625.1	0.1	ND			0.0038
Benzo(k)fluoranthene		✔	1	625.1	0.1	ND			0.0038
Chrysene		✔	1	625.1	0.1	ND			0.0038
Dibenzo(a,h)anthracene	✔		1	625.1	0.1	ND			0.0038
Indeno(1,2,3-cd)pyrene		✔	1	625.1	0.1	ND			0.0038

Parameter	Known or believed absent	Known or believed present	# of samples	Test method (#)	Detection limit (µg/l)	Influent		Effluent Limitations	
						Daily maximum (µg/l)	Daily average (µg/l)	TBEL	WQBEL
Total Group II PAHs	✔		1	129.625.1-	NA	ND		100 µg/L	---
Naphthalene		✔	1	625.1	0.1	ND		20 µg/L	---
E. Halogenated SVOCs									
Total PCBs	✔		1	127, 608.3	0.25	ND		0.000064 µg/L	---
Pentachlorophenol	✔		1	129, 625.1	1	ND		1.0 µg/L	---
F. Fuels Parameters									
Total Petroleum Hydrocarbons	✔		1	140,1664B	4000	ND		5.0 mg/L	---
Ethanol			0					Report mg/L	---
Methyl-tert-Butyl Ether	✔		1	128,624.1	10	ND		70 µg/L	20
tert-Butyl Alcohol	✔		1	128,624.1	100	ND		120 µg/L in MA 40 µg/L in NH	---
tert-Amyl Methyl Ether	✔		1	128,624.1	20	ND		90 µg/L in MA 140 µg/L in NH	---
Other (i.e., pH, temperature, hardness, salinity, LC_{50}, additional pollutants present); if so, specify:									
pH		✔	1	121,4500H	NA	7			
Total phenolics	✔		1	4,420.1	30	ND			
Hardness		✔	1	2340	0.66	204000			

E. Treatment system information

1. Indicate the type(s) of treatment that will be applied to effluent prior to discharge: (check all that apply)

☐ Adsorption/Absorption ☐ Advanced Oxidation Processes ☐ Air Stripping ■ Granulated Activated Carbon ("GAC")/Liquid Phase Carbon Adsorption as needed.
☐ Ion Exchange ☐ Precipitation/Coagulation/Flocculation ■ Separation/Filtration ☐ Other; if so, specify:
As necessary to meet permit requirements

2. Provide a written description of all treatment system(s) or processes that will be applied to the effluent prior to discharge.
Refer to attached report

Identify each major treatment component (check any that apply):
■ Fractionation tanks☐ Equalization tank ☐ Oil/water separator ☐ Mechanical filter ■ Media filter
☐ Chemical feed tank ☐ Air stripping unit ■ Bag filter ☐ Other; if so, specify:

Indicate if either of the following will occur (check any that apply):
☐ Chlorination ☐ De-chlorination

3. Provide the **design flow capacity** in gallons per minute (gpm) of the most limiting component. Indicate the most limiting component: Is use of a flow meter feasible? (check one): ■ Yes ☐ No, if so, provide justification:	500 gpm
Provide the proposed maximum effluent flow in gpm.	500 gpm
Provide the average effluent flow in gpm.	35 gpm
If Activity Category IV applies, indicate the estimated total volume of water that will be discharged:	NA

4. Has the operator attached a schematic of flow in accordance with the instructions in E, above? (check one): ■ Yes ☐ No

F. Chemical and additive information

1. Indicate the type(s) of chemical or additive that will be applied to effluent prior to discharge or that may otherwise be present in the discharge(s): (check all that apply)

☐ Algaecides/biocides ☐ Antifoams ☐ Coagulants ☐ Corrosion/scale inhibitors ☐ Disinfectants ☐ Flocculants ☐ Neutralizing agents ☐ Oxidants ☐ Oxygen ☐ scavengers ☐ pH conditioners ☐ Bioremedial agents, including microbes ☐ Chlorine or chemicals containing chlorine ☐ Other; if so, specify:

2. Provide the following information for each chemical/additive, using attachments, if necessary:

a. Product name, chemical formula, and manufacturer of the chemical/additive;
b. Purpose or use of the chemical/additive or remedial agent;
c. Material Safety Data Sheet (MSDS) and Chemical Abstracts Service (CAS) Registry number for each chemical/additive;
d. The frequency (hourly, daily, etc.), duration (hours, days), quantity (maximum and average), and method of application for the chemical/additive;
e. Any material compatibility risks for storage and/or use including the control measures used to minimize such risks; and
f. If available, the vendor's reported aquatic toxicity (NOAEL and/or LC50 in percent for aquatic organism(s)).

3. Has the operator attached an explanation which demonstrates that the addition of such chemicals/additives may be authorized under this general permit in accordance with the instructions in F, above? (check one): ☐ Yes ☐ No; if no, has the operator attached data that demonstrates each of the 126 priority pollutants in CWA Section 307(a) and 40 CFR Part 423.15(j)(1) are non-detect in discharges with the addition of the proposed chemical/additive? (check one): ☐ Yes ☐ No

G. Endangered Species Act eligibility determination

1. Indicate under which criterion the discharge(s) is eligible for coverage under this general permit:

■ **FWS Criterion A**: No endangered or threatened species or critical habitat are in proximity to the discharges or related activities or come in contact with the "action area".

☐ **FWS Criterion B**: Formal or informal consultation with the FWS under section 7 of the ESA resulted in either a no jeopardy opinion (formal consultation) or a written concurrence by FWS on a finding that the discharges and related activities are "not likely to adversely affect" listed species or critical habitat (informal consultation). Has the operator completed consultation with FWS? (check one): ☐ Yes ☐ No; if no, is consultation underway? (check one): ☐ Yes ☐ No

☐ **FWS Criterion C**: Using the best scientific and commercial data available, the effect of the discharges and related activities on listed species and critical habitat have been evaluated. Based on those evaluations, a determination is made by EPA, or by the operator and affirmed by EPA, that the discharges and related activities will have "no effect" on any federally threatened or endangered listed species or designated critical habitat under the jurisdiction of the FWS. This determination was made by: (check one) ☐ the operator ☐ EPA ☐ Other; if so, specify:

☐ **NMFS Criterion**: A determination made by EPA is affirmed by the operator that the discharges and related activities will have "no effect" or are "not likely to adversely affect" any federally threatened or endangered listed species or critical habitat under the jurisdiction of NMFS and will not result in any take of listed species. Has the operator previously completed consultation with NMFS? (check one): ☐ Yes ☐ No

2. Has the operator attached supporting documentation of ESA eligibility in accordance with the instructions in Appendix I, and G, above? (check one): ■ Yes ☐ No

Does the supporting documentation include any written concurrence or finding provided by the Services? (check one): ☐ Yes ☐ No; if yes, attach.

H. National Historic Preservation Act eligibility determination

1. Indicate under which criterion the discharge(s) is eligible for coverage under this general permit:

■ **Criterion A**: No historic properties are present. The discharges and discharge-related activities (e.g., BMPs) do not have the potential to cause effects on historic properties.

☐ **Criterion B**: Historic properties are present. Discharges and discharge related activities do not have the potential to cause effects on historic properties.

☐ **Criterion C**: Historic properties are present. The discharges and discharge-related activities have the potential to have an effect or will have an adverse effect on historic properties.

2. Has the operator attached supporting documentation of NHPA eligibility in accordance with the instructions in H, above? (check one): ■ Yes ☐ No

Does the supporting documentation include any written agreement with the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer (TPHO), or other tribal representative that outlines measures the operator will carry out to mitigate or prevent any adverse effects on historic properties? (check one): ☐ Yes ☐ No

I. Supplemental information

Describe any supplemental information being provided with the NOI. Include attachments if required or otherwise necessary.

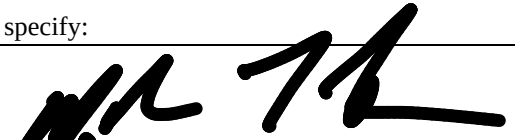
Refer to attached report

Has the operator attached data, including any laboratory case narrative and chain of custody used to support the application? (check one): ■ Yes ☐ No

Has the operator attached the certification requirement for the Best Management Practices Plan (BMPP)? (check one): ■ Yes ☐ No

J. Certification requirement

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

BMPP certification statement:	A BMPP meeting the requirements of this general permit has been developed for implementation upon initiation of discharge.
Notification provided to the appropriate State, including a copy of this NOI, if required.	Check one: Yes ■ No ☐
Notification provided to the municipality in which the discharge is located, including a copy of this NOI, if requested.	Check one: Yes ■ No ☐
Notification provided to the owner of a private or municipal storm sewer system, if such system is used for site discharges, including a copy of this NOI, if requested.	Check one: Yes ■ No ☐ NA ☐
Permission obtained from the owner of a private or municipal storm sewer system, if such system is used for site discharges. If yes, attach additional conditions. If no, attach explanation and timeframe for obtaining permission.	Check one: Yes ■ No ☐ NA ☐
Notification provided to the owner/operator of the area associated with activities covered by an additional discharge permit(s). Additional discharge permit is (check one): ☐ RGP ☐ DGP ☐ CGP ☐ MSGP ☐ Individual NPDES permit ☐ Other; if so, specify:	Check one: Yes ☐ No ☐ NA ■
Signature: 	Date: 3/30/2022
Print Name and Title: Mark Flint, Senior Director of Construction	

APPENDIX C:

DEP PRIORITY RESOURCES MAP

USGS STREAMFLOW STATISTICS REPORT

DILUTION FACTOR CALCULATIONS

ADDITIONAL NOI SUPPORT INFORMATION

MassDEP - Bureau of Waste Site Cleanup

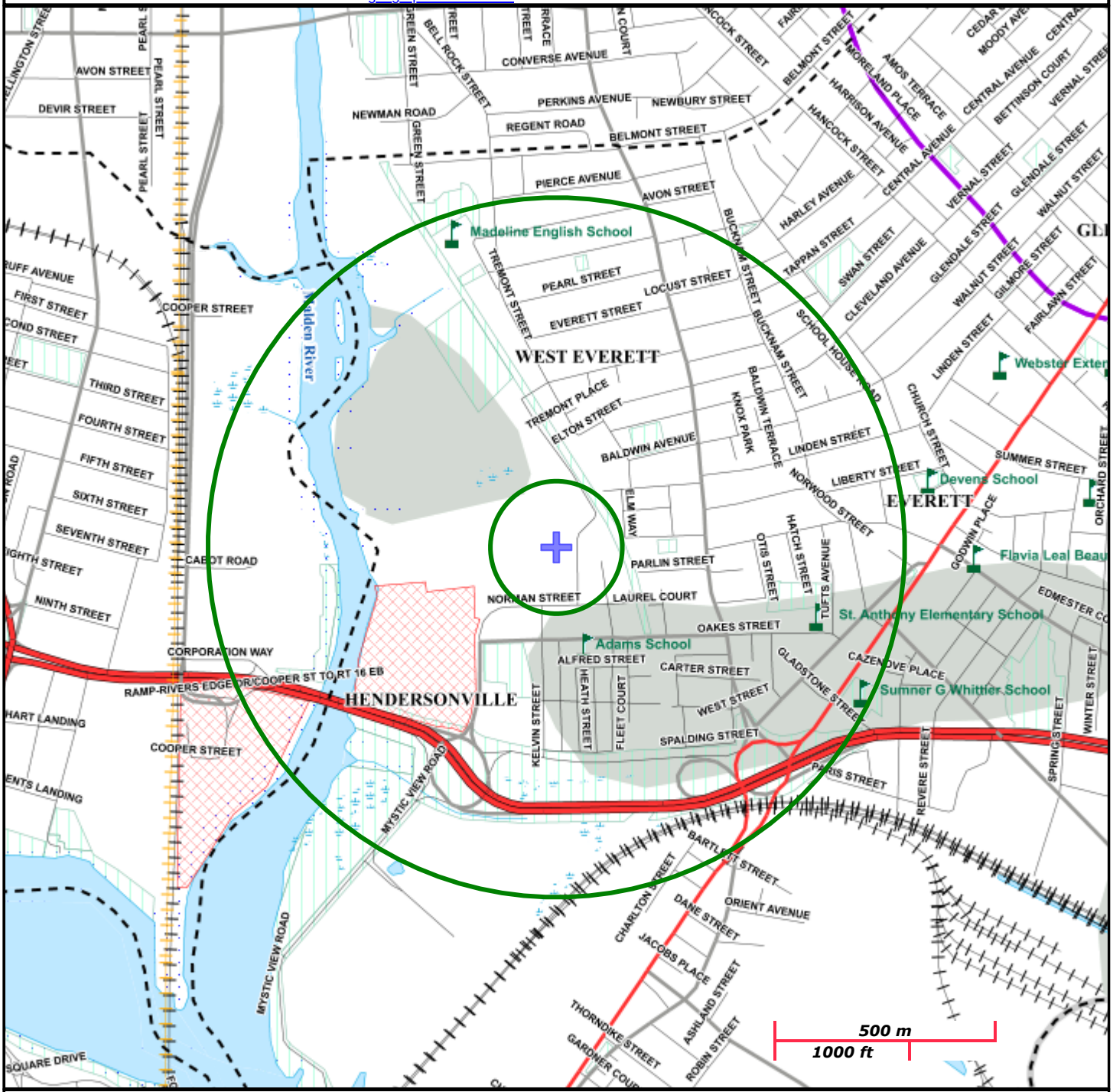
Phase 1 Site Assessment Map: 500 feet & 0.5 Mile Radii

Site Information:
65 NORMAN STREET
65 NORMAN STREET EVERETT, MA

NAD83 UTM Meters:
4697034mN , 329966mE (Zone: 19)
March 11, 2022

The information shown is the best available at the date of printing. However, it may be incomplete. The responsible party and LSP are ultimately responsible for ascertaining the true conditions surrounding the site. Metadata for data layers shown on this map can be found at: https://www.mass.gov/orgs/massgis-bureau-of-geographic-information.

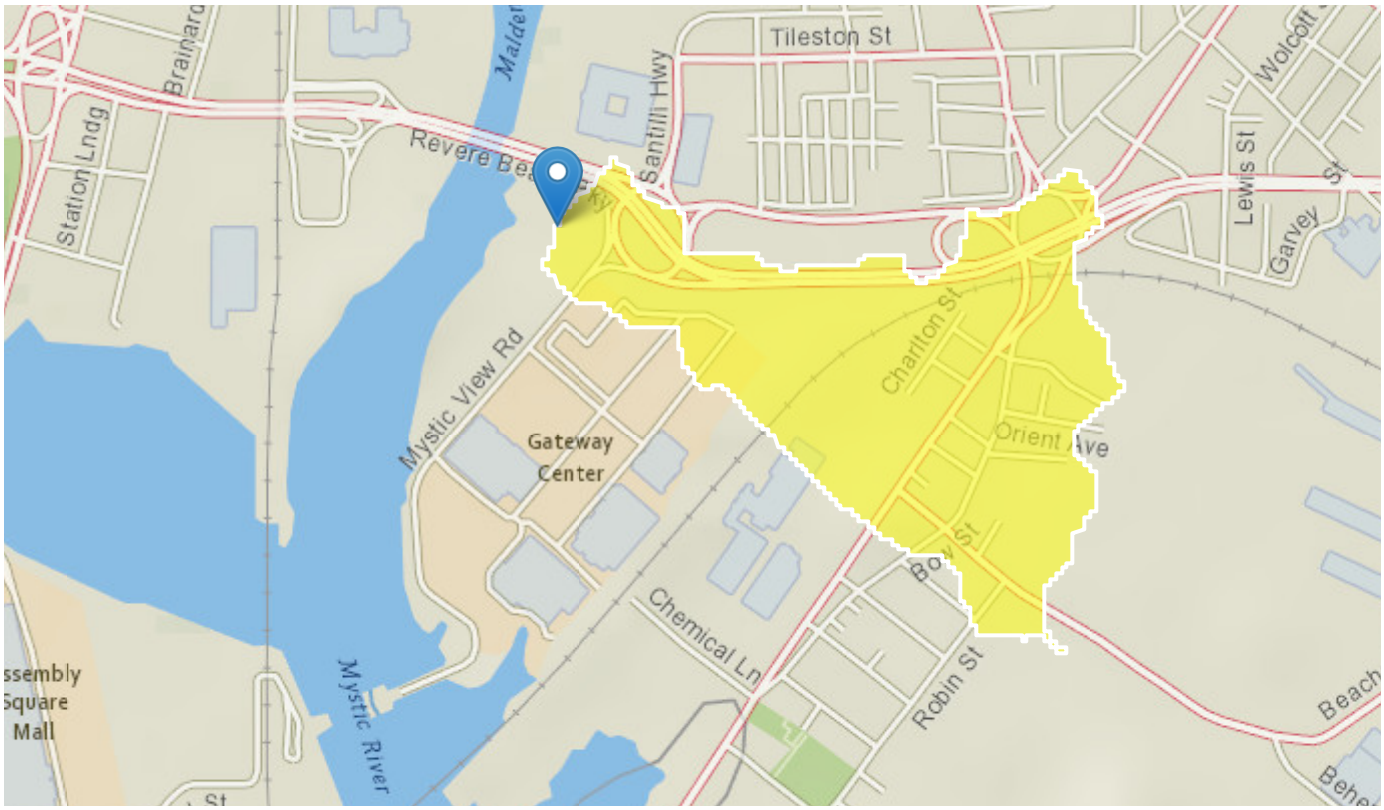
MassDEP
Commonwealth of Massachusetts
Department of Environmental Protection



Roads: Limited Access, Divided, Other Hwy, Major Road, Minor Road, Track, Trail
Boundaries: Town, County, DEP Region; Train; Powerline; Pipeline; Aqueduct
Basins: Major, PWS; Streams: Perennial, Intermittent, Man Made Shore, Dam
Aquifers: Medium Yield, High Yield, EPA Sole Source
Non Potential Drinking Water Source Area: Medium, High (Yield)
PWS Protection Areas: Zone II, IWPA, Zone A
Hydrography: Open Water, PWS Reservoir, Tidal Flat
Wetlands: Freshwater, Saltwater, Cranberry Bog
FEMA 100yr Floodplain; Protected Open Space; ACEC
Est. Rare Wetland Wildlife Hab; Vernal Pool: Cert., Potential
Solid Waste Landfill; PWS: Com.GW,SW, Emerg., Non-Com.

StreamStats Report

Region ID: MA
Workspace ID: MA20220311214215913000
Clicked Point (Latitude, Longitude): 42.40242, -71.07099
Time: 2022-03-11 16:42:35 -0500



Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.16	square miles
BSLDEM250	Mean basin slope computed from 1:250K DEM	1.079	percent
DRFTPERSTR	Area of stratified drift per unit of stream length	0.7	square mile per mile
MAREGION	Region of Massachusetts 0 for Eastern 1 for Western	0	dimensionless

Low-Flow Statistics Parameters [Statewide Low Flow WRIR00 4135]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.16	square miles	1.61	149
BSLDEM250	Mean Basin Slope from 250K DEM	1.079	percent	0.32	24.6
DRFTPERSTR	Stratified Drift per Stream Length	0.7	square mile per mile	0	1.29
MAREGION	Massachusetts Region	0	dimensionless	0	1

Low-Flow Statistics Disclaimers [Statewide Low Flow WRIR00 4135]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors

Low-Flow Statistics Flow Report [Statewide Low Flow WRIR00 4135]

Statistic	Value	Unit
7 Day 2 Year Low Flow	0.0184	ft^3/s
7 Day 10 Year Low Flow	0.00749	ft^3/s

Low-Flow Statistics Citations

Ries, K.G., III,2000, Methods for estimating low-flow statistics for Massachusetts streams: U.S. Geological Survey Water Resources Investigations Report 00-4135, 81 p. (http://pubs.usgs.gov/wri/wri004135/)

Application Version: 4.7.0
StreamStats Services Version: 1.2.22
NSS Services Version: 2.1.2

Brian Fong-Murdock

From: Ruan, Xiaodan (DEP) <xiaodan.ruan@state.ma.us>
Sent: Thursday, March 24, 2022 2:18 PM
To: Brian Fong-Murdock
Cc: Coniaris, Catherine (DEP)
Subject: RE: RGP Dilution Factor Assistance

[External]

Hi Brian,

I see that the StreamStats cannot delineate a basin nor calculate a 7Q10 flow for the segment of the Malden River as the receiving water. Thanks for the StreamStats report; however, it looks like the clicked point was still part of an underground stormwater system and not surface water if I am correct. Since StreamStats cannot calculate a 7Q10 flow for the segment of the Malden River, the dilution factor should be 1 or 0, meaning no dilution.

Here is water quality information in assisting you in filling out the NOI:

> Waterbody ID: Malden River (MA71-05) within Boston Harbor - Mystic River Watershed
> Classification: B
> Outstanding Resource Water?: no
> State's most recent Integrated List is located here: https://www.mass.gov/doc/final-massachusetts-integrated-list-of-waters-for-the-clean-water-act-20182020-reporting-cycle/download, search for "MA 71-05" to see the causes of impairments.
> TMDLs: there is one approved pathogen TMDL for this segment: https://www.mass.gov/doc/final-pathogen-tmdl-report-for-the-boston-harbor-weymouth-weir-and-mystic-watersheds/download

If this is not a *current* MCP site, then in addition to submitting the NOI to EPA, you need to apply with MassDEP and submit a $500 fee (unless fee exempt, e.g., municipality). For MassDEP's application, please use ePLACE, an online application submittal process where you will set up a user ID and be able to submit NOIs for various projects as well as pay by credit card. The instructions are located on this page: https://www.mass.gov/how-to/wm-15-npdes-general-permit-notice-of-intent. Technical assistant information is available on the front page of the ePLACE application webpage.

Please let me know if you have any questions.

Thanks,
Xiaodan

Xiaodan Ruan
Environmental Engineer
Massachusetts Department of Environmental Protection
One Winter Street, Boston, MA 02108
(857)-256-4172
xiaodan.ruan@mass.gov

From: Brian Fong-Murdock <BFongMurdock@mcphailgeo.com>
Sent: Monday, March 21, 2022 12:04 PM
To: Ruan, Xiaodan (DEP) <xiaodan.ruan@mass.gov>
Subject: RGP Dilution Factor Assistance

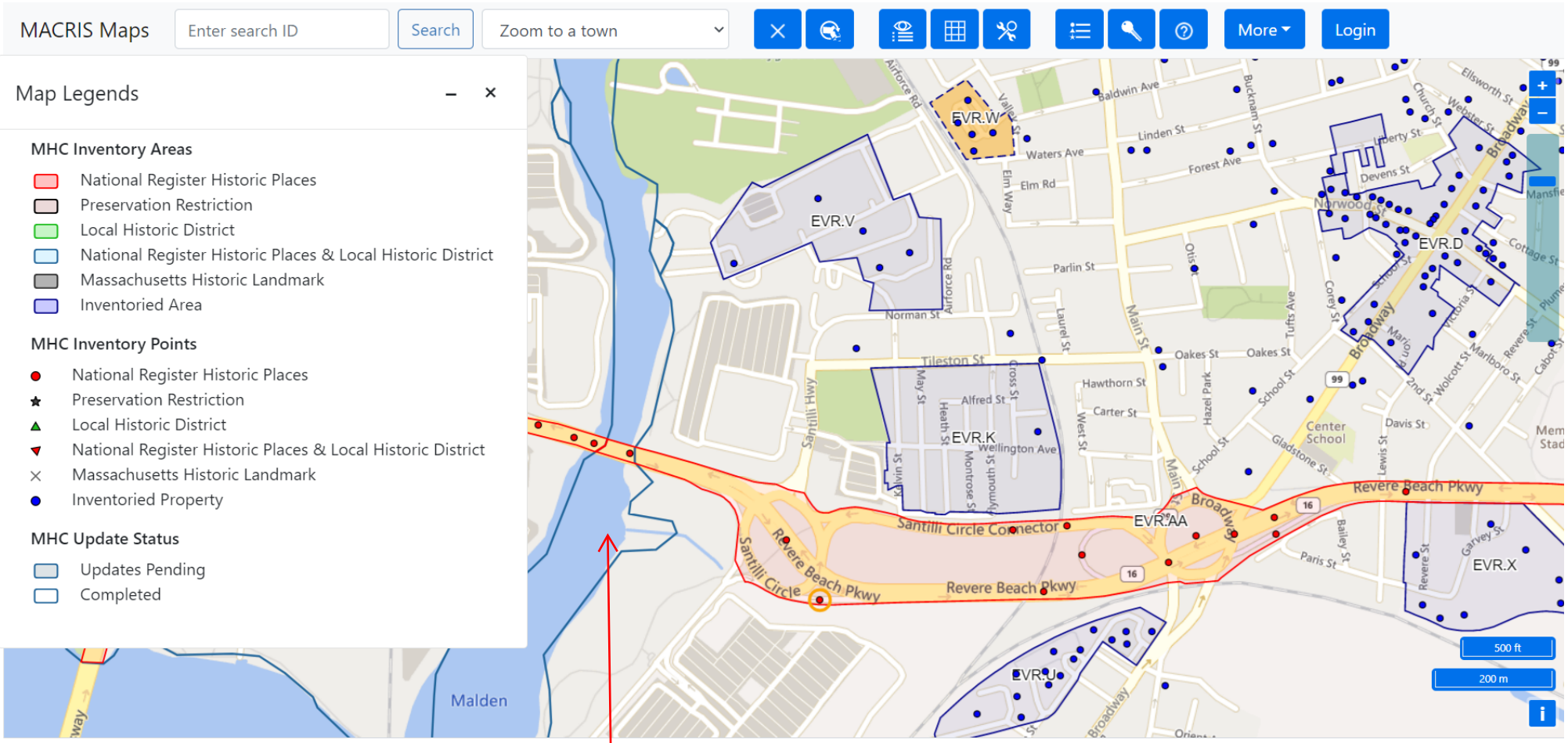
Hi Xiaodan,

Here is second dilution factor confirmation I mentioned in my last email.
The approximate address for the site is:

65 Norman St, MA 02149
7Q10 = 0.00749 cfs
DF = 1.03 MGD
See attached Stream Stats Report and excel spreadsheet calculating our dilution factor.
Please let me know if you need any additional information.

Brian Fong-Murdock

McPHAIL ASSOCIATES, LLC
2269 Massachusetts Avenue
Cambridge, MA 02140
Cell: 617-669-4848



Approximate discharge location

Massachusetts Cultural Resource Information System

MACRIS

MACRIS Search Results

Search Date: 3/11/2022
Search Criteria: Town(s): Everett;

Inv. No.	Property Name	Street	Town	Year	Designations
EVR.A	Liberty Street Area		Everett		
EVR.B	Pleasant View - Villa - Arlington Streets Area		Everett		
EVR.C	Mount Washington		Everett		
EVR.D	Everett Square		Everett		
EVR.E	Everett - Prescott Streets Area		Everett		
EVR.F	Chestnut Streetscape		Everett		
EVR.G	Waverly Streetscape		Everett		
EVR.H	Sherman - Gilmore Streets Area		Everett		
EVR.I	Metropolitan Park System of Greater Boston		Everett		
EVR.J	Hampshire Streetscape		Everett		
EVR.K	Hendersonville		Everett		
EVR.L	Thurman Park		Everett		
EVR.M	Belmont Streetscape		Everett		
EVR.N	Ferry Streetscape		Everett		
EVR.O	Dartmouth Streetscape		Everett		
EVR.P	Cleveland Streetscape		Everett		
EVR.Q	Glendale Streetscape		Everett		
EVR.R	Vernal Streetscape		Everett		
EVR.S	Reynolds Avenue Streetscape		Everett		
EVR.T	Porter Streetscape		Everett		
EVR.U	Broadway - Charlton Street Industrial Area		Everett		
EVR.V	General Electric Company Foundry		Everett		
EVR.W	New England Oil, Paint and Varnish Company		Everett		
EVR.X	Paris - Garvey - Springs Streets Industrial Area		Everett		
EVR.Y	Saint Therese Roman Catholic Church Complex		Everett		
EVR.Z	Metropolitan Park System of Greater Boston		Everett		NRMPS;
EVR.AA	Revere Beach Parkway		Everett		NRDIS; NRMPS;
EVR.AB	Everett Jewish Cemeteries		Everett		
EVR.AC	Glendale Square		Everett		
EVR.AD	Glenwood Cemetery		Everett		
EVR.AE	Woodlawn Cemetery		Everett		
EVR.AF	Broadway Institutional Area		Everett		
EVR.167	Porter, H. K. and Sons Battery Clippers Factory	6 Ashland St	Everett	1900	
EVR.190	Colonial Beacon Oil Refinery Business Office	30 Beacham St	Everett	1926	
EVR.44	Wood House	40 Beacon St	Everett	C 1885	
EVR.45	Berghurst, Olaf House	143 Bell Rock St	Everett	C 1886	
EVR.47	Northway, Luther E. House	127 Belmont St	Everett	C 1880	
EVR.48	Blake, Thomas Proctor House	135-137 Belmont St	Everett	C 1880	
EVR.49	Gramsdorf House	145 Belmont St	Everett	C 1875	
EVR.50	Bonn, Blanchard J. House	51 Birch St	Everett	1911	
EVR.170	Boston Varnish Company	Boston St	Everett	C 1900	
EVR.171	Carpenter - Morton Varnish Company	Boston St	Everett	1909	
EVR.176	Edmester, Lemuel House	199 Bow St	Everett	C 1835	
EVR.51		145 Bradford St	Everett	C 1888	
EVR.52		153 Bradford St	Everett	R 1885	
EVR.180	Boston Elevated Railway Yard - Power Station	Broadway	Everett	1925	
EVR.64	Parlin, Albert J. Junior High School	Broadway	Everett	1915	
EVR.179	Boston Elevated Railway Yard - Bus Repair Facility	80 Broadway	Everett	1924	

Inv. No.	Property Name	Street	Town	Year	Designations
EVR.181	Boston Elevated Railway Yard - Carpentry Shop	80 Broadway	Everett	1923	
EVR.178	Boston Elevated Railway Yard - Metal Shop	80 Broadway	Everett	1939	
EVR.173	Everett Station Garage	145 Broadway	Everett	1924	
EVR.193	Donovan, James Shoe Company Engine House	210 Broadway	Everett	1903	
EVR.192	Everett Cycle Company - Donovan, James Shoe Company	210 Broadway	Everett	1895	
EVR.194	Everett Factories - EFTC #2 Loft	210 Broadway	Everett	1916	
EVR.195	Everett Factories - EFTC #3 Loft	210 Broadway	Everett	1919	
EVR.196	Everett Factories - EFTC #5 Loft	210 Broadway	Everett	1951	
EVR.53	Bogue, John House	306 Broadway	Everett	C 1830	
EVR.54	Stimpson, W. E. House	342 Broadway	Everett	C 1850	
EVR.56	Kittredge, Frederick A. House	365 Broadway	Everett	C 1888	
EVR.57	Police Station, Old	371 Broadway	Everett	1903	
EVR.1	Central Fire Station	384 Broadway	Everett	1908	
EVR.2	U. S. Post Office - Everett Branch	391 Broadway	Everett	1939	
EVR.239	Star Market	405 Broadway	Everett	1970	
EVR.927	Everett Revolutionary War Monument	410 Broadway	Everett	1976	
EVR.3	Parlin, Frederick E. Memorial Library	410 Broadway	Everett	1894	
EVR.6	Everett Co-operative Bank	419 Broadway	Everett	C 1950	
EVR.7	Evans Building	421-425 Broadway	Everett	1896	
EVR.8	Whittier, Arthur H. Building	427-429 Broadway	Everett	1900	
EVR.9	Everett Trust Company	431-439 Broadway	Everett	C 1918	
EVR.10	Kresge, S. S. Company Block	432 Broadway	Everett	1926	
EVR.11	Dempsey's Breakfast and Lunch Restaurant	434-436 Broadway	Everett	C 1940	
EVR.12	Cannell Brothers Building - Everett Savings Bank	440-442 Broadway	Everett	1885	
EVR.13	Dana Building	444-458 Broadway	Everett	1928	
EVR.16	Everett Associates Building	445-453 Broadway	Everett	1908	
EVR.17	Everett National Bank	457-459 Broadway	Everett	C 1926	
EVR.14	Everett First Congregational Church	460 Broadway	Everett	1852	
EVR.15	Everett Savings Bank	466 Broadway	Everett	1930	
EVR.18	Howard, Charles W. Building	471 Broadway	Everett	1924	
EVR.928	Immaculate Conception Roman Catholic Church - Blessed Virgin Mary Statue	477 Broadway	Everett	1922	
EVR.20	Immaculate Conception Roman Catholic Church Rectory	477 Broadway	Everett	1905	
EVR.21	Everett City Hall	484 Broadway	Everett	1960	
EVR.19	Immaculate Conception Roman Catholic Church	489 Broadway	Everett	1896	
EVR.58	Smith, Nathan B. House	499-501 Broadway	Everett	C 1858	
EVR.59	Saltmarsh, Goerge A. House	516 Broadway	Everett	1891	
EVR.60		523-531 Broadway	Everett	1915	
EVR.61	Hotchkiss, Robert E. House	534 Broadway	Everett	C 1888	
EVR.63	Palestine Masonic Lodge	536 Broadway	Everett	1910	
EVR.43	Foster, Celden B. House	537 Broadway	Everett	C 1902	
EVR.62	Everett High School	548 Broadway	Everett	1922	
EVR.65	Atwood, Hawes House	577 Broadway	Everett	C 1857	
EVR.66	Brandon Apartment House	651 Broadway	Everett	C 1929	
EVR.67	Malden Electric Company Substation	693 Broadway	Everett	1921	
EVR.255	Johnson, Julia House - Bruce, Dr. John Bruce Office	699 Broadway	Everett	C 1890	
EVR.256		700-704 Broadway	Everett	C 1925	
EVR.177	Glendale Baptist Church	701 Broadway	Everett	1892	
EVR.257	Murphy, Timothy House	706 Broadway	Everett	C 1895	

Inv. No.	Property Name	Street	Town	Year	Designations
EVR.258	Glendale Realty Block	709-715 Broadway	Everett	C 1890	
EVR.68	Glendale Building	712-722 Broadway	Everett	1898	
EVR.259	Brothers, H. C. Block	717-723 Broadway	Everett	C 1890	
EVR.260	Glendale Square Mobil Station	735 Broadway	Everett	C 1970	
EVR.261	Eastern Bank	736 Broadway	Everett	2005	
EVR.262		741 Broadway	Everett	C 1910	
EVR.263	Glendale Court	742 Broadway	Everett	1975	
EVR.264	Hall, M. B. House	748-750 Broadway	Everett	C 1890	
EVR.265	Ossen - Cohen Apartment Block	749-751 Broadway	Everett	C 1900	
EVR.266	Hill House	752 Broadway	Everett	C 1890	
EVR.267	McDonald, William House	756 Broadway	Everett	C 1890	
EVR.268	Swedish Congregational Church	757 Broadway	Everett	1907	
EVR.269	Pike, Frances House	760-762 Broadway	Everett	C 1890	
EVR.270		761 Broadway	Everett	C 1900	
EVR.271	Torngren Apartment Block	765 Broadway	Everett	C 1910	
EVR.272	Callahan House	766 Broadway	Everett	C 1890	
EVR.273	Clair, Joseph Three-Decker	767 Broadway	Everett	C 1910	
EVR.274	Delaney, James House	772 Broadway	Everett	C 1900	
EVR.275	Clair, Joseph Three-Decker	773 Broadway	Everett	C 1900	
EVR.276	Hall, Charles O. Three-Decker	779 Broadway	Everett	C 1900	
EVR.69	Shute, William Memorial Library	781 Broadway	Everett	1898	
EVR.227	Saint Therese Roman Catholic Church Parish Center	795 Broadway	Everett	C 1950	
EVR.908	Saint Therese of Lisieux Statue	801 Broadway	Everett	C 1930	
EVR.70	Saint Therese Roman Catholic Church	801 Broadway	Everett	C 1928	
EVR.909	Saint Therese Roman Catholic Church Garden Shrine	801 Broadway	Everett	C 1965	
EVR.71	Porter, Ernest House	826 Broadway	Everett	C 1901	
EVR.907	Wehner, Joseph Park - Everett Spanish-American Veterans Memorial	945 Broadway	Everett	1927	
EVR.902	Wehner Park	951 Broadway	Everett	1919	
EVR.77	Saint Joseph's Roman Catholic Church	Bucknam St	Everett	1917	
EVR.72	Carlisle, George W. House	3 Bucknam St	Everett	C 1860	
EVR.73	Nowers, Alfred W. House	30 Bucknam St	Everett	C 1860	
EVR.74	Averell, Ezekiel House	43 Bucknam St	Everett	C 1860	
EVR.75	Bartlett, Joseph W. House	54 Bucknam St	Everett	C 1850	
EVR.76	Swanson, Philip House	131 Bucknam St	Everett	C 1910	
EVR.189	Saint Joseph's Roman Catholic Church Rectory	193 Bucknam St	Everett	1926	
EVR.78	McDonald, Michael F. House	120 Central Ave	Everett	C 1845	
EVR.206	Clark, W. E. and Company Steel Warehouse	3 Charlton St	Everett	R 1910	
EVR.199	American Hard Paper-Ware Company Engine House	7 Charlton St	Everett	C 1903	
EVR.197	American Hard Paper-Ware Company Factory	7 Charlton St	Everett	C 1909	
EVR.198	Everett Factories - EFTC Shed	7 Charlton St	Everett	1954	
EVR.200	American Agricultural Chemical Company Loft	7-41 Charlton St	Everett	1914	
EVR.203	New England Bolt Company Machine Shop	9R Charlton St	Everett	C 1902	
EVR.205	New England Bolt Company Sheds	9R Charlton St	Everett	C 1954	
EVR.204	New England Bolt Company Warehouse	9R Charlton St	Everett	1953	
EVR.201	American Agricultural Chemical Company Warehouse	31 Charlton St	Everett	C 1920	
EVR.202	Everett Factories - EFTC Machine Shop	31 Charlton St	Everett	1953	
EVR.240	U. S. Post Office - Everett Branch	13 Chelsea St	Everett	1921	
EVR.22	Fitzgerald Building	16-18 Chelsea St	Everett	C 1890	

Inv. No.	Property Name	Street	Town	Year	Designations
EVR.23	Faith, C. B. Furniture Company Building	20-22 Chelsea St	Everett	1927	
EVR.24	Young Men's Christian Association	26 Chelsea St	Everett	1888	
EVR.25	Crown Theater	30 Chelsea St	Everett	1914	
EVR.26	New England Telephone and Telegraph Exchange Building	33 Chelsea St	Everett	1925	
EVR.36	Melanson Brothers Auto Salesroom	67 Chelsea St	Everett	C 1925	
EVR.34	Everett Armory	90 Chelsea St	Everett	1902	
EVR.922	Everett World War I Memorial	90 Chelsea St	Everett	1921	
EVR.923	Everett World War II - Korean War Memorial	90 Chelsea St	Everett	1962	
EVR.35	Edmester, Jonathan House	98 Chelsea St	Everett	C 1800	
EVR.117	Oakes, Capt. Thomas House	71 Chestnut St	Everett	C 1810	
EVR.80	First Baptist Church	Church St	Everett	1928	
EVR.79	Prescott House	36 Church St	Everett	C 1896	
EVR.228	Elks Home	42 Church St	Everett	1949	
EVR.81	Upton, Grafton House	22 Clay Ave	Everett	C 1898	
EVR.83	Corey, Benjamin House	25-27 Corey St	Everett	1885	
EVR.84	Daggett, Frederick K. House	43 Corey St	Everett	C 1845	
EVR.229	Zion Baptist Church	21 Cottage St	Everett	1929	
EVR.39	Henderson Brothers House	78 Cottage St	Everett	1890	
EVR.40		118-120 Cottage St	Everett	1890	
EVR.168	Sexton Can Company	31 Cross St	Everett	1912	
EVR.85	Harvey, Isaac C. House	10 Dartmouth St	Everett	C 1910	
EVR.183	Harvey, Isaac C. House	12 Dartmouth St	Everett	C 1910	
EVR.184	Harvey, Isaac C. House	14 Dartmouth St	Everett	C 1910	
EVR.185	Harvey, Isaac C. House	16 Dartmouth St	Everett	C 1910	
EVR.86	Grant, Horace L. House	25 Dyer Ave	Everett	1885	
EVR.87	Dana, Francis W. House	26-28 Dyer Ave	Everett	1885	
EVR.903	Glendale Park	Elm St	Everett	1902	
EVR.925	Everett Fire Department Bell Monument	43 Elm St	Everett		
EVR.924	Everett Firefighter's Memorial Monument	43 Elm St	Everett	1938	
EVR.230	Fire Alarm Headquarters	43 Elm St	Everett	1936	
EVR.290	Woodlawn Cemetery Lodge - Woodlawn Cemetery Office	130 Elm St	Everett	1897	
EVR.231	Elm Street Baptist Church	202 Elm St	Everett	1924	
EVR.800	Woodlawn Cemetery	302 Elm St	Everett	1852	
EVR.974	Woodlawn Cemetery - Atwood Monument	302 Elm St	Everett	1901	
EVR.977	Woodlawn Cemetery - Badger, David N. Tomb	302 Elm St	Everett	1858	
EVR.966	Woodlawn Cemetery - Bowen, Augustus Monument	302 Elm St	Everett	1851	
EVR.991	Woodlawn Cemetery - Burnham, Capt. Frederick Monument	302 Elm St	Everett		
EVR.292	Woodlawn Cemetery - Carthage Mausoleum Complex	302 Elm St	Everett	2001	
EVR.291	Woodlawn Cemetery - Chapel and Patton Hall	302 Elm St	Everett	1911	
EVR.967	Woodlawn Cemetery - Chapin, Charles H. G. Monument	302 Elm St	Everett	1871	
EVR.987	Woodlawn Cemetery - Chelsea Soldiers Home Lot Markers with Howitzer Cannons	302 Elm St	Everett		
EVR.985	Woodlawn Cemetery - City of Chelsea Soldiers' Lot Monument with Cannons	302 Elm St	Everett		
EVR.965	Woodlawn Cemetery - Corbett, Lucena Marker	302 Elm St	Everett	1823	
EVR.968	Woodlawn Cemetery - Cottle, Harrison W. Obelisk	302 Elm St	Everett	1888	
EVR.984	Woodlawn Cemetery - Field of Ephron Grave Markers	302 Elm St	Everett		
EVR.992	Woodlawn Cemetery - Franklin Engine Company No. 7 of Charlestown Monument	302 Elm St	Everett	C 1853	
EVR.989	Woodlawn Cemetery - Gilson, Helen Monument	302 Elm St	Everett	1875	
EVR.983	Woodlawn Cemetery - Grand Army of the Republic Lot Grave Markers with Civil War Cannons	302 Elm St	Everett		

Inv. No.	Property Name	Street	Town	Year	Designations
EVR.964	Woodlawn Cemetery - Granite Curbed Family Lots	302 Elm St	Everett	C 1870	
EVR.980	Woodlawn Cemetery - Hayes, John Mausoleum	302 Elm St	Everett	1910	
EVR.963	Woodlawn Cemetery - Hosmer, Calvin Family Iron Fenced Lot	302 Elm St	Everett	C 1860	
EVR.994	Woodlawn Cemetery - Immigrants' Home - Women's Home in East Boston Monument	302 Elm St	Everett	C 1920	
EVR.979	Woodlawn Cemetery - Irish, Richard Mausoleum	302 Elm St	Everett	1903	
EVR.972	Woodlawn Cemetery - Kimball Table Tomb	302 Elm St	Everett	1904	
EVR.295	Woodlawn Cemetery - La Rovere Mausoleum	302 Elm St	Everett	2007	
EVR.975	Woodlawn Cemetery - Lawrence - Hubley Monument	302 Elm St	Everett		
EVR.978	Woodlawn Cemetery - Lunt Tomb	302 Elm St	Everett	1872	
EVR.993	Woodlawn Cemetery - Manchester Unity IOOF Monument	302 Elm St	Everett	1920	
EVR.981	Woodlawn Cemetery - Parlin Mausoleums	302 Elm St	Everett	1930	
EVR.976	Woodlawn Cemetery - Peverly Tomb	302 Elm St	Everett	1888	
EVR.982	Woodlawn Cemetery - Piantedosi Mausoleum	302 Elm St	Everett	C 1980	
EVR.971	Woodlawn Cemetery - Portlock, Charles Monument	302 Elm St	Everett	1887	
EVR.988	Woodlawn Cemetery - Pvt. Lincoln, Jesse Marker	302 Elm St	Everett	1864	
EVR.969	Woodlawn Cemetery - Randall, Emma Tilton Monument	302 Elm St	Everett	1888	
EVR.293	Woodlawn Cemetery - Sheffield Mausoleum	302 Elm St	Everett	1983	
EVR.990	Woodlawn Cemetery - Simonds, Joel Monument	302 Elm St	Everett		
EVR.962	Woodlawn Cemetery - Smith Family Iron Fenced Lot	302 Elm St	Everett	C 1860	
EVR.970	Woodlawn Cemetery - Smith Family Monument	302 Elm St	Everett		
EVR.973	Woodlawn Cemetery - Strahan, Thomas Monument	302 Elm St	Everett	1910	
EVR.986	Woodlawn Cemetery - U. S. Navy Lot Markers with Anchor	302 Elm St	Everett		
EVR.294	Woodlawn Cemetery - Versailles Mausoleum	302 Elm St	Everett	2001	
EVR.958	Woodlawn Cemetery Cast Iron Avenue Markers	302 Elm St	Everett		
EVR.959	Woodlawn Cemetery Main Entrance Gate	302 Elm St	Everett	1897	
EVR.296	Woodlawn Cemetery Maintenance Building and Greenhouses	302 Elm St	Everett	1996	
EVR.174	Spooner, Joseph House	2 Everett Ave	Everett	C 1846	
EVR.88	Greenwood, Charles W. House	15 Ferry St	Everett	1883	
EVR.182	Greenwood, Frederick P. House	23 Ferry St	Everett	1883	
EVR.89	Nichols, Andrew House	137 Ferry St	Everett	C 1860	
EVR.90	Ferry Street Engine House	243 Ferry St	Everett	1894	
EVR.92	Wills, William F. House	314 Ferry St	Everett	C 1890	
EVR.277	Glendale Square Shopping Center	315 Ferry St	Everett	C 1957	
EVR.278	Brackett, Clara House	318 Ferry St	Everett	C 1890	
EVR.279	Robinson, Adelaide Apartment Block	322-324 Ferry St	Everett	C 1890	
EVR.280	Bastian Three-Decker	328 Ferry St	Everett	C 1920	
EVR.281	Cohen, David Building	332-338 Ferry St	Everett	C 1900	
EVR.282	Glendale Hall	355 Ferry St	Everett	1914	
EVR.283		360 Ferry St	Everett	C 1940	
EVR.284	Burnett's Furniture Building	365-373 Ferry St	Everett	C 1920	
EVR.285		370 Ferry St	Everett	C 1890	
EVR.286	Crowley, Timothy House	374 Ferry St	Everett	C 1910	
EVR.287	Reagan, Albert House	376 Ferry St	Everett	C 1896	
EVR.288		378 Ferry St	Everett	C 1896	
EVR.289	Glendale Towers	381 Ferry St	Everett	1970	
EVR.93	Glendale United Methodist Church	392 Ferry St	Everett	1924	
EVR.94	Alden House	462 Ferry St	Everett	C 1830	
EVR.95	Green, Capt. Jonathan and Lydia Bucknam House	519 Ferry St	Everett	C 1715	

Inv. No.	Property Name	Street	Town	Year	Designations
EVR.96	Mills, M. Augustus House	535-537 Ferry St	Everett	C 1860	
EVR.97	Murphy, James and William House	102 Florence St	Everett	1891	
EVR.98	Lewis, Albert J. Grammar School	Floyd St	Everett	1915	
EVR.99	Tibbetts, Charles House	50 Forest Ave	Everett	C 1878	
EVR.100	Woodman, Artemus T. House	58 Forest Ave	Everett	1874	
EVR.126	Mann, Horace School	Foster St	Everett	1900	
EVR.42	Woodberry, Charles House	39 Fremont Ave	Everett	C 1868	
EVR.802	Everett Jewish Cemeteries - Ahavas Achim Anshe Sfard Cemetery	Fuller St	Everett	R 1925	
EVR.930	Everett Jewish Cemeteries - Ahavas Achim Anshe Sfard Gate	Fuller St	Everett		
EVR.803	Everett Jewish Cemeteries - Bessarabian Cemetery	Fuller St	Everett		
EVR.804	Everett Jewish Cemeteries - Beth Israel Cemetery 1	Fuller St	Everett	C 1923	
EVR.933	Everett Jewish Cemeteries - Beth Israel Cemetery 1 Gate	Fuller St	Everett	C 1920	
EVR.805	Everett Jewish Cemeteries - Beth Israel Cemetery 2	Fuller St	Everett		
EVR.806	Everett Jewish Cemeteries - Beth Israel Cemetery 3	Fuller St	Everett		
EVR.807	Everett Jewish Cemeteries - Beth Israel Cemetery 4	Fuller St	Everett		
EVR.248	Everett Jewish Cemeteries - Beth Israel Cemetery Building	Fuller St	Everett		
EVR.934	Everett Jewish Cemeteries - Beth Israel Veterans Monument	Fuller St	Everett	1947	
EVR.808	Everett Jewish Cemeteries - Birsen Cemetery	Fuller St	Everett	C 1920	
EVR.935	Everett Jewish Cemeteries - Birsen Cemetery Gate	Fuller St	Everett	C 1920	
EVR.809	Everett Jewish Cemeteries - B'nai Israel of Beachmont Cemetery	Fuller St	Everett		
EVR.810	Everett Jewish Cemeteries - Chevra Chai Odom Cemetery	Fuller St	Everett	C 1925	
EVR.936	Everett Jewish Cemeteries - Chevra Chai Odom Cemetery Gate	Fuller St	Everett	C 1920	
EVR.811	Everett Jewish Cemeteries - Chevra Thilim of Malden Cemetery	Fuller St	Everett		
EVR.937	Everett Jewish Cemeteries - Chevra Thilim of Malden Cemetery Gate	Fuller St	Everett		
EVR.938	Everett Jewish Cemeteries - Chevra Thilim of Malden Cemetery Posts	Fuller St	Everett		
EVR.812	Everett Jewish Cemeteries - Chevra Tilim of Boston and Chelsea Cemetery	Fuller St	Everett		
EVR.250	Everett Jewish Cemeteries - Chevra Tilim of Boston and Chelsea Cemetery Mishnas - Rabbi Twerksy Othel	Fuller St	Everett		
EVR.249	Everett Jewish Cemeteries - Chevra Tilim of Boston and Chelsea Chapel	Fuller St	Everett		
EVR.939	Everett Jewish Cemeteries - Chevra Tilim of Boston and Chelsea Gate and Fence	Fuller St	Everett		
EVR.813	Everett Jewish Cemeteries - Dorchester Hebrew Helping Hand Cemetery	Fuller St	Everett	C 1927	
EVR.940	Everett Jewish Cemeteries - Dorchester Hebrew Helping Hand Cemetery Gate	Fuller St	Everett	1927	
EVR.828	Everett Jewish Cemeteries - Elchonon, Rabbi Isaac Cemetery	Fuller St	Everett	1920	
EVR.954	Everett Jewish Cemeteries - Elchonon, Rabbi Isaac Cemetery - Hoffman, Jacob and Minna Marker	Fuller St	Everett		
EVR.814	Everett Jewish Cemeteries - Guard of Moses Cemetery	Fuller St	Everett	1928	
EVR.819	Everett Jewish Cemeteries - Hatzedek, Linas Cemetery #1	Fuller St	Everett	1937	
EVR.815	Everett Jewish Cemeteries - Herzel, Dr. Theodore Cemetery	Fuller St	Everett		
EVR.942	Everett Jewish Cemeteries - Herzel, Dr. Theodore Cemetery - Herzel, Dr. Theodore Bronze Plaque	Fuller St	Everett	1952	
EVR.941	Everett Jewish Cemeteries - Herzel, Dr. Theodore Cemetery Gate	Fuller St	Everett		
EVR.816	Everett Jewish Cemeteries - Klevaner Cemetery	Fuller St	Everett	C 1936	
EVR.943	Everett Jewish Cemeteries - Klevaner Cemetery Entrance Gate	Fuller St	Everett	1936	
EVR.817	Everett Jewish Cemeteries - Knights of Zaslav Cemetery	Fuller St	Everett	C 1937	
EVR.944	Everett Jewish Cemeteries - Knights of Zaslav Cemetery Gate	Fuller St	Everett	1937	
EVR.818	Everett Jewish Cemeteries - Liberty Progressive Cemetery	Fuller St	Everett	1947	
EVR.251	Everett Jewish Cemeteries - Liberty Progressive Cemetery Building	Fuller St	Everett		
EVR.945	Everett Jewish Cemeteries - Liberty Progressive Cemetery Monument	Fuller St	Everett	1947	
EVR.950	Everett Jewish Cemeteries - Lt. Carl Stein Post No 187 Jewish War Veterans World War II Monument	Fuller St	Everett	1946	
EVR.929	Everett Jewish Cemeteries - Memorial Drive Entrance	Fuller St	Everett		
EVR.820	Everett Jewish Cemeteries - Montefiore Cemetery	Fuller St	Everett	C 1929	

Inv. No.	Property Name	Street	Town	Year	Designations
EVR.946	Everett Jewish Cemeteries - Montefiore Cemetery Gate	Fuller St	Everett	1929	
EVR.821	Everett Jewish Cemeteries - Netzah Israel Cemetery	Fuller St	Everett	1935	
EVR.252	Everett Jewish Cemeteries - Netzah Israel Cemetery - Korff, Grand Rabbi Jacob Othel	Fuller St	Everett	C 1953	
EVR.947	Everett Jewish Cemeteries - Netzah Israel Cemetery Posts	Fuller St	Everett		
EVR.822	Everett Jewish Cemeteries - New Tifereth Israel of Everett Cemetery	Fuller St	Everett	1945	
EVR.948	Everett Jewish Cemeteries - New Tifereth Israel of Everett Cemetery Gate	Fuller St	Everett		
EVR.823	Everett Jewish Cemeteries - North Russell Street Cemetery	Fuller St	Everett		
EVR.825	Everett Jewish Cemeteries - Old Congregation Tifereth Israel of Everett Cemetery	Fuller St	Everett	C 1925	
EVR.253	Everett Jewish Cemeteries - Old Congregation Tifereth Israel of Everett Chapel	Fuller St	Everett	1937	
EVR.824	Everett Jewish Cemeteries - Old Jewish Deed Holders Cemetery	Fuller St	Everett		
EVR.949	Everett Jewish Cemeteries - Old Jewish Deed Holders Cemetery Posts	Fuller St	Everett		
EVR.826	Everett Jewish Cemeteries - Old Tifereth Israel of Winthrop Cemetery	Fuller St	Everett		
EVR.951	Everett Jewish Cemeteries - Old Tifereth Israel of Winthrop Cemetery Gates	Fuller St	Everett		
EVR.952	Everett Jewish Cemeteries - Old Tifereth Israel of Winthrop World War II Memorial	Fuller St	Everett		
EVR.953	Everett Jewish Cemeteries - Paoli Zedek Cemetery Gate	Fuller St	Everett	1950	
EVR.827	Everett Jewish Cemeteries - Poali Zedek Cemetery	Fuller St	Everett		
EVR.829	Everett Jewish Cemeteries - Temple Beth Shalom of Cambridge Cemetery	Fuller St	Everett	C 1920	
EVR.955	Everett Jewish Cemeteries - Temple Beth Shalom of Cambridge Cemetery Posts	Fuller St	Everett		
EVR.830	Everett Jewish Cemeteries - Tifereth Israel of Revere Cemetery	Fuller St	Everett		
EVR.956	Everett Jewish Cemeteries - Tifereth Israel of Revere Cemetery Gate	Fuller St	Everett		
EVR.831	Everett Jewish Cemeteries - United Ashkenaz Cemetery	Fuller St	Everett		
EVR.957	Everett Jewish Cemeteries - United Ashkenaz Cemetery Arch	Fuller St	Everett		
EVR.995	Glenwood Cemetery - Fuller Street Fence	Fuller St	Everett	1894	
EVR.254	Slotnick, Canter and Schneider Monuments Office Building	232 Fuller St	Everett	C 1900	
EVR.9015	Glenwood Cemetery - Krasser, Frederick and Margaret Monument	241 Fuller St	Everett	R 1920	
EVR.9001	Glenwood Cemetery - Marine Corps Monument	241 Fuller St	Everett	1953	
EVR.9002	Glenwood Cemetery - Wehner VFW Post 834/DAV of the World War Chapter 51 Monument	241 Fuller St	Everett	1936	
EVR.41	Temple, W. D. House	74 Garland St	Everett	C 1870	
EVR.220	Market Forge Company Works	35 Garvey St	Everett	1916	
EVR.226	Saint Therese Roman Catholic Church Rectory	20 Gledhill Ave	Everett	C 1920	
EVR.103	Hale, Edward Everett School	Glendale St	Everett	1903	
EVR.104	Boynton, Charles House	42 Hamilton St	Everett	C 1882	
EVR.232	Hancock, The	19 Hancock St	Everett	1899	
EVR.105	Alger, Edwin A. Jr. House	32 Hancock St	Everett	C 1865	
EVR.106	Drysdale, George House	35 Hancock St	Everett	C 1876	
EVR.107	Gleason, Loring W. House	45 Hancock St	Everett	C 1878	
EVR.108	Chemical Engine House	54 Hancock St	Everett	1899	
EVR.109	Harley, James House	174-176 Hancock St	Everett	C 1884	
EVR.110	Higgins, Richard S. House	175 Hancock St	Everett	C 1890	
EVR.111	Fernald, Benjamin E. House	193 Hancock St	Everett	C 1893	
EVR.112	Hall, Edwin M. House	11 High St	Everett	C 1895	
EVR.113	Plummer, Nathaniel B. House	38 High St	Everett	C 1871	
EVR.114	Bayliss, Thomas Shop	24 Jefferson Ave	Everett	C 1915	
EVR.115	Knox, Samuel Richardson House	11-13 Knox Pl	Everett	1846	
EVR.116		54 Lexington St	Everett	R 1885	
EVR.118	Methodist Episcopal Church	21 Liberty St	Everett	1870	
EVR.119	Baldwin, Charles and William House	5-7 Linden St	Everett	C 1834	
EVR.120	Coan, George House	98 Linden St	Everett	C 1886	

Inv. No.	Property Name	Street	Town	Year	Designations
EVR.186	Coan, George House	102 Linden St	Everett	C 1886	
EVR.121	Cook, Adam House	128 Linden St	Everett	C 1880	
EVR.122	Goodwin, H. P. House	134 Linden St	Everett	C 1860	
EVR.123	Merriam House	159 Linden St	Everett	R 1885	
EVR.124	Skinner, James House	170 Linden St	Everett	C 1872	
EVR.125	Fiske, Sylvester P. House	198 Linden St	Everett	C 1870	
EVR.142	Dyer, Francis E. House	36 Locust St	Everett	C 1872	
EVR.141	Winslow, Capt. George School	1214 Locust St	Everett	1931	
EVR.127	Henderson Block	117-121 Main St	Everett	1891	
EVR.128	Sargent, Kilby Commercial Block	125-127 Main St	Everett	1926	
EVR.129	Bangs, Charles H. House	219 Main St	Everett	1894	
EVR.130	Henderson Commercial Block	242-248 Main St	Everett	C 1890	
EVR.131		277-283 Main St	Everett	1924	
EVR.132		285-291 Main St	Everett	C 1889	
EVR.133	Sawtelle, James House	315 Main St	Everett	C 1890	
EVR.134		399-401 Main St	Everett	1911	
EVR.135	Mystic Side Congregational Church	422 Main St	Everett	1892	
EVR.136	Dunmore, Harry - O'Hearn, Patrick House	92-94 Morris St	Everett	C 1903	
EVR.187	Rood, Henry and James House	96-98 Morris St	Everett	C 1903	
EVR.901	Mystic River Railroad Bridge (Milepost #2.22)	Mystic River	Everett	1894	
EVR.137	Rich, Capt. Henry House	68 Newton St	Everett	C 1810	
EVR.138	Hamilton, George G. Grammar School	Nichols St	Everett	1915	
EVR.140	Lady of Grace Roman Catholic Church	Nichols St	Everett	1917	
EVR.188	Lady of Grace Roman Catholic School	Nichols St	Everett	1927	
EVR.139	Nichols Apartments	146 Nichols St	Everett	C 1927	
EVR.209	General Electric Company Foundry Shed	Norman St	Everett	C 1950	
EVR.207	U. S. Steel Castings Company Foundry	Norman St	Everett	C 1900	
EVR.208	U. S. Steel Castings Foundry Engine House	Norman St	Everett	C 1900	
EVR.210	U. S. Steel Castings Foundry Pattern Shop	Norman St	Everett	R 1905	
EVR.211	U. S. Steel Castings Foundry Warehouse	Norman St	Everett	R 1905	
EVR.241		8 Norwood St	Everett	C 1930	
EVR.27	Enterprise Realty Commercial Block	11-13 Norwood St	Everett	1927	
EVR.242	Salavation Army Building	14 Norwood St	Everett	C 1940	
EVR.28	Enterprise Realty Commercial Block	15-17 Norwood St	Everett	1925	
EVR.243		18 Norwood St	Everett	C 1930	
EVR.244		19 Norwood St	Everett	C 1900	
EVR.32		24-26 Norwood St	Everett	1924	
EVR.29		27 Norwood St	Everett	1948	
EVR.30		29-31 Norwood St	Everett	C 1920	
EVR.245		30 Norwood St	Everett	C 1930	
EVR.31		33-37 Norwood St	Everett	1926	
EVR.143	Freeman Apartment Building	42 Norwood St	Everett	1904	
EVR.33	Everett First Methodist Episcopal Church	43 Norwood St	Everett	C 1892	
EVR.246	Everett Methodist Episcopal Church Rectory	43 Norwood St	Everett	C 1890	
EVR.299	Methodist Episcopal Church Rectory	43 Norwood St	Everett	C 1890	
EVR.144	Harvard - Yale College Apartments	48-50 Norwood St	Everett	1915	
EVR.145	Slader, George R. House	49-53 Norwood St	Everett	C 1870	
EVR.146	Norwood Apartment Block	76 Norwood St	Everett	1896	

Inv. No.	Property Name	Street	Town	Year	Designations
EVR.148		11 Oakland Ave	Everett	C 1910	
EVR.149	Otis, George D. House	16 Otis St	Everett	C 1870	
EVR.217	Eagle Shoe Manufacturing Company Factory	80 Paris St	Everett	C 1900	
EVR.218	Briggs-Maroney Company Paint Factory	85 Paris St	Everett	C 1913	
EVR.219	Briggs-Maroney Company Varnish Factory	85 Paris St	Everett	C 1921	
EVR.216	Moore and Company Shoe Shank Factory	101 Paris St	Everett	1911	
EVR.150	Jennings, Charles Edwin and Mary Florence House	38 Pleasant St	Everett	1893	
EVR.233	Jennings, Charles Edwin Stable	38 Pleasant St	Everett	1893	
EVR.900	Everett Memorial Stadium	Revere Beach Pkwy	Everett	1929	
EVR.914	Poirier Memorial Roadway Bridge over B&M Railroad	Revere Beach Pkwy	Everett	1904	NRDIS; NRMPS;
EVR.913	Poirier, Krystyl K. Memorial Roadway	Revere Beach Pkwy	Everett	1904	NRDIS; NRMPS;
EVR.910	Revere Beach Parkway	Revere Beach Pkwy	Everett	1899	NRDIS; NRMPS;
EVR.915	Revere Beach Parkway Bridge over B & M Railroad	Revere Beach Pkwy	Everett	1954	NRDIS; NRMPS;
EVR.921	Revere Beach Parkway Median System	Revere Beach Pkwy	Everett	1899	NRDIS; NRMPS;
EVR.911	Santilli Circle Rotary and Mitres	Revere Beach Pkwy	Everett	1956	NRDIS; NRMPS;
EVR.912	Santilli Circle Rotary East Access Ramp	Revere Beach Pkwy	Everett	1956	NRDIS; NRMPS;
EVR.916	Sweetser, Gen. Leroy E. Circle and Mitres	Revere Beach Pkwy	Everett	1954	NRDIS; NRMPS;
EVR.920	Sweetser, Gen. Leroy E. Circle East Access Ramp	Revere Beach Pkwy	Everett	1954	NRDIS; NRMPS;
EVR.919	Sweetser, Gen. Leroy E. Circle West Access Ramp	Revere Beach Pkwy	Everett	1954	NRDIS; NRMPS;
EVR.918	Sweetser, Gen. Leroy E. Overpass (East)	Revere Beach Pkwy	Everett	1956	NRDIS; NRMPS;
EVR.917	Sweetser, Gen. Leroy E. Overpass (West)	Revere Beach Pkwy	Everett	1956	NRDIS; NRMPS;
EVR.904	Woods Memorial Bridge	Revere Beach Pkwy	Everett	1954	NRMPS; NRDIS;
EVR.221	Market Forge Company Loft	2010 Revere Beach Pkwy	Everett	C 1913	
EVR.191	Leavitt Peanut Butter Company Office and Factory	100 Santilli Hwy	Everett	1958	
EVR.153	Stewart, James P. House	64 School St	Everett	C 1868	
EVR.247		158 School St	Everett	C 1930	
EVR.4	Feldman Enterprise Dry Goods Store Building	158 School St	Everett	1938	
EVR.5	Whittier, Alvah and Dearborn, Daniel Building	166-172 School St	Everett	1877	
EVR.222	Market Forge Company Shed	452 Second St	Everett	C 1925	
EVR.38	South Malden Engine House	537 Second St	Everett	1860	
EVR.155	Lafayette School	Shute St	Everett	1898	
EVR.960	Woodlawn Cemetery - Shute Street Secondary Entrance Gate	Shute St	Everett		
EVR.101	South District - Glendale Schoolhouse	36-38 Shute St	Everett	1854	
EVR.154	Paige House	102 Shute St	Everett	C 1840	
EVR.224	Argo Tile and Pottery Company	103 Spring St	Everett	1915	
EVR.223	Stone and Forsyth Paper and Cordage Company	109 Spring St	Everett	C 1913	
EVR.159	Everett High School	11 Summer St	Everett	1892	
EVR.156	Coolidge Manor	16-20 Summer St	Everett	1925	
EVR.234	Coolidge Manor Annex	26 Summer St	Everett	1928	
EVR.175	Home School	51 Summer St	Everett	C 1888	
EVR.157	Immaculate Conception Roman Catholic Parochial School	51 Summer St	Everett	1922	
EVR.926	Monsignor Sviokla Center - Saint Joseph Statue	51 Summer St	Everett	C 1888	
EVR.158	Dennis, William A. House	58 Summer St	Everett	C 1898	
EVR.172	Electric Company Substation #10	37 Thorndike St	Everett	1928	
EVR.906	B & M Railroad Bridge #3.24 - Saugus Branch	Tileston St	Everett	1927	
EVR.160		9 Valley St	Everett	C 1898	
EVR.235	Everett First Presbyterian Church	18 Vernal St	Everett	1914	
EVR.236	Everett Adventist Church	162 Vernal St	Everett	C 1925	

Inv. No.	Property Name	Street	Town	Year	Designations
EVR.162	Moran, Thomas House	3 Vine St	Everett	C 1896	
EVR.237	Wilbur, The	8 Walnut St	Everett	1928	
EVR.9018	Glenwood Cemetery - Currier Monument	Washingon Ave	Everett	C 1890	
EVR.801	Glenwood Cemetery	Washington Ave	Everett	1890	
EVR.9010	Glenwood Cemetery - American Legion Post 176 Monument	Washington Ave	Everett	1939	
EVR.9009	Glenwood Cemetery - Amvets Post 125 Monument	Washington Ave	Everett	R 1950	
EVR.9006	Glenwood Cemetery - Cannon	Washington Ave	Everett		
EVR.9011	Glenwood Cemetery - Elks Lodge 642 Monument	Washington Ave	Everett	R 1920	
EVR.9007	Glenwood Cemetery - Everett Police Memorial	Washington Ave	Everett	1939	
EVR.9003	Glenwood Cemetery - Firemen's Memorial	Washington Ave	Everett	1938	
EVR.9008	Glenwood Cemetery - Gold Star Mothers Monument	Washington Ave	Everett	R 1950	
EVR.9005	Glenwood Cemetery - Grand Army of the Republic Monument	Washington Ave	Everett	1938	
EVR.9000	Glenwood Cemetery - Italian-American Memorial	Washington Ave	Everett	R 1920	
EVR.9004	Glenwood Cemetery - Korean War Veterans Memorial	Washington Ave	Everett	R 1950	
EVR.9012	Glenwood Cemetery - Niche Unit	Washington Ave	Everett	R 1950	
EVR.9013	Glenwood Cemetery - Octagonal Pavilion	Washington Ave	Everett	R 1920	
EVR.9016	Glenwood Cemetery - Saunders, C. O. Monument	Washington Ave	Everett	1893	
EVR.9014	Glenwood Cemetery - Seating Pavilion	Washington Ave	Everett	R 1920	
EVR.998	Glenwood Cemetery - Stone Pillar	Washington Ave	Everett	C 1895	
EVR.9017	Glenwood Cemetery - True Monument	Washington Ave	Everett	C 1895	
EVR.999	Glenwood Cemetery - Veterans of World War I Monument	Washington Ave	Everett	R 1920	
EVR.997	Glenwood Cemetery - Washington Avenue Entrance Pillars	Washington Ave	Everett	C 1895	
EVR.996	Glenwood Cemetery - Washington Avenue Fence	Washington Ave	Everett	R 1920	
EVR.298	Glenwood Cemetery Maintenance Building	Washington Ave	Everett	R 1920	
EVR.297	Glenwood Cemetery Office	Washington Ave	Everett	R 1920	
EVR.213	Dupont De Demours, E. I. Company East Shed	59 Waters Ave	Everett	C 1950	
EVR.215	Dupont De Demours, E. I. Company New West Wing	59 Waters Ave	Everett	R 1955	
EVR.214	Dupont De Demours, E. I. Company West Sheds	59 Waters Ave	Everett	R 1950	
EVR.212	New England Oil, Paint and Varnish Company Factory	59 Waters Ave	Everett	C 1913	
EVR.225	New England Oil, Paint and Varnish Company Office	59 Waters Ave	Everett	C 1913	
EVR.163	Cannell, Samuel P. House	23 Webster St	Everett	C 1887	
EVR.238	Parlin, Albert N. House for Young Men	32 Webster St	Everett	1925	
EVR.169	Fash, Reuben Ice Cream Complex	15 Williams St	Everett	C 1912	
EVR.961	Woodlawn Cemetery - Willow Avenue Secondary Entrance Gate	Willow Ave	Everett		
EVR.164	Hobbs, Clinton E. House	55 Winthrop St	Everett	C 1910	
EVR.37		27 Wolcott St	Everett	1923	
EVR.165	Smith, Samuel A. House	11 Woodlawn St	Everett	C 1883	
EVR.166	Smith, Samuel A. House	34-36 Woodlawn St	Everett	C 1880	

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104
http://www.fws.gov/newengland

In Reply Refer To: March 11, 2022
Project Code: 2022-0019022
Project Name: 65 Norman Street - Outfall

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

Please review this letter each time you request an Official Species List, we will continue to update it with additional information and links to websites may change.

About Official Species Lists

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Federal and non-Federal project proponents have responsibilities under the Act to consider effects on listed species.

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested by returning to an existing project's page in IPaC.

Endangered Species Act Project Review

Please visit the "**New England Field Office Endangered Species Project Review and Consultation**" website for step-by-step instructions on how to consider effects on listed

species and prepare and submit a project review package if necessary:

https://www.fws.gov/newengland/endangeredspecies/project-review/index.html

NOTE Please do not use the **Consultation Package Builder** tool in IPaC except in specific situations following coordination with our office. Please follow the project review guidance on our website instead and reference your **Project Code** in all correspondence.

Additional Info About Section 7 of the Act
Under section 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to determine whether projects may affect threatened and endangered species and/or designated critical habitat. If a Federal agency, or its non-Federal representative, determines that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Federal agency also may need to consider proposed species and proposed critical habitat in the consultation. 50 CFR 402.14(c)(1) specifies the information required for consultation under the Act regardless of the format of the evaluation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

In addition to consultation requirements under Section 7(a)(2) of the ESA, please note that under sections 7(a)(1) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species. Please contact NEFO if you would like more information.

Candidate species that appear on the enclosed species list have no current protections under the ESA. The species' occurrence on an official species list does not convey a requirement to consider impacts to this species as you would a proposed, threatened, or endangered species. The ESA does not provide for interagency consultations on candidate species under section 7, however, the Service recommends that all project proponents incorporate measures into projects to benefit candidate species and their habitats wherever possible.

Migratory Birds

In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see:

https://www.fws.gov/birds/policies-and-regulations.php

Please feel free to contact us at **newengland@fws.gov** with your **Project Code** in the subject line if you need more information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat.

Attachment(s): Official Species List

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
(603) 223-2541

Project Summary

Project Code: 2022-0019022
Event Code: None
Project Name: 65 Norman Street - Outfall
Project Type: Commercial Development
Project Description: Construction related dewatering
Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@42.4025812,-71.07227142539176,14z

Counties: Middlesex County, Massachusetts

Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Insects

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

IPaC User Contact Information

Agency: McPhail Associates, LLC
Name: Brian Fong-Murdock
Address: 2269 Massachusetts Avenue
City: Cambridge
State: MA
Zip: 02140
Email bfongmurdock@mcphailgeo.com
Phone: 6176694848

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104
http://www.fws.gov/newengland

In Reply Refer To:
Project Code: 2022-0019019
Project Name: 65 Norman Street

March 11, 2022

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

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Candidate species that appear on the enclosed species list have no current protections under the ESA. The species' occurrence on an official species list does not convey a requirement to consider impacts to this species as you would a proposed, threatened, or endangered species. The ESA does not provide for interagency consultations on candidate species under section 7, however, the Service recommends that all project proponents incorporate measures into projects to benefit candidate species and their habitats wherever possible.

Migratory Birds

In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see:

https://www.fws.gov/birds/policies-and-regulations.php

Please feel free to contact us at **newengland@fws.gov** with your **Project Code** in the subject line if you need more information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat.

Attachment(s): Official Species List

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
(603) 223-2541

Project Summary

Project Code: 2022-0019019
Event Code: None
Project Name: 65 Norman Street
Project Type: Commercial Development
Project Description: Construction related dewatering
Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@42.4068861,-71.06627450045315,14z

Counties: Middlesex County, Massachusetts

Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Insects

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

IPaC User Contact Information

Agency: McPhail Associates, LLC
Name: Brian Fong-Murdock
Address: 2269 Massachusetts Avenue
City: Cambridge
State: MA
Zip: 02140
Email bfongmurdock@mcphailgeo.com
Phone: 6176694848

APPENDIX D:

LABORATORY ANALYTICAL DATA

ANALYTICAL REPORT

Lab Number:	L2211849
Client:	McPhail Associates 2269 Massachusetts Avenue Cambridge, MA 02140
ATTN:	Ambrose Donovan
Phone:	(617) 868-1420
Project Name:	65 NORMAN STREET
Project Number:	6646.9.T3
Report Date:	03/21/22

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: 65 NORMAN STREET
Project Number: 6646.9.T3

Lab Number: L2211849
Report Date: 03/21/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2211849-01	B-10 (OW)	WATER	EVERETT, MA	03/07/22 13:00	03/07/22
L2211849-02	MALDEN RIVER-SW	WATER	EVERETT, MA	03/07/22 11:30	03/07/22

Project Name:	65 NORMAN STREET	**Lab Number:**	L2211849
Project Number:	6646.9.T3	**Report Date:**	03/21/22

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	65 NORMAN STREET	**Lab Number:**	L2211849
Project Number:	6646.9.T3	**Report Date:**	03/21/22

Case Narrative (continued)

Sample Receipt

L2211849-01: The analysis of Ethanol was requested on the chain of custody; however, a sample container was not received. This was verified by the client.

L2211849-01: A sample container for Dissolved Metals was received for the "B-10 (OW)" sample, but was not listed on the chain of custody. At the client's request, the analysis was not performed.

L2211849-02: At the client's request, the analysis of Total Suspended Solids was performed.

Volatile Organics by Method 624

The WG1613547-3 LCS recoveries, associated with L2211849-01, are above the acceptance criteria for 1,2-dichlorobenzene (145%), 1,3-dichlorobenzene (145%), and 1,4-dichlorobenzene (155%); however, the associated sample is non-detect to the RL for these target analytes. The results of the original analysis are reported.

Volatile Organics by SIM

WG1614049-3: One or more of the internal standard recoveries is outside the acceptance criteria; however, the internal standard is within criteria for the target compound; therefore, the results are reported.

Microextractables

The WG1614220-2 LCS recovery for 1,2-dibromo-3-chloropropane (128%), associated with L2211849-01, is outside Alpha's acceptance criteria, but within the acceptance criteria specified in the method.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Kelly Stenstrom

Title: Technical Director/Representative Date: 03/21/22

ORGANICS

VOLATILES

Project Name: 65 NORMAN STREET
Project Number: 6646.9.T3
Lab Number: L2211849
Report Date: 03/21/22

SAMPLE RESULTS

Lab ID: L2211849-01
Client ID: B-10 (OW)
Sample Location: EVERETT, MA

Date Collected: 03/07/22 13:00
Date Received: 03/07/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 128,624.1
Analytical Date: 03/09/22 12:26
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	1.0	--	1
1,1-Dichloroethane	ND		ug/l	1.5	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.5	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethane	ND		ug/l	1.5	--	1
1,1,1-Trichloroethane	ND		ug/l	2.0	--	1
Benzene	ND		ug/l	1.0	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	5.0	--	1
1,3-Dichlorobenzene	ND		ug/l	5.0	--	1
1,4-Dichlorobenzene	ND		ug/l	5.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
Acetone	ND		ug/l	10	--	1
Methyl tert butyl ether	ND		ug/l	10	--	1
Tert-Butyl Alcohol	ND		ug/l	100	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	20	--	1

Project Name: 65 NORMAN STREET
Lab Number: L2211849
Project Number: 6646.9.T3
Report Date: 03/21/22

SAMPLE RESULTS

Lab ID: L2211849-01
Client ID: B-10 (OW)
Sample Location: EVERETT, MA
Date Collected: 03/07/22 13:00
Date Received: 03/07/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	103		60-140
Fluorobenzene	90		60-140
4-Bromofluorobenzene	120		60-140

Project Name: 65 NORMAN STREET
Project Number: 6646.9.T3

Lab Number: L2211849
Report Date: 03/21/22

SAMPLE RESULTS

Lab ID: L2211849-01
Client ID: B-10 (OW)
Sample Location: EVERETT, MA

Date Collected: 03/07/22 13:00
Date Received: 03/07/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 128,624.1-SIM
Analytical Date: 03/09/22 12:26
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-SIM - Westborough Lab						
1,4-Dioxane	ND		ug/l	5.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Fluorobenzene	99		60-140
4-Bromofluorobenzene	96		60-140

Project Name: 65 NORMAN STREET
Project Number: 6646.9.T3

Lab Number: L2211849
Report Date: 03/21/22

SAMPLE RESULTS

Lab ID: L2211849-01
Client ID: B-10 (OW)
Sample Location: EVERETT, MA

Date Collected: 03/07/22 13:00
Date Received: 03/07/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 14,504.1
Analytical Date: 03/10/22 14:40
Analyst: GT

Extraction Method: EPA 504.1
Extraction Date: 03/10/22 13:13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Microextractables by GC - Westborough Lab							
1,2-Dibromoethane	ND		ug/l	0.010	--	1	A

Project Name: 65 NORMAN STREET
Project Number: 6646.9.T3
Lab Number: L2211849
Report Date: 03/21/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 128,624.1
Analytical Date: 03/09/22 05:37
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1613547-4					
Methylene chloride	ND		ug/l	1.0	--
1,1-Dichloroethane	ND		ug/l	1.5	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.5	--
Tetrachloroethene	ND		ug/l	1.0	--
1,2-Dichloroethane	ND		ug/l	1.5	--
1,1,1-Trichloroethane	ND		ug/l	2.0	--
Benzene	ND		ug/l	1.0	--
Toluene	ND		ug/l	1.0	--
Ethylbenzene	ND		ug/l	1.0	--
Vinyl chloride	ND		ug/l	1.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--
1,2-Dichlorobenzene	ND		ug/l	5.0	--
1,3-Dichlorobenzene	ND		ug/l	5.0	--
1,4-Dichlorobenzene	ND		ug/l	5.0	--
p/m-Xylene	ND		ug/l	2.0	--
o-xylene	ND		ug/l	1.0	--
Xylenes, Total	ND		ug/l	1.0	--
Acetone	ND		ug/l	10	--
Methyl tert butyl ether	ND		ug/l	10	--
Tert-Butyl Alcohol	ND		ug/l	100	--
Tertiary-Amyl Methyl Ether	ND		ug/l	20	--

Project Name: 65 NORMAN STREET
Project Number: 6646.9.T3
Lab Number: L2211849
Report Date: 03/21/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 128,624.1
Analytical Date: 03/09/22 05:37
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1613547-4					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	100		60-140
Fluorobenzene	86		60-140
4-Bromofluorobenzene	131		60-140

Project Name: 65 NORMAN STREET
Project Number: 6646.9.T3

Lab Number: L2211849
Report Date: 03/21/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 128,624.1-SIM
Analytical Date: 03/09/22 05:37
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG1614049-4					
1,4-Dioxane	ND		ug/l	5.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Fluorobenzene	93		60-140
4-Bromofluorobenzene	110		60-140

Project Name: 65 NORMAN STREET
Project Number: 6646.9.T3

Lab Number: L2211849
Report Date: 03/21/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 14,504.1
Analytical Date: 03/10/22 14:21
Analyst: GT

Extraction Method: EPA 504.1
Extraction Date: 03/10/22 13:13

Parameter	Result	Qualifier	Units	RL	MDL	
Microextractables by GC - Westborough Lab for sample(s): 01 Batch: WG1614220-1						
1,2-Dibromoethane	ND		ug/l	0.010	--	A

Lab Control Sample Analysis
Batch Quality Control

Project Name: 65 NORMAN STREET
Project Number: 6646.9.T3

Lab Number: L2211849
Report Date: 03/21/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1613547-3								
Methylene chloride	100		-		60-140	-		28
1,1-Dichloroethane	85		-		50-150	-		49
Carbon tetrachloride	105		-		70-130	-		41
1,1,2-Trichloroethane	115		-		70-130	-		45
Tetrachloroethene	125		-		70-130	-		39
1,2-Dichloroethane	85		-		70-130	-		49
1,1,1-Trichloroethane	100		-		70-130	-		36
Benzene	85		-		65-135	-		61
Toluene	105		-		70-130	-		41
Ethylbenzene	130		-		60-140	-		63
Vinyl chloride	90		-		5-195	-		66
1,1-Dichloroethene	105		-		50-150	-		32
cis-1,2-Dichloroethene	100		-		60-140	-		30
Trichloroethene	100		-		65-135	-		48
1,2-Dichlorobenzene	**145**	Q	-		65-135	-		57
1,3-Dichlorobenzene	**145**	Q	-		70-130	-		43
1,4-Dichlorobenzene	**155**	Q	-		65-135	-		57
p/m-Xylene	130		-		60-140	-		30
o-xylene	120		-		60-140	-		30
Acetone	70		-		40-160	-		30
Methyl tert butyl ether	85		-		60-140	-		30
Tert-Butyl Alcohol	74		-		60-140	-		30
Tertiary-Amyl Methyl Ether	80		-		60-140	-		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 65 NORMAN STREET
Project Number: 6646.9.T3

Lab Number: L2211849
Report Date: 03/21/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1613547-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Pentafluorobenzene	100				60-140
Fluorobenzene	86				60-140
4-Bromofluorobenzene	125				60-140

Lab Control Sample Analysis
Batch Quality Control

Project Name: 65 NORMAN STREET
Project Number: 6646.9.T3

Lab Number: L2211849
Report Date: 03/21/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG1614049-3								
1,4-Dioxane	130		-		60-140	-		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Fluorobenzene	95				60-140
4-Bromofluorobenzene	104				60-140

Lab Control Sample Analysis

Batch Quality Control

Project Name: 65 NORMAN STREET

Project Number: 6646.9.T3

Lab Number: L2211849

Report Date: 03/21/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Microextractables by GC - Westborough Lab	Associated sample(s): 01		Batch: WG1614220-2						
1,2-Dibromoethane	**124**	Q	-		80-120	-			A

Matrix Spike Analysis

Batch Quality Control

Project Name: 65 NORMAN STREET

Project Number: 6646.9.T3

Lab Number: L2211849

Report Date: 03/21/22

Parameter	*Native Sample*	*MS Added*	*MS Found*	*MS %Recovery*	*Qual*	*MSD Found*	*MSD %Recovery*	*Qual*	*Recovery Limits*	*RPD*	*Qual*	*RPD Limits*	*Column*
Microextractables by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1614220-3 QC Sample: L2212053-01 Client ID: MS Sample													
1,2-Dibromoethane	ND	0.25	0.274	110		-	-		80-120	-		20	A
1,2-Dibromo-3-chloropropane	ND	0.25	0.283	113		-	-		80-120	-		20	A
1,2,3-Trichloropropane	ND	0.25	0.248	99		-	-		80-120	-		20	A

SEMIVOLATILES

Project Name: 65 NORMAN STREET
Project Number: 6646.9.T3

Lab Number: L2211849
Report Date: 03/21/22

SAMPLE RESULTS

Lab ID: L2211849-01
Client ID: B-10 (OW)
Sample Location: EVERETT, MA

Date Collected: 03/07/22 13:00
Date Received: 03/07/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 129,625.1
Analytical Date: 03/14/22 13:01
Analyst: SZ

Extraction Method: EPA 625.1
Extraction Date: 03/12/22 08:16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-ethylhexyl)phthalate	ND		ug/l	2.20	--	1
Butyl benzyl phthalate	ND		ug/l	5.00	--	1
Di-n-butylphthalate	ND		ug/l	5.00	--	1
Di-n-octylphthalate	ND		ug/l	5.00	--	1
Diethyl phthalate	ND		ug/l	5.00	--	1
Dimethyl phthalate	ND		ug/l	5.00	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	71		42-122
2-Fluorobiphenyl	68		46-121
4-Terphenyl-d14	71		47-138

Project Name: 65 NORMAN STREET
Project Number: 6646.9.T3
Lab Number: L2211849
Report Date: 03/21/22

SAMPLE RESULTS

Lab ID: L2211849-01
Client ID: B-10 (OW)
Sample Location: EVERETT, MA

Date Collected: 03/07/22 13:00
Date Received: 03/07/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 129,625.1-SIM
Analytical Date: 03/12/22 19:34
Analyst: JJW

Extraction Method: EPA 625.1
Extraction Date: 03/12/22 08:13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.100	--	1
Fluoranthene	ND		ug/l	0.100	--	1
Naphthalene	ND		ug/l	0.100	--	1
Benzo(a)anthracene	ND		ug/l	0.100	--	1
Benzo(a)pyrene	ND		ug/l	0.100	--	1
Benzo(b)fluoranthene	ND		ug/l	0.100	--	1
Benzo(k)fluoranthene	ND		ug/l	0.100	--	1
Chrysene	ND		ug/l	0.100	--	1
Acenaphthylene	ND		ug/l	0.100	--	1
Anthracene	ND		ug/l	0.100	--	1
Benzo(ghi)perylene	ND		ug/l	0.100	--	1
Fluorene	ND		ug/l	0.100	--	1
Phenanthrene	ND		ug/l	0.100	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.100	--	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.100	--	1
Pyrene	ND		ug/l	0.100	--	1
Pentachlorophenol	ND		ug/l	1.00	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	49		25-87
Phenol-d6	32		16-65
Nitrobenzene-d5	75		42-122
2-Fluorobiphenyl	69		46-121
2,4,6-Tribromophenol	89		45-128
4-Terphenyl-d14	76		47-138

Project Name: 65 NORMAN STREET
Project Number: 6646.9.T3

Lab Number: L2211849
Report Date: 03/21/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 129,625.1-SIM
Analytical Date: 03/12/22 18:29
Analyst: JJW

Extraction Method: EPA 625.1
Extraction Date: 03/12/22 08:13

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG1614884-1					
Acenaphthene	ND		ug/l	0.100	--
Fluoranthene	ND		ug/l	0.100	--
Naphthalene	ND		ug/l	0.100	--
Benzo(a)anthracene	ND		ug/l	0.100	--
Benzo(a)pyrene	ND		ug/l	0.100	--
Benzo(b)fluoranthene	ND		ug/l	0.100	--
Benzo(k)fluoranthene	ND		ug/l	0.100	--
Chrysene	ND		ug/l	0.100	--
Acenaphthylene	ND		ug/l	0.100	--
Anthracene	ND		ug/l	0.100	--
Benzo(ghi)perylene	ND		ug/l	0.100	--
Fluorene	ND		ug/l	0.100	--
Phenanthrene	ND		ug/l	0.100	--
Dibenzo(a,h)anthracene	ND		ug/l	0.100	--
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.100	--
Pyrene	ND		ug/l	0.100	--
Pentachlorophenol	ND		ug/l	1.00	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	50		25-87
Phenol-d6	32		16-65
Nitrobenzene-d5	72		42-122
2-Fluorobiphenyl	66		46-121
2,4,6-Tribromophenol	80		45-128
4-Terphenyl-d14	72		47-138

Project Name: 65 NORMAN STREET
Project Number: 6646.9.T3

Lab Number: L2211849
Report Date: 03/21/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 129,625.1
Analytical Date: 03/14/22 10:44
Analyst: SZ

Extraction Method: EPA 625.1
Extraction Date: 03/12/22 08:16

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1614886-1					
Bis(2-ethylhexyl)phthalate	ND		ug/l	2.20	--
Butyl benzyl phthalate	ND		ug/l	5.00	--
Di-n-butylphthalate	ND		ug/l	5.00	--
Di-n-octylphthalate	ND		ug/l	5.00	--
Diethyl phthalate	ND		ug/l	5.00	--
Dimethyl phthalate	ND		ug/l	5.00	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	62		42-122
2-Fluorobiphenyl	65		46-121
4-Terphenyl-d14	67		47-138

Lab Control Sample Analysis
Batch Quality Control

Project Name: 65 NORMAN STREET
Project Number: 6646.9.T3

Lab Number: L2211849
Report Date: 03/21/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG1614884-2								
Acenaphthene	79		-		60-132	-		30
Fluoranthene	86		-		43-121	-		30
Naphthalene	75		-		36-120	-		30
Benzo(a)anthracene	93		-		42-133	-		30
Benzo(a)pyrene	89		-		32-148	-		30
Benzo(b)fluoranthene	90		-		42-140	-		30
Benzo(k)fluoranthene	85		-		25-146	-		30
Chrysene	75		-		44-140	-		30
Acenaphthylene	86		-		54-126	-		30
Anthracene	82		-		43-120	-		30
Benzo(ghi)perylene	89		-		1-195	-		30
Fluorene	83		-		70-120	-		30
Phenanthrene	78		-		65-120	-		30
Dibenzo(a,h)anthracene	98		-		1-200	-		30
Indeno(1,2,3-cd)pyrene	97		-		1-151	-		30
Pyrene	86		-		70-120	-		30
Pentachlorophenol	67		-		38-152	-		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 65 NORMAN STREET
Project Number: 6646.9.T3

Lab Number: L2211849
Report Date: 03/21/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG1614884-2								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	59				25-87
Phenol-d6	40				16-65
Nitrobenzene-d5	83				42-122
2-Fluorobiphenyl	77				46-121
2,4,6-Tribromophenol	95				45-128
4-Terphenyl-d14	84				47-138

Lab Control Sample Analysis
Batch Quality Control

Project Name: 65 NORMAN STREET
Project Number: 6646.9.T3

Lab Number: L2211849
Report Date: 03/21/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1614886-3								
Bis(2-ethylhexyl)phthalate	84		-		29-137	-		82
Butyl benzyl phthalate	79		-		1-140	-		60
Di-n-butylphthalate	78		-		8-120	-		47
Di-n-octylphthalate	84		-		19-132	-		69
Diethyl phthalate	72		-		1-120	-		100
Dimethyl phthalate	73		-		1-120	-		183

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Nitrobenzene-d5	70				42-122
2-Fluorobiphenyl	70				46-121
4-Terphenyl-d14	71				47-138

PCBS

Project Name: 65 NORMAN STREET
Project Number: 6646.9.T3
Lab Number: L2211849
Report Date: 03/21/22

SAMPLE RESULTS

Lab ID: L2211849-01
Client ID: B-10 (OW)
Sample Location: EVERETT, MA

Date Collected: 03/07/22 13:00
Date Received: 03/07/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 127,608.3
Analytical Date: 03/14/22 11:32
Analyst: JM

Extraction Method: EPA 608.3
Extraction Date: 03/14/22 01:36
Cleanup Method: EPA 3665A
Cleanup Date: 03/14/22
Cleanup Method: EPA 3660B
Cleanup Date: 03/14/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.250	--	1	A
Aroclor 1221	ND		ug/l	0.250	--	1	A
Aroclor 1232	ND		ug/l	0.250	--	1	A
Aroclor 1242	ND		ug/l	0.250	--	1	A
Aroclor 1248	ND		ug/l	0.250	--	1	A
Aroclor 1254	ND		ug/l	0.250	--	1	A
Aroclor 1260	ND		ug/l	0.200	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	66		37-123	B
Decachlorobiphenyl	63		38-114	B
2,4,5,6-Tetrachloro-m-xylene	64		37-123	A
Decachlorobiphenyl	64		38-114	A

Project Name: 65 NORMAN STREET
Project Number: 6646.9.T3
Lab Number: L2211849
Report Date: 03/21/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 127,608.3
Analytical Date: 03/14/22 10:12
Analyst: JM

Extraction Method: EPA 608.3
Extraction Date: 03/14/22 01:36
Cleanup Method: EPA 3665A
Cleanup Date: 03/14/22
Cleanup Method: EPA 3660B
Cleanup Date: 03/14/22

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG1615134-1						
Aroclor 1016	ND		ug/l	0.250	--	A
Aroclor 1221	ND		ug/l	0.250	--	A
Aroclor 1232	ND		ug/l	0.250	--	A
Aroclor 1242	ND		ug/l	0.250	--	A
Aroclor 1248	ND		ug/l	0.250	--	A
Aroclor 1254	ND		ug/l	0.250	--	A
Aroclor 1260	ND		ug/l	0.200	--	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	61		37-123	B
Decachlorobiphenyl	65		38-114	B
2,4,5,6-Tetrachloro-m-xylene	60		37-123	A
Decachlorobiphenyl	67		38-114	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: 65 NORMAN STREET

Project Number: 6646.9.T3

Lab Number: L2211849

Report Date: 03/21/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG1615134-2									
Aroclor 1016	72		-		50-140	-		36	A
Aroclor 1260	72		-		8-140	-		38	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	67				37-123	B
Decachlorobiphenyl	71				38-114	B
2,4,5,6-Tetrachloro-m-xylene	67				37-123	A
Decachlorobiphenyl	71				38-114	A

METALS

Project Name: 65 NORMAN STREET
Lab Number: L2211849
Project Number: 6646.9.T3
Report Date: 03/21/22

SAMPLE RESULTS

Lab ID: L2211849-01
Client ID: B-10 (OW)
Sample Location: EVERETT, MA
Date Collected: 03/07/22 13:00
Date Received: 03/07/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Antimony, Total	ND		mg/l	0.00400	--	1	03/08/22 17:09	03/08/22 23:09	EPA 3005A	3,200.8	CD
Arsenic, Total	0.00120		mg/l	0.00100	--	1	03/08/22 17:09	03/08/22 23:09	EPA 3005A	3,200.8	CD
Cadmium, Total	ND		mg/l	0.00020	--	1	03/08/22 17:09	03/08/22 23:09	EPA 3005A	3,200.8	CD
Chromium, Total	ND		mg/l	0.00100	--	1	03/08/22 17:09	03/08/22 23:09	EPA 3005A	3,200.8	CD
Copper, Total	ND		mg/l	0.00100	--	1	03/08/22 17:09	03/08/22 23:09	EPA 3005A	3,200.8	CD
Iron, Total	18.5		mg/l	0.050	--	1	03/08/22 17:09	03/21/22 15:40	EPA 3005A	19,200.7	EW
Lead, Total	ND		mg/l	0.00100	--	1	03/08/22 17:09	03/08/22 23:09	EPA 3005A	3,200.8	CD
Mercury, Total	ND		mg/l	0.00020	--	1	03/08/22 20:07	03/11/22 13:59	EPA 245.1	3,245.1	ZK
Nickel, Total	ND		mg/l	0.00200	--	1	03/08/22 17:09	03/08/22 23:09	EPA 3005A	3,200.8	CD
Selenium, Total	ND		mg/l	0.00500	--	1	03/08/22 17:09	03/08/22 23:09	EPA 3005A	3,200.8	CD
Silver, Total	ND		mg/l	0.00040	--	1	03/08/22 17:09	03/08/22 23:09	EPA 3005A	3,200.8	CD
Zinc, Total	ND		mg/l	0.01000	--	1	03/08/22 17:09	03/08/22 23:09	EPA 3005A	3,200.8	CD
Total Hardness by SM 2340B - Mansfield Lab											
Hardness	204		mg/l	0.660	NA	1	03/08/22 17:09	03/21/22 15:40	EPA 3005A	19,200.7	EW
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	--	1		03/08/22 23:09	NA	107,-	

Project Name: 65 NORMAN STREET
Lab Number: L2211849
Project Number: 6646.9.T3
Report Date: 03/21/22

SAMPLE RESULTS

Lab ID: L2211849-02
Client ID: MALDEN RIVER-SW
Sample Location: EVERETT, MA
Date Collected: 03/07/22 11:30
Date Received: 03/07/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Antimony, Total	ND		mg/l	0.00400	--	1	03/08/22 17:09	03/08/22 23:13	EPA 3005A	3,200.8	CD
Arsenic, Total	ND		mg/l	0.00100	--	1	03/08/22 17:09	03/08/22 23:13	EPA 3005A	3,200.8	CD
Cadmium, Total	ND		mg/l	0.00020	--	1	03/08/22 17:09	03/08/22 23:13	EPA 3005A	3,200.8	CD
Chromium, Total	0.00106		mg/l	0.00100	--	1	03/08/22 17:09	03/08/22 23:13	EPA 3005A	3,200.8	CD
Copper, Total	0.00390		mg/l	0.00100	--	1	03/08/22 17:09	03/08/22 23:13	EPA 3005A	3,200.8	CD
Iron, Total	0.576		mg/l	0.050	--	1	03/08/22 17:09	03/21/22 15:45	EPA 3005A	19,200.7	EW
Lead, Total	0.00129		mg/l	0.00100	--	1	03/08/22 17:09	03/08/22 23:13	EPA 3005A	3,200.8	CD
Mercury, Total	ND		mg/l	0.00020	--	1	03/08/22 20:07	03/11/22 14:03	EPA 245.1	3,245.1	ZK
Nickel, Total	ND		mg/l	0.00200	--	1	03/08/22 17:09	03/08/22 23:13	EPA 3005A	3,200.8	CD
Selenium, Total	ND		mg/l	0.00500	--	1	03/08/22 17:09	03/08/22 23:13	EPA 3005A	3,200.8	CD
Silver, Total	ND		mg/l	0.00040	--	1	03/08/22 17:09	03/08/22 23:13	EPA 3005A	3,200.8	CD
Zinc, Total	0.03444		mg/l	0.01000	--	1	03/08/22 17:09	03/08/22 23:13	EPA 3005A	3,200.8	CD
Total Hardness by SM 2340B - Mansfield Lab											
Hardness	171		mg/l	0.660	NA	1	03/08/22 17:09	03/21/22 15:45	EPA 3005A	19,200.7	EW
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	--	1		03/08/22 23:13	NA	107,-	

Project Name: 65 NORMAN STREET **Lab Number:** L2211849

Project Number: 6646.9.T3 **Report Date:** 03/21/22

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-02 Batch: WG1613090-1										
Mercury, Total	ND		mg/l	0.00020	--	1	03/08/22 20:07	03/11/22 12:22	3,245.1	ZK

Prep Information

Digestion Method: EPA 245.1

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-02 Batch: WG1613131-1										
Iron, Total	ND		mg/l	0.050	--	1	03/08/22 17:09	03/21/22 14:04	19,200.7	EW

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Hardness by SM 2340B - Mansfield Lab for sample(s): 01-02 Batch: WG1613131-1										
Hardness	ND		mg/l	0.660	NA	1	03/08/22 17:09	03/21/22 14:04	19,200.7	EW

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-02 Batch: WG1613132-1										
Antimony, Total	ND		mg/l	0.00400	--	1	03/08/22 17:09	03/08/22 21:17	3,200.8	CD
Arsenic, Total	ND		mg/l	0.00100	--	1	03/08/22 17:09	03/08/22 21:17	3,200.8	CD
Cadmium, Total	ND		mg/l	0.00020	--	1	03/08/22 17:09	03/08/22 21:17	3,200.8	CD
Chromium, Total	ND		mg/l	0.00100	--	1	03/08/22 17:09	03/08/22 21:17	3,200.8	CD
Copper, Total	ND		mg/l	0.00100	--	1	03/08/22 17:09	03/08/22 21:17	3,200.8	CD

Project Name: 65 NORMAN STREET **Lab Number:** L2211849

Project Number: 6646.9.T3 **Report Date:** 03/21/22

Method Blank Analysis
Batch Quality Control

Lead, Total	ND	mg/l	0.00100	--	1	03/08/22 17:09	03/08/22 21:17	3,200.8	CD
Nickel, Total	ND	mg/l	0.00200	--	1	03/08/22 17:09	03/08/22 21:17	3,200.8	CD
Selenium, Total	ND	mg/l	0.00500	--	1	03/08/22 17:09	03/08/22 21:17	3,200.8	CD
Silver, Total	ND	mg/l	0.00040	--	1	03/08/22 17:09	03/08/22 21:17	3,200.8	CD
Zinc, Total	ND	mg/l	0.01000	--	1	03/08/22 17:09	03/08/22 21:17	3,200.8	CD

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: 65 NORMAN STREET

Project Number: 6646.9.T3

Lab Number: L2211849

Report Date: 03/21/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1613090-2								
Mercury, Total	94		-		85-115	-		
Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1613131-2								
Iron, Total	102		-		85-115	-		
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01-02 Batch: WG1613131-2								
Hardness	100		-		85-115	-		
Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1613132-2								
Antimony, Total	87		-		85-115	-		
Arsenic, Total	94		-		85-115	-		
Cadmium, Total	96		-		85-115	-		
Chromium, Total	100		-		85-115	-		
Copper, Total	95		-		85-115	-		
Lead, Total	95		-		85-115	-		
Nickel, Total	97		-		85-115	-		
Selenium, Total	89		-		85-115	-		
Silver, Total	92		-		85-115	-		
Zinc, Total	98		-		85-115	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: 65 NORMAN STREET
Project Number: 6646.9.T3

Lab Number: L2211849
Report Date: 03/21/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1613090-3 QC Sample: L2211588-02 Client ID: MS Sample												
Mercury, Total	ND	0.005	0.00474	95		-	-		70-130	-		20
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1613090-5 QC Sample: L2211588-04 Client ID: MS Sample												
Mercury, Total	ND	0.005	0.00480	96		-	-		70-130	-		20
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1613131-3 QC Sample: L2211645-01 Client ID: MS Sample												
Iron, Total	0.098	1	1.11	101		-	-		75-125	-		20
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1613131-3 QC Sample: L2211645-01 Client ID: MS Sample												
Hardness	93.7	66.2	156	94		-	-		75-125	-		20
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1613131-7 QC Sample: L2211645-02 Client ID: MS Sample												
Iron, Total	0.122	1	1.13	101		-	-		75-125	-		20
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1613131-7 QC Sample: L2211645-02 Client ID: MS Sample												
Hardness	20.7	66.2	85.5	98		-	-		75-125	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: 65 NORMAN STREET
Project Number: 6646.9.T3

Lab Number: L2211849
Report Date: 03/21/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1613132-3 QC Sample: L2211645-01 Client ID: MS Sample									
Antimony, Total	ND	0.5	0.4605	92	-	-	70-130	-	20
Arsenic, Total	0.00199	0.12	0.1109	91	-	-	70-130	-	20
Cadmium, Total	ND	0.053	0.04775	90	-	-	70-130	-	20
Chromium, Total	0.01222	0.2	0.2002	94	-	-	70-130	-	20
Copper, Total	0.07396	0.25	0.3021	91	-	-	70-130	-	20
Lead, Total	0.00101	0.53	0.4564	86	-	-	70-130	-	20
Nickel, Total	0.02536	0.5	0.4785	91	-	-	70-130	-	20
Selenium, Total	ND	0.12	0.1045	87	-	-	70-130	-	20
Silver, Total	ND	0.05	0.04282	86	-	-	70-130	-	20
Zinc, Total	0.01225	0.5	0.4768	93	-	-	70-130	-	20
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1613132-5 QC Sample: L2211645-02 Client ID: MS Sample									
Antimony, Total	ND	0.5	0.4871	97	-	-	70-130	-	20
Arsenic, Total	0.00273	0.12	0.1153	94	-	-	70-130	-	20
Cadmium, Total	ND	0.053	0.04962	94	-	-	70-130	-	20
Chromium, Total	0.00561	0.2	0.1963	95	-	-	70-130	-	20
Copper, Total	0.01483	0.25	0.2512	94	-	-	70-130	-	20
Lead, Total	ND	0.53	0.4669	88	-	-	70-130	-	20
Nickel, Total	0.00950	0.5	0.4716	92	-	-	70-130	-	20
Selenium, Total	ND	0.12	0.1103	92	-	-	70-130	-	20
Silver, Total	ND	0.05	0.04501	90	-	-	70-130	-	20
Zinc, Total	0.02356	0.5	0.4928	94	-	-	70-130	-	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: 65 NORMAN STREET
Project Number: 6646.9.T3

Lab Number: L2211849
Report Date: 03/21/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1613090-4 QC Sample: L2211588-02 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/l	NC		20
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1613090-6 QC Sample: L2211588-04 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/l	NC		20
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1613131-4 QC Sample: L2211645-01 Client ID: DUP Sample						
Hardness	93.7	91.4	mg/l	2		20
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1613131-8 QC Sample: L2211645-02 Client ID: DUP Sample						
Hardness	20.7	20.9	mg/l	1		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: 65 NORMAN STREET

Project Number: 6646.9.T3

Lab Number: L2211849

Report Date: 03/21/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1613132-4 QC Sample: L2211645-01 Client ID: DUP Sample					
Antimony, Total	ND	0.00494	mg/l	NC	20
Arsenic, Total	0.00199	0.00210	mg/l	5	20
Cadmium, Total	ND	ND	mg/l	NC	20
Chromium, Total	0.01222	0.01213	mg/l	1	20
Copper, Total	0.07396	0.07340	mg/l	1	20
Lead, Total	0.00101	0.00100	mg/l	2	20
Nickel, Total	0.02536	0.02558	mg/l	1	20
Selenium, Total	ND	ND	mg/l	NC	20
Silver, Total	ND	ND	mg/l	NC	20
Zinc, Total	0.01225	0.01232	mg/l	1	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: 65 NORMAN STREET

Project Number: 6646.9.T3

Lab Number: L2211849

Report Date: 03/21/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1613132-6 QC Sample: L2211645-02 Client ID: DUP Sample					
Antimony, Total	ND	ND	mg/l	NC	20
Arsenic, Total	0.00273	0.00263	mg/l	4	20
Cadmium, Total	ND	ND	mg/l	NC	20
Chromium, Total	0.00561	0.00592	mg/l	5	20
Copper, Total	0.01483	0.01525	mg/l	3	20
Lead, Total	ND	ND	mg/l	NC	20
Nickel, Total	0.00950	0.01000	mg/l	5	20
Selenium, Total	ND	ND	mg/l	NC	20
Silver, Total	ND	ND	mg/l	NC	20
Zinc, Total	0.02356	0.02431	mg/l	3	20

INORGANICS
&
MISCELLANEOUS

Project Name: 65 NORMAN STREET
Project Number: 6646.9.T3

Lab Number: L2211849
Report Date: 03/21/22

SAMPLE RESULTS

Lab ID: L2211849-01
Client ID: B-10 (OW)
Sample Location: EVERETT, MA

Date Collected: 03/07/22 13:00
Date Received: 03/07/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Suspended	36.		mg/l	6.5	NA	1.3	-	03/08/22 20:15	121,2540D	MD
Cyanide, Total	0.008		mg/l	0.005	--	1	03/08/22 11:55	03/09/22 10:43	121,4500CN-CE	CS
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	03/08/22 02:20	121,4500CL-D	MM
pH (H)	7.0		SU	-	NA	1	-	03/07/22 23:22	121,4500H+-B	AS
Nitrogen, Ammonia	0.590		mg/l	0.075	--	1	03/08/22 03:30	03/08/22 19:29	121,4500NH3-BH	AT
TPH, SGT-HEM	ND		mg/l	3.60	--	.9	03/09/22 18:45	03/09/22 19:30	140,1664B	TL
Phenolics, Total	ND		mg/l	0.030	--	1	03/10/22 06:52	03/10/22 12:57	4,420.1	KP
Chromium, Hexavalent	ND		mg/l	0.010	--	1	03/08/22 04:55	03/08/22 05:17	1,7196A	DT
Anions by Ion Chromatography - Westborough Lab										
Chloride	67.0		mg/l	5.00	--	10	-	03/08/22 21:12	44,300.0	SH

Project Name: 65 NORMAN STREET
Project Number: 6646.9.T3

Lab Number: L2211849
Report Date: 03/21/22

SAMPLE RESULTS

Lab ID: L2211849-02
Client ID: MALDEN RIVER-SW
Sample Location: EVERETT, MA

Date Collected: 03/07/22 11:30
Date Received: 03/07/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Suspended	11.		mg/l	1.5	NA	1.5	-	03/10/22 16:30	121,2540D	MD
Cyanide, Total	ND		mg/l	0.005	--	1	03/10/22 11:15	03/10/22 15:28	121,4500CN-CE	CS
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	03/08/22 02:20	121,4500CL-D	MM
pH (H)	7.6		SU	-	NA	1	-	03/07/22 23:22	121,4500H+-B	AS
Nitrogen, Ammonia	0.194		mg/l	0.075	--	1	03/10/22 14:02	03/10/22 22:01	121,4500NH3-BH	AT
Chromium, Hexavalent	ND		mg/l	0.010	--	1	03/08/22 04:55	03/08/22 05:17	1,7196A	DT
Anions by Ion Chromatography - Westborough Lab										
Chloride	626.		mg/l	12.5	--	25	-	03/10/22 22:52	44,300.0	AT

Project Name: 65 NORMAN STREET
Project Number: 6646.9.T3
Lab Number: L2211849
Report Date: 03/21/22

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1612847-1										
Nitrogen, Ammonia	ND		mg/l	0.075	--	1	03/08/22 03:30	03/08/22 19:15	121,4500NH3-BH	AT
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG1612855-1										
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	03/08/22 02:20	121,4500CL-D	MM
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG1612881-1										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	03/08/22 04:55	03/08/22 05:16	1,7196A	DT
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1612996-1										
Cyanide, Total	ND		mg/l	0.005	--	1	03/08/22 11:55	03/09/22 10:02	121,4500CN-CE	CS
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1613270-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	03/08/22 20:15	121,2540D	MD
Anions by Ion Chromatography - Westborough Lab for sample(s): 01 Batch: WG1613348-1										
Chloride	ND		mg/l	0.500	--	1	-	03/08/22 16:17	44,300.0	SH
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1613748-1										
TPH, SGT-HEM	ND		mg/l	4.00	--	1	03/09/22 18:45	03/09/22 19:30	140,1664B	TL
General Chemistry - Westborough Lab for sample(s): 02 Batch: WG1614048-1										
Cyanide, Total	ND		mg/l	0.005	--	1	03/10/22 11:15	03/10/22 14:51	121,4500CN-CE	CS
General Chemistry - Westborough Lab for sample(s): 02 Batch: WG1614108-1										
Nitrogen, Ammonia	ND		mg/l	0.075	--	1	03/10/22 14:02	03/10/22 21:39	121,4500NH3-BH	AT
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1614147-1										
Phenolics, Total	ND		mg/l	0.030	--	1	03/10/22 06:52	03/10/22 12:46	4,420.1	KP
General Chemistry - Westborough Lab for sample(s): 02 Batch: WG1614274-1										
Solids, Total Suspended	ND		mg/l	1.0	NA	1	-	03/10/22 16:30	121,2540D	MD
Anions by Ion Chromatography - Westborough Lab for sample(s): 02 Batch: WG1614376-1										
Chloride	ND		mg/l	0.500	--	1	-	03/10/22 17:13	44,300.0	AT

Lab Control Sample Analysis

Batch Quality Control

Project Name: 65 NORMAN STREET
Project Number: 6646.9.T3

Lab Number: L2211849
Report Date: 03/21/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG1612824-1								
pH	100		-		99-101	-		5
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1612847-2								
Nitrogen, Ammonia	87		-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG1612855-2								
Chlorine, Total Residual	96		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG1612881-2								
Chromium, Hexavalent	91		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1612996-2								
Cyanide, Total	102		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1613270-2								
Solids, Total Suspended	95		-		80-120	-		
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 Batch: WG1613348-2								
Chloride	100		-		90-110	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 65 NORMAN STREET
Project Number: 6646.9.T3

Lab Number: L2211849
Report Date: 03/21/22

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1613748-2					
TPH	82	-	64-132	-	34
General Chemistry - Westborough Lab Associated sample(s): 02 Batch: WG1614048-2					
Cyanide, Total	92	-	90-110	-	
General Chemistry - Westborough Lab Associated sample(s): 02 Batch: WG1614108-2					
Nitrogen, Ammonia	93	-	80-120	-	20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1614147-2					
Phenolics, Total	101	-	70-130	-	
General Chemistry - Westborough Lab Associated sample(s): 02 Batch: WG1614274-2					
Solids, Total Suspended	90	-	80-120	-	
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 02 Batch: WG1614376-2					
Chloride	101	-	90-110	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: 65 NORMAN STREET
Project Number: 6646.9.T3

Lab Number: L2211849
Report Date: 03/21/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1612847-4 QC Sample: L2211215-02 Client ID: MS Sample												
Nitrogen, Ammonia	ND	4	3.54	88		-	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1612855-4 QC Sample: L2211797-02 Client ID: MS Sample												
Chlorine, Total Residual	ND	0.25	0.27	108		-	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1612881-4 QC Sample: L2211849-02 Client ID: MALDEN RIVER-SW												
Chromium, Hexavalent	ND	0.1	0.099	99		-	-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1612996-3 QC Sample: L2211457-02 Client ID: MS Sample												
Cyanide, Total	0.025	0.2	0.233	104		-	-		90-110	-		30
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1613348-3 QC Sample: L2211694-01 Client ID: MS Sample												
Chloride	11.3	4	15.0	92		-	-		90-110	-		18
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1613748-4 QC Sample: L2210776-16 Client ID: MS Sample												
TPH	ND	19.8	18.4	93		-	-		64-132	-		34
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1614048-3 QC Sample: L2211465-02 Client ID: MS Sample												
Cyanide, Total	0.007	0.2	0.167	**80**	Q	-	-		90-110	-		30
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1614108-4 QC Sample: L2211800-01 Client ID: MS Sample												
Nitrogen, Ammonia	0.128	4	3.56	86		-	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1614147-4 QC Sample: L2211645-02 Client ID: MS Sample												
Phenolics, Total	ND	0.4	0.36	90		-	-		70-130	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: 65 NORMAN STREET
Project Number: 6646.9.T3

Lab Number: L2211849
Report Date: 03/21/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1614376-3 QC Sample: L2212482-02 Client ID: MS Sample									
Chloride	2.83	4	7.02	105	-	-	90-110	-	18

Lab Duplicate Analysis
Batch Quality Control

Project Name: 65 NORMAN STREET
Project Number: 6646.9.T3

Lab Number: L2211849
Report Date: 03/21/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1612824-2 QC Sample: L2211797-01 Client ID: DUP Sample						
pH	7.4	7.8	SU	5		5
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1612847-3 QC Sample: L2211215-02 Client ID: DUP Sample						
Nitrogen, Ammonia	ND	0.108	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1612855-3 QC Sample: L2211797-01 Client ID: DUP Sample						
Chlorine, Total Residual	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1612881-3 QC Sample: L2211849-01 Client ID: B-10 (OW)						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1612996-4 QC Sample: L2211471-02 Client ID: DUP Sample						
Cyanide, Total	ND	ND	mg/l	NC		30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1613270-3 QC Sample: L2211707-05 Client ID: DUP Sample						
Solids, Total Suspended	220	230	mg/l	4		29
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1613348-4 QC Sample: L2211694-01 Client ID: DUP Sample						
Chloride	11.3	11.4	mg/l	1		18
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1613748-3 QC Sample: L2210776-15 Client ID: DUP Sample						
TPH	ND	ND	mg/l	NC		34
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1614048-4 QC Sample: L2211462-02 Client ID: DUP Sample						
Cyanide, Total	ND	ND	mg/l	NC		30

Lab Duplicate Analysis
Batch Quality Control

Project Name: 65 NORMAN STREET
Project Number: 6646.9.T3

Lab Number: L2211849
Report Date: 03/21/22

Parameter	Native Sample	Duplicate Sample	Units	RPD		RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1614108-3 QC Sample: L2211800-01 Client ID: DUP Sample						
Nitrogen, Ammonia	0.128	0.196	mg/l	**42**	Q	20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1614147-3 QC Sample: L2211645-02 Client ID: DUP Sample						
Phenolics, Total	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1614274-3 QC Sample: L2211992-01 Client ID: DUP Sample						
Solids, Total Suspended	150	190	mg/l	24		29
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1614376-4 QC Sample: L2212482-02 Client ID: DUP Sample						
Chloride	2.83	2.81	mg/l	1		18

Project Name: 65 NORMAN STREET
Project Number: 6646.9.T3

Lab Number: L2211849
Report Date: 03/21/22

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2211849-01A	Vial Na2S2O3 preserved	B	NA		3.7	Y	Absent		624.1-RGP(7),624.1-SIM-RGP(7)
L2211849-01B	Vial Na2S2O3 preserved	B	NA		3.7	Y	Absent		624.1-RGP(7),624.1-SIM-RGP(7)
L2211849-01C	Vial Na2S2O3 preserved	B	NA		3.7	Y	Absent		624.1-RGP(7),624.1-SIM-RGP(7)
L2211849-01D	Vial Na2S2O3 preserved	B	NA		3.7	Y	Absent		624.1-RGP(7),624.1-SIM-RGP(7)
L2211849-01E	Vial Na2S2O3 preserved	B	NA		3.7	Y	Absent		504(14)
L2211849-01F	Vial Na2S2O3 preserved	B	NA		3.7	Y	Absent		504(14)
L2211849-01G	Plastic 250ml unpreserved	B	7	7	3.7	Y	Absent		-
L2211849-01H	Plastic 250ml HNO3 preserved	B	<2	<2	3.7	Y	Absent		CD-2008T(180),NI-2008T(180),ZN-2008T(180),CU-2008T(180),FE-UI(180),HARDU(180),AG-2008T(180),SE-2008T(180),AS-2008T(180),HG-U(28),SB-2008T(180),CR-2008T(180),PB-2008T(180)
L2211849-01I	Plastic 250ml NaOH preserved	B	>12	>12	3.7	Y	Absent		TCN-4500(14)
L2211849-01J	Plastic 500ml H2SO4 preserved	B	<2	<2	3.7	Y	Absent		NH3-4500(28)
L2211849-01K	Plastic 950ml unpreserved	B	7	7	3.7	Y	Absent		HEXCR-7196(1),CL-300(28),TRC-4500(1),PH-4500(.01),TSS-2540(7)
L2211849-01L	Amber 950ml H2SO4 preserved	B	<2	<2	3.7	Y	Absent		TPHENOL-420(28)
L2211849-01M	Amber 1000ml Na2S2O3	B	7	7	3.7	Y	Absent		625.1-RGP(7),625.1-SIM-RGP(7)
L2211849-01N	Amber 1000ml Na2S2O3	B	7	7	3.7	Y	Absent		625.1-RGP(7),625.1-SIM-RGP(7)
L2211849-01O	Amber 1000ml Na2S2O3	B	7	7	3.7	Y	Absent		PCB-608.3(365)
L2211849-01P	Amber 1000ml Na2S2O3	B	7	7	3.7	Y	Absent		PCB-608.3(365)
L2211849-01Q	Amber 1000ml HCl preserved	B	NA		3.7	Y	Absent		TPH-1664(28)
L2211849-01R	Amber 1000ml HCl preserved	B	NA		3.7	Y	Absent		TPH-1664(28)
L2211849-01X	Plastic 120ml HNO3 preserved Extracts	B	NA		3.7	Y	Absent		HOLD-METAL-DISSOLVED(180)

*Values in parentheses indicate holding time in days

Project Name: 65 NORMAN STREET
Project Number: 6646.9.T3

Lab Number: L2211849
Report Date: 03/21/22

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2211849-02A	Plastic 250ml HNO3 preserved	B	<2	<2	3.7	Y	Absent		CD-2008T(180),NI-2008T(180),ZN-2008T(180),CU-2008T(180),FE-UI(180),HARDU(180),SE-2008T(180),AG-2008T(180),HG-U(28),AS-2008T(180),PB-2008T(180),CR-2008T(180),SB-2008T(180)
L2211849-02B	Plastic 250ml NaOH preserved	B	>12	>12	3.7	Y	Absent		TCN-4500(14),NH3-4500(28)
L2211849-02C	Plastic 500ml H2SO4 preserved	B	<2	<2	3.7	Y	Absent		TCN-4500(14),NH3-4500(28)
L2211849-02D	Plastic 950ml unpreserved	B	7	7	3.7	Y	Absent		TSS-2540-LOW(7),CL-300(28),HEXCR-7196(1),TRC-4500(1),PH-4500(.01)

*Values in parentheses indicate holding time in days

Project Name:	65 NORMAN STREET	**Lab Number:**	L2211849
Project Number:	6646.9.T3	**Report Date:**	03/21/22

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report

Project Name:	65 NORMAN STREET	**Lab Number:**	L2211849
Project Number:	6646.9.T3	**Report Date:**	03/21/22

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the reporting limit (RL) for the sample.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where

Report Format: Data Usability Report

Project Name:	65 NORMAN STREET	**Lab Number:**	L2211849
Project Number:	6646.9.T3	**Report Date:**	03/21/22

Data Qualifiers

the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: Data Usability Report

Project Name:	65 NORMAN STREET	**Lab Number:**	L2211849
Project Number:	6646.9.T3	**Report Date:**	03/21/22

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

3 Methods for the Determination of Metals in Environmental Samples, Supplement I. EPA/600/R-94/111. May 1994.

4 Methods for Chemical Analysis of Water and Wastes. EPA 600/4-79-020. Revised March 1983.

14 Methods for the Determination of Organic Compounds in Finished Drinking Water and Raw Source Water. EPA/600/4-88/039, Revised July 1991.

19 Inductively Coupled Plasma Atomic Emission Spectrometric Method for Trace Element Analysis of Water and Wastes. Appendix C, Part 136, 40 CFR (Code of Federal Regulations). July 1, 1999 edition.

44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.

107 Alpha Analytical - In-house calculation method.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

127 Method 608.3: Organochlorine Pesticides and PCBs by GC/HSD, EPA 821-R-16-009, December 2016.

128 Method 624.1: Purgeables by GC/MS, EPA 821-R-16-008, December 2016.

129 Method 625.1: Base/Neutrals and Acids by GC/MS, EPA 821-R-16-007, December 2016.

140 Method 1664,Revision B: N-Hexane Extractable Material (HEM; Oil & Grease) and Silica Gel Treated N-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry, EPA-821-R-10-001, February 2010.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

CHAIN OF CUSTODY

PAGE OF

ALPHA ANALYTICAL — World Class Chemistry

Date Rec'd in Lab: 3/7/22

ALPHA Job #: L2211849

Westborough, MA TEL: 508-898-9220 FAX: 508-898-9193
Mansfield, MA TEL: 508-822-9300 FAX: 508-822-3288

Project Information

Project Name: 65 Norman Street

Project Location: Everett, MA

Project #: 6646.9.T3

Project Manager: T. Fennick

ALPHA Quote #:

Client Information

Client: McPhail Associates, LLC

Address: 2269 Massachusetts Avenue

Cambridge, MA 02140

Phone: (617) 868-1420

Fax:

Email: bfongmurdock@mcphailgeo.com

☐ These samples have been Previously analyzed by Alpha

Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)

Due Date: Time:

Report Information Data Deliverables

☒ FAX ☐ EMAIL

☒ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed Program	Criteria
NPDES RGP	

Other Project Specific Requirements/Comments/Detection Limits:

Circle the following if required:

SALINITY (HARDNESS) (PH)

Sect. A inorganics: Ammonia, Chloride, TRC,TSS,CrVI,CrIII, Tot-CN, RGP Metals
B- Non-Hal- VOC- 624.1, 624.1-SIM, Tot. Phenol Sect C- VOC- 624.1 & 504
D:625.1/625.1-SIM: E- PCB's, PCP(625.1-SIM): F-TPH, 624.1, Sub-Ethanol

SAMPLE HANDLING
Filtration
☐ Done
☐ Not Needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	RGP Metals (200.8) (A)	TSS- (A)	Ammonia (4500 (A))	TCN (A)	HexCr (7196), TRC, Cl- (A)	624.1(B, C, F) 624.1-simSIM (B)	Tphenol-420 (B)	504-EDB (C)	625.1/625.1SIM- (D, E)	PCB-608- (E)	TPH-1664-(F)	SUB-ETHANOL (F)	Sample Specific Comments	TOTAL # BOTTLES
11849-01	B-10(OW)	3/7/22	1300	GW	TMC	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	~~HARDNESS~~ BFM 3/7/22 PH	20
02	MaldenRiver-SW	3/7/22	1130	SW	TMC	☒	☒	☒	☒	☒	☐	☐	☐	☐	☐	☐	☐	HARDNESS PH	
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
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						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		

BFM 3/8/22

	RGP Metals	TSS	Ammonia	TCN	HexCr	624.1	Tphenol	504	625.1	PCB	TPH	SUB-ETHANOL
Container Type	P	P	P	P	P	V	A	V	A	A	A	V
Preservative	C	A	D	E	A	B	D	H	A	H	B	B

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	3/7/22 1330	[signature]	
[signature]	3/7/22	[signature] AAL	3/7/22
Rob Mack [signature]	3/7/22 1815	[signature]	3/7/22 1815

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms.

FORM NO: 01-01(I-NJ) (rev. 5-JAN-12)

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ALPHA ANALYTICAL — World Class Chemistry

Westborough, MA TEL: 508-898-9220 FAX: 508-898-9193
Mansfield, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 3/7/22

ALPHA Job #: L2211849

Project Information

Project Name: 65 Norman Street

Project Location: Everett, MA

Project #: 6646.9.T3

Project Manager: T. Fennick

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Email: bfongmurdock@mcphailgeo.com

☐ These samples have been Previously analyzed by Alpha

Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)

Due Date: Time:

Report Information Data Deliverables

☒ FAX ☐ EMAIL

☒ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed Program	Criteria
NPDES RGP	

Other Project Specific Requirements/Comments/Detection Limits:

Circle the following if required:

SALINITY (HARDNESS) (PH)

Sect. A inorganics: Ammonia, Chloride, TRC,TSS,CrVI,CrIII, Tot-CN, RGP Metals
B- Non-Hal- VOC- 624.1, 624.1-SIM, Tot. Phenol Sect C- VOC- 624.1 & 504
D:625.1/625.1-SIM: E- PCB's, PCP(625.1-SIM): F-TPH, 624.1, Sub-Ethanol

SAMPLE HANDLING
Filtration
☐ Done
☐ Not Needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	RGP Metals (200.8) (A)	TSS- (A)	Ammonia (4500 (A))	TCN (A)	HexCr (7196), TRC, Cl- (A)	624.1(B, C, F) 624.1-simSIM (B)	Tphenol-420 (B)	504-EDB (C)	625.1/625.1SIM- (D, E)	PCB-608- (E)	TPH-1664-(F)	SUB-ETHANOL (F)	Sample Specific Comments	TOTAL # BOTTLES
11849-01	B-10(ow)	3/7/22	1300	GW	TMC	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	~~HARDNESS~~ OFW 3/7/22 PH	20
02	MaldenRiver-SW	3/7/22	1130	SW	TMC	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	HARDNESS PH	
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
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					Container Type	P	P	P	P	P	V	A	V	A	A	A	V		
					Preservative	C	A	D	E	A	B	D	H	A	H	B	B		

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	3/7/22 1330	[signature]	
[signature] Rob Wa[illegible]	3/7/22	[signature]	AA 3/7/22
	3/7/22 1815	[signature]	3/7/22 1815

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms.

FORM NO: 01-01(I-NJ) (rev. 5-JAN-12)

APPENDIX E:

BEST MANAGEMENT PRACTICE PLAN

BEST MANAGEMENT PRACTICES PLAN

A Notice of Intent for a Remediation General Permit (RGP) under the National Pollutant Discharge Elimination System (NPDES) has been submitted to the US Environmental Protection Agency (EPA) in anticipation of temporary construction dewatering that will occur during construction of a residential 4-story structure at the project site listed with the address of 65 Norman Street in Everett, Massachusetts. This Best Management Practices Plan (BMPP) has been prepared as an Appendix to the RGP and will be posted and implemented at the site during the time period that temporary construction dewatering is occurring at the site.

Water Treatment and Management

During construction of the proposed building foundation and below grade garage, dewatering effluent is anticipated to be pumped from localized sumps and trenches within the excavation directly into a settling tank. Dewatering effluent treatment will consist of a settling tank and bag filters to remove suspended soil particulates and, if necessary, granular activated carbon filters. The effluent will then flow through the necessary treatment systems and discharge through hoses or piping connected into the storm water drains located beneath Airforce Road and/or Norman Street. Based upon a review of the Department of Public Works stormwater drainage plan, the above referenced stormwater drain system ultimately discharges into an unnamed tributary of the Malden River at outfalls 09-01.

Discharge Monitoring and Compliance

Regular sampling and testing will be conducted at the influent to the system and the treated effluent as required by the RGP. During the first week of discharge, the operator must sample the untreated influent and treated effluent two times: one (1) sample of untreated influent and one (1) sample of treated effluent must be collected on the first day of discharge, and one (1) sample of untreated influent and one (1) sample of treated effluent must be collected on one additional non-consecutive day within the first week of discharge. Samples must be analyzed in accordance with 40 CFR §136 unless otherwise specified by the RGP, with a maximum 5-day turnaround time and results must be reviewed no more than 48 hours from receipt of the results of each sampling event. After the first week, samples may be analyzed with up to a ten (10)-day turnaround time and results must be reviewed no more than 72 hours from receipt of the results. If the treatment system is operating as designed and achieving the effluent limitations outlined in the RGP, on-going sampling shall be conducted weekly for three (3) additional weeks beginning no earlier than 24 hours following initial sampling, and monthly as described below. Any adjustments/reductions in monitoring frequency must be approved by EPA in writing.

In accordance with Part 4.1 of the RGP, the operator must perform routine monthly monitoring for both influent and effluent beginning no more than 30 days following the completion of the sampling requirements for new discharges or discharges that have been interrupted. The routine monthly monitoring is to be conducted through the end of the scheduled discharge. The routine monthly monitoring must continue for five (5)

consecutive months prior to submission of any request for modification of monitoring frequency.

Dewatering activity for the Site is classified as Category III-G: Sites with Known Contamination. Monitoring shall include analysis of influent and effluent samples for the presence of: pH; inorganics as listed in the RGP including: ammonia, chloride, total residual chlorine, total suspended solids, antimony, arsenic, cadmium, chromium III, chromium VI, copper, lead, mercury, nickel, selenium, silver, zinc and cyanide; and fuel parameters as listed in the RGP including: total petroleum hydrocarbons, methyl tert butyl ether, tert-butyl alcohol and tertiary-amyl methyl ether.

Monitoring will include checking the condition of the treatment system, assessing the need for treatment system adjustments based on monitoring data, observing and recording daily flow rates and discharge quantities, and verifying the flow path of the discharged effluent.

The total monthly flow will be monitored by checking and documenting the flow through the flow meter to be installed on the system. Flow will be maintained below the "system design flow" by regularly monitoring flow and adjusting the amount of construction dewatering as needed. Monthly monitoring reports will be compiled and maintained at the site.

System Maintenance

A number of methods will be used to minimize the potential for violations during the term of this permit discharge. Scheduled regular maintenance and periodic cleaning of the treatment system will be conducted to verify proper operation and shall be conducted in accordance with the project earthwork specifications. Regular maintenance will include checking the condition of the treatment system equipment such as the settling tanks, bag filters, hoses, pumps, and flow meters. Equipment will be monitored daily for potential matters and unscheduled maintenance requirements.

Employees who have direct or indirect responsibility for ensuring compliance with the RGP will be trained by the Contractor.

Miscellaneous Items

Site security for the treatment system will be addressed within the overall site security plan.

Management of Treatment System Materials

Dewatering effluent will be pumped directly into the treatment system from the excavation with use of hoses and localized sumps to minimize handling. The Contractor will establish staging areas for equipment or materials storage that may be possible sources of pollution away from any dewatering activities, to the extent practicable.

Sediment from the tank used in the treatment system will be characterized and removed from the site to an appropriate receiving facility, in accordance with applicable laws and regulations. Bag and ion filters will be replaced/disposed of as necessary.