



**NOTICE OF INTENT FOR DISCHARGE
UNDER MASSACHUSETTS DEWATERING
GENERAL PERMIT MAG070000**

10 VINING STREET

BOSTON

MASSACHUSETTS

to

U.S. Environmental Protection Agency

and

Massachusetts Department of
Environmental Protection

March 26, 2012

Project No. 5347.9.00



March 26, 2012

U.S Environmental Protection Agency
Office of Ecosystem Protection (OEP06-3)
5 Post Office Square
Boston, MA 02109-3912

Attention: Dewatering GP Processing

Massachusetts Department of Environmental Protection
Division of Watershed Management
627 Main Street
Worcester, MA 01608

Attention: Mr. Robert D. Kubit

Reference: Mission Park Garage - 10 Vining Street; Boston, Massachusetts
Notice of Intent - Dewatering General Permit (DGP) and
MassDEP BRP WM-10 Permit for Construction or Foundation Dewatering

Ladies and Gentlemen:

On behalf of the Roxbury Tenants of Harvard, McPhail Associates, LLC has prepared the attached Notice of Intent (NOI) for coverage under the Massachusetts Dewatering General Permit MAG070000 (DGP) for the discharge of groundwater from a foundation sump pit into the Muddy River via a designated drainage pipe at the above referenced site. Refer to **Figure 1** entitled Project Location Plan for the general site locus.

These services were performed and this permit application was prepared in accordance with our proposal dated December 28, 2011, and the subsequent authorization of Roxbury Tenants of Harvard. These services are subject to the limitations contained in **Appendix A**.

The NOI application has been filed electronically to the designated US EPA e-mail address for a DGP application and sent to the Massachusetts Department of Environmental Protection (DEP). As indicated above, the suggested NOI form is contained in **Appendix B**. The following text addresses requirements of the NOI that could not specifically be addressed on the NOI form.

Supplemental information attached to this letter in support of the DGP includes the following:

- A topographic map (**Figure 1**);
- Current Massachusetts Geographic Information Systems (GIS) Department of Environmental Protection (DEP) Priority Resources Map of Boston (**Figure 2**);
- A summary of groundwater analysis (**Table 1**);
- Notice of Intent and Transmittal Form for Permit Application and Payment (**Appendix B**);
- Sketches showing the approximate location of site manholes and storm drains and the connection to the Muddy River (**Appendix C**);



US EPA
Massachusetts DEP
March 26, 2012
Page 2

- A review of Areas of Critical Concern and Endangered and Threatened Species (**Appendix D**); and
- Laboratory chemical test data (**Appendix E**).

Site Location and Current Conditions

The existing multi-story residential building fronts onto Vining Street to the northeast, New Whitney Street to the southwest, and the Riverway to the west. The lower three levels of the existing structure are utilized for parking and the lowest two levels are generally located below-grade. The existing structure is understood to have been constructed in the 1970s.

The lowest level of the below-grade garage occupies an approximate 155,000 square-foot plan area. An underslab foundation drain is located beneath the lowest level slab. The foundation drains lead to a single sump pit equipped with duplex sump pumps which continuously discharge groundwater to maintain the garage in a dry condition. The groundwater inflow into the foundation drainage system was measured on November 29, 2011 to be about 175 gallons per minute (GPM).

A topographic map of the site indicating the location of the facility is attached as **Figure 1**. Sketches showing the approximate location of site manholes, drainage pipes and the connection to the Muddy River are contained in **Appendix C**. The plans indicate that the foundation sump discharges to a site manhole that is located on the exterior of the west side of the existing building. The manhole is connected to a 10-inch diameter vitrified clay storm drain that discharges directly to the Muddy River. The Muddy River is located approximately 200 feet west of the site.

Site Environmental Setting, Nearby DEP-listed Disposal Sites and Surrounding Historical Places

Based on the current Massachusetts Geographic Information Systems (GIS) Department of Environmental Protection (DEP) Priority Resources Map of Boston (**Figure 2**), the subject site is not located within the boundaries of a Potentially Productive Aquifer or within a Zone II, Interim Wellhead Protection Area as defined by the Massachusetts Department of Environmental Protection. There are no known public or private drinking water supply wells, no Areas of Critical Environmental Concern, no habitats of Species of Special Concern or Threatened or Endangered Species within 500 feet of the subject site. There are no surface water bodies or wetland areas located at the subject site. The nearest surface water body is the Muddy River, classified by the DEP as a Class B Surface Water Body, that is located approximately 200 feet west of the subject site. The area immediately surrounding the Muddy River is indicated to be within the 100 year flood plain, and the banks are classified as Protected Open Space. The Protected Open Spaces are located within 500 feet of the subject property.

The DEP on-line waste site database indicates that there is one DEP-listed disposal site within 500 feet of the subject site. This disposal site, which is located at 70 Francis Street, has achieved a Class A-2 Response Action Outcome (RAO) statement. A Class A-2 RAO indicates that response actions were performed at the site which resulted in a Permanent Solution to the release and that a Condition of No Significant Risk exists at the site. Based on the reported DEP status, the 70 Francis Street release site is not considered to pose a threat of impact to the groundwater dewatering activities at the subject site.



A review of the most recent federal listing of threatened and endangered species published by the U.S. Fish and Wildlife Service identified no threatened and/or endangered species at or in the vicinity of the discharge location and/or discharge outfall. In addition, a review of the Massachusetts Division of Fisheries and Wildlife on-line database identified no threatened or endangered species at the point of discharge and/or the discharge outfall. A list of threatened and endangered species from the U.S. Fish and Wildlife Services and Massachusetts Division of Fisheries on-line databases is included in **Appendix D**.

A review of the most recent National Register of Historical Places for Suffolk County in Boston, Massachusetts did not identify records or addresses of Historic Places that exist in the immediate vicinity of the subject property and/or outfall location.

Permanent Foundation Sump Dewatering

As indicated above, the existing structure is understood to have been constructed in the 1970s and off-site discharge of groundwater from a foundation sump is understood to have occurred since that time. The foundation drainage system is required to maintain the garage in a dry condition. The groundwater inflow into the foundation drainage system was measured on November 29, 2011 to be about 175 gallons per minute (GPM). The maximum daily flow is estimated to be 504,000 gallons per day (GPD). The average monthly flow is estimated to be 252,000 GPD.

Summary of Groundwater Analysis

The source of the discharge is groundwater and as required by the NPDES DGP provisions, the effluent or discharge water was sampled as required by Section 4.4.5 of the General Permit for: antimony, arsenic, cadmium, chromium (total), hexavalent chromium, chloride, copper, iron, mercury, nickel, silver, zinc and pH. The receiving water was sampled for hardness.

On January 25, 2012, a representative of McPhail Associates, LLC obtained a sample of groundwater from the sump pit and submitted the sample to a certified laboratory for analysis for the presence of parameters required under the EPA's Dewatering General Permit (DGP) application, including antimony, arsenic, cadmium, pH, total chromium, hexavalent chromium, copper, chloride, iron, mercury, nickel, silver and zinc. On January 26, 2012, a sample of water was obtained from the Muddy River near the outfall of the drainage pipe and analyzed for hardness. The results of the laboratory analysis are summarized in **Table 1**, and laboratory data is included in **Appendix E**. The results of laboratory analysis indicate the following:

1. **pH:** The tested sample exhibited a pH level of 6.4 Standard Units (S.U.) which is outside the recommended range of 6.5 to 8.5 S.U. for discharge into freshwater.

The detected level of pH is outside the allowable range of 6.5 to 8.3 SU for discharge into a surface water body. Since the detected pH level is slightly outside the allowable range, we propose to monitor the pH level in accordance with the DGP monitoring requirements and if the pH level over time continues to be detected outside the allowable range, we would request a waiver to expand the allowable pH range to 6.0 to 9.0 SU in accordance with Section 1.3 of the General Permit.



2. **Total Metals:** The laboratory reported no detectable levels of hexavalent chromium, antimony, cadmium, mercury or silver in the submitted sample of groundwater. Levels of arsenic, chromium, copper, iron, nickel, and zinc were reported at levels of 1.1 microgram per liter (ug/l), 1 ug/l, 11.7 ug/l, 270 ug/l, 2.6 ug/l, and 13 ug/l, respectively. The detected levels of arsenic, chromium, iron, nickel and zinc are below the EPA effluent limits of 10 ug/l, 48.8 ug/l, 1,000 ug/l, 29 ug/l and 66.6 ug/l, respectively, for discharge to a freshwater body.

The detected level of copper exceeds the EPA effluent limit of 5.2 ug/l for discharge into a freshwater body. However, based on calculations of the applicable dilution factor as shown below, the detected concentration of copper is below the corresponding dilution concentration of 13 ug/l.

Dilution Factor Application for Total Copper

As mentioned above, total copper was detected at a concentration of 11.7 ug/l and the EPA freshwater effluent limitation for copper is 5.2 ug/l. As a result, a Dilution Factor (DF) was calculated for the detected level of total copper pursuant to the procedure contained in DGP MAG070000, Appendix VII. 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 Muddy River. The calculated DF was then used to find the appropriate Dilution Range Concentration (DRC) contained in MAG910000, Appendix IV. The Minimum Flow Rate calculated by the USGS Streamstats GIS database at the location of discharge into the Muddy River for seven consecutive days with a recurrence interval of 10 years (7Q10 flow) is 0.57 cubic feet per second thus resulting in a DF of 2.5 using the average discharge rate of 252,000 GPD. Therefore, based on the calculation of the applicable dilution factor, the detected level of copper at 11.7 ug/l is less than the dilution concentration of 13 ug/l for discharge into a freshwater body.

3. **Hardness:** The hardness of the receiving water (Muddy River Outfall) was 140 mg/l, which was sampled on January 26, 2012. The laboratory data for this sample is included in **Appendix E**.

Groundwater Treatment

With the exception of pH, laboratory analysis indicates that groundwater within the sump meets the requirements for discharge under an EPA DGP into a designated drain and ultimately into the Muddy River. The detected level of pH is outside the allowable range of 6.5 to 8.3 SU for discharge into a surface water body. In accordance with the DGP, samples of the effluent will be obtained once per week and submitted to a laboratory for analysis for the presence of pH. The results of the analysis will be compared with parameters established in Section 1.1 of the Massachusetts DGP MAG070000. Should the results of four consecutive sampling events comply with the discharge parameters established in the DGP MAG070000, analysis of the effluent will be performed monthly thereafter. However, if the pH level remains slightly outside the allowable range during our monitoring activities over this period, a waiver will be requested in accordance with Section 1.3 of the General Permit to expand the allowable pH range to 6.0 to 9.0 SU. Pursuant to provisions of the DGP, should a sheen be present on the surface of the groundwater, a sample of the effluent will be obtained and submitted to a laboratory for total oil and grease analysis. If the results of total oil and grease analysis indicate levels in excess of the DGP limit parameters, off-site dewatering will cease and appropriate regulatory and treatment measures will be implemented.



US EPA
Massachusetts DEP
March 26, 2012
Page 5

Summary and Conclusions

The purpose of this report is to assess site environmental conditions and groundwater data to support an application for a Massachusetts Dewatering General Permit for long-term off-site discharge of groundwater from a foundation sump. In summary, the results of the groundwater chemical analyses indicate that with the exception of pH the analytes were either not detected above the laboratory's detection limits or were detected at concentrations below the DGP effluent limitations. The detected level of pH is slightly outside the allowable range of 6.5 to 8.3 SU for discharge into a surface water body. Sampling and analysis of the effluent will be carried out in accordance with the terms of DGP MAG070000. Should the results of four consecutive sampling events indicate that pH levels remain slightly outside the allowable range, a waiver will be requested in accordance with Section 1.3 of the General Permit to expand the allowable pH range to 6.0 to 9.0 SU.

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.

Very truly yours,

McPHAIL ASSOCIATES, LLC

A handwritten signature in black ink, appearing to read "Jonathan W. Patch".

Jonathan W. Patch, P.E.

A handwritten signature in black ink, appearing to read "Ambrose J. Donovan".

Ambrose J. Donovan, P.E., L.S.P.

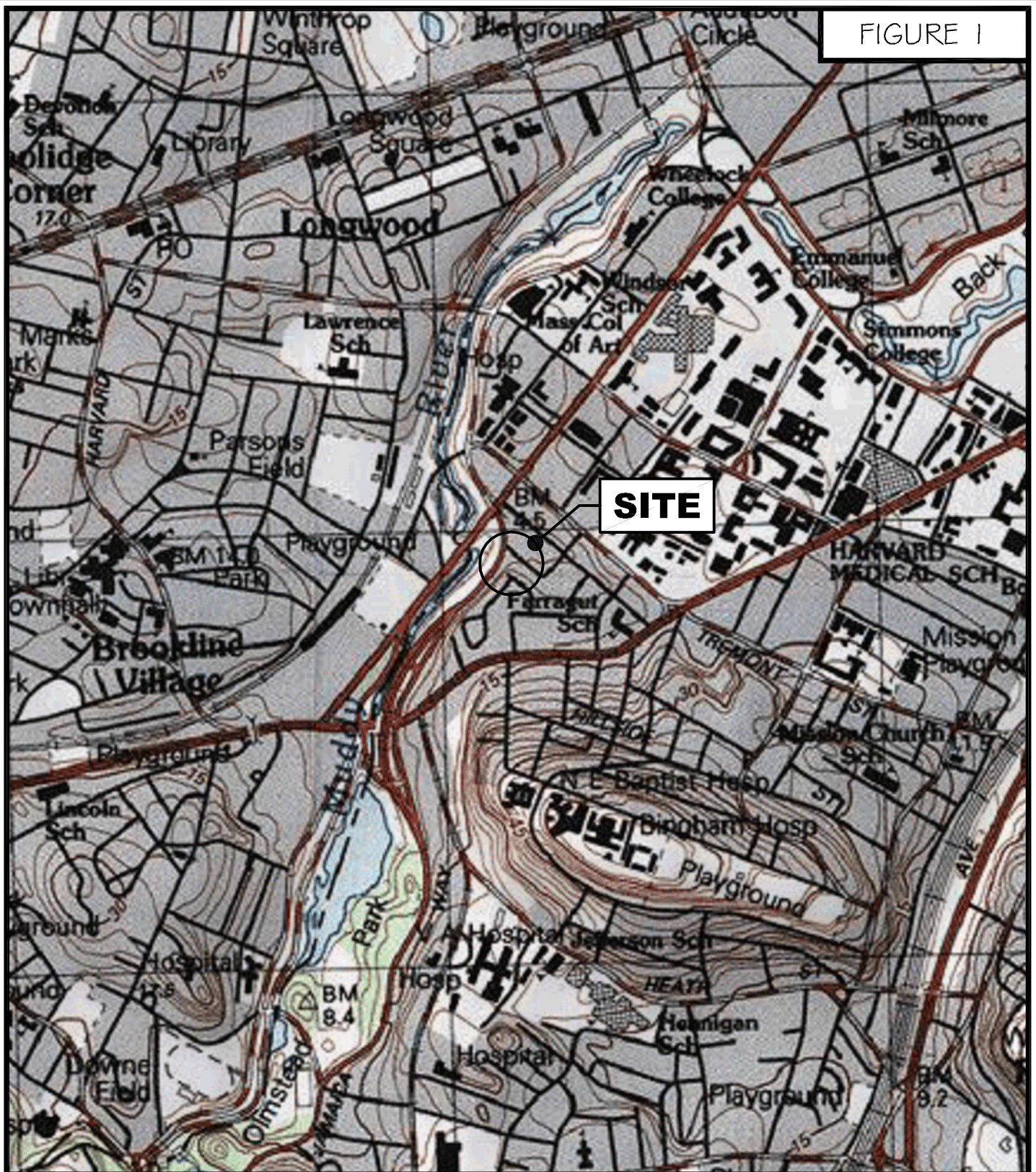
A handwritten signature in black ink, appearing to read "William J. Burns".

William J. Burns

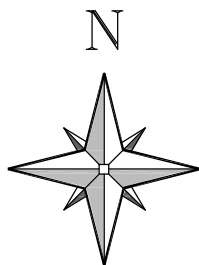
F:\WP5\REPORTS\5347-DGP.wpd

JWP/WJB/ajd

FIGURE 1



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



SCALE 1:12,500

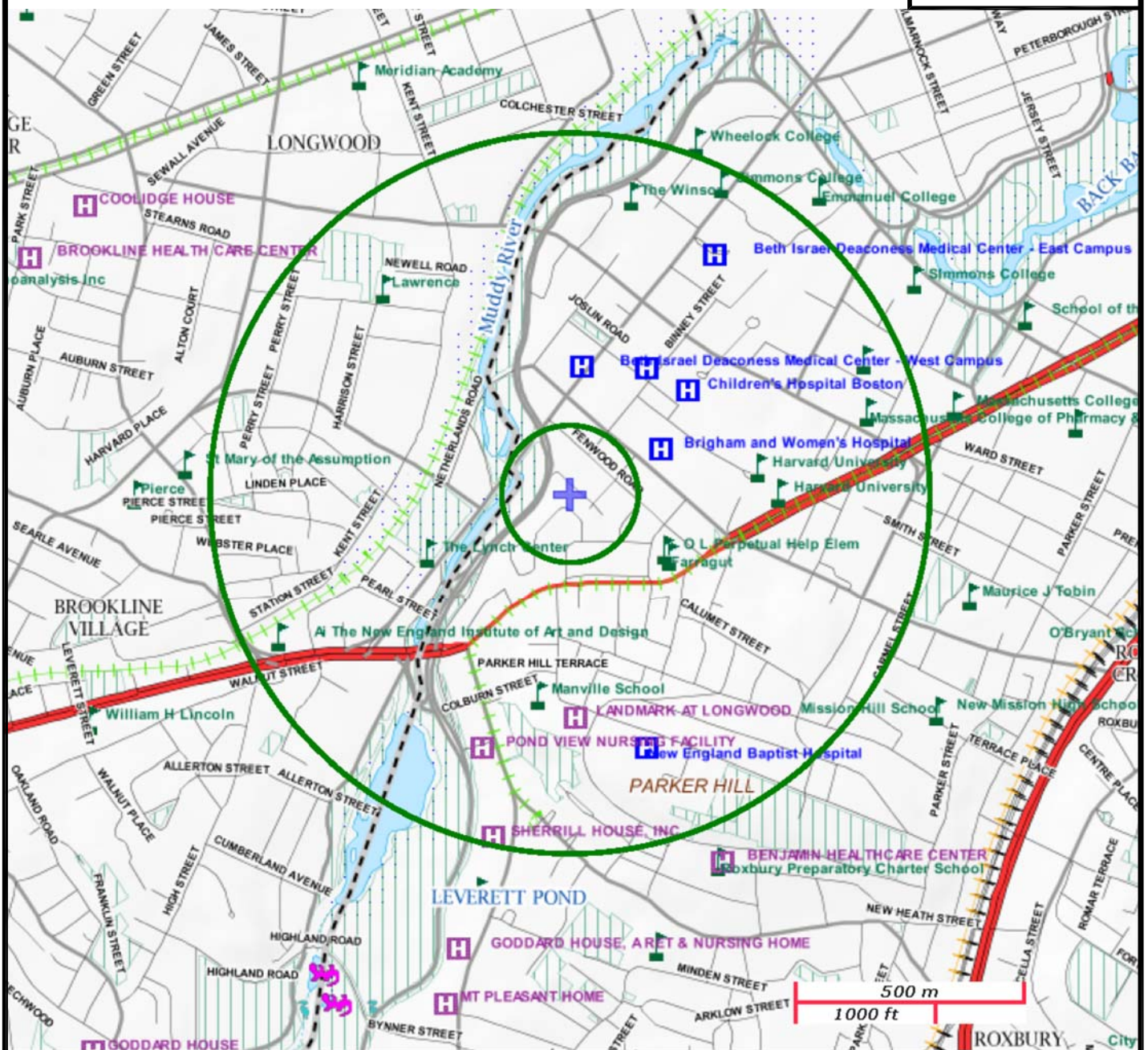
PROJECT LOCATION PLAN

10 VINING STREET

BOSTON

MASSACHUSETTS

FIGURE 2



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

REFERENCE: THIS PLAN WAS PREPARED FROM AN IMAGE OBTAINED FROM THE MASS.GOV WEBSITE

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

10 VINING STREET
BOSTON MASSACHUSETTS
SITE PLAN
FOR
ROXBURY TENANTS OF HARVARD
BY
McPHAIL ASSOCIATES, LLC
CONSULTING GEOTECHNICAL ENGINEERS
Date: FEBRUARY 2012 Dwn: F.G.P. Chkd: H.J.B. Scale: N.T.S.
Project No: 5347

Table 1
Analytical Results - Groundwater
(DGP Application)

10 Vining Street Boston, MA
McPhail Project No. 5347.9.00

LOCATION		RGP Limits	RGP Limits with DF	Units	GW SUMP 01/25/12
SAMPLING DATE					25-JAN-12
LAB SAMPLE ID					L1201316-01
	pH (H)	6.5-8.3		SU	6.4
38	Chloride	Monitor Only		ug/l	850000
	Total Recoverable Metal Limits				
39	Antimony	5.6	14	ug/l	ND (0.5)
40	Arsenic (freshwater)	10	25	ug/l	1.1
41	Cadmium (freshwater)	3	7.5	ug/l	ND (0.2)
42	Chromium III (freshwater)	48.8	122	ug/l	1
43	Chromium IV, Hexavalent (freshwater)	11.4	28.5	ug/l	ND (10)
44	Copper	5.2	13	ug/l	11.7
46	Mercury	0.9	2.25	ug/l	ND (0.2)
47	Nickel	29	72.5	ug/l	2.6
49	Silver	1.2	3	ug/l	ND (0.4)
50	Zinc	66.6	166.5	ug/l	13
51	Iron	1000	2500	ug/l	270

ND()-not detected above
laboratory method
detection limit



APPENDIX A

Limitations

The purpose of this report is to present a summary of environmental conditions, including the results of testing of groundwater samples obtained from a foundation sump on the property located at 10 Vining Street in Boston, Massachusetts and a surface water sample from the Muddy River, in support of an application for approval of long-term dewatering discharge of groundwater from a foundation sump into surface waters of the Commonwealth of Massachusetts under EPA's Massachusetts Dewatering General Permit MAG070000.

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 analytical 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 seasonal water table, past practices used in disposal and other factors.

Laboratory analyses have been performed for specific constituents during the course of this assessment, as described in the text. However, it should be noted that additional constituents not searched for during the current study may be present in soil and/or groundwater at the site.

This report and application have been prepared on behalf of and for the exclusive use of the Roxbury Tenants of Harvard. This report and the findings contained herein shall not, in whole or in part, be disseminated or conveyed to any other party, other than the US EPA, the Massachusetts DEP, nor used in whole or in part by any other party without prior written consent of McPhail Associates, LLC.



APPENDIX B

Notice of Intent - NPDES Dewatering General Permit

Transmittal Form for Permit Application and Payment

II. Suggested Notice of Intent (NOI) Form

1. General facility information. Please provide the following information about the facility.

a) Name of facility: Mission Park Garage - 10 Vining Street		Mailing Address for the Facility: 10 Vining Street, Boston, MA 02115	
b) Location Address of the Facility (if different from mailing address):	Facility Location	Type of Business:	
	longitude: 71.11 W latitude: 42.33 N	Residential/Parking Garage Facility SIC codes: 7500	
c) Name of facility owner: <u>Roxbury Tenants of Harvard</u> Owner's email: <u>ltaylor@roxburytenants.org</u> Owner's Tel #: <u>617-232-4306</u> Owner's Fax #: <u>617-232-0571</u> Address of owner (if different from facility address) 11 New Whitney Street Boston, MA 02115 Owner is (check one): 1. Federal____ 2. State____ 3. Tribal____ 4. Private ☒ 4. Other____(Describe)			
Legal name of Operator, if not owner: _____ Operator Contact Name: _____ Operator Tel Number: _____ Fax Number: _____ Operator's email: _____ Operator Address (if different from owner)			
d) Attach a topographic map indicating the location of the facility and the outfall(s) to the receiving water. Map attached? ☒			
e) Check Yes or No for the following: 1. Has a prior NPDES permit been granted for the discharge? Yes____ No ☒ If Yes, Permit Number: _____ 2. Is the discharge a "new discharge" as defined by 40 CFR Section 122.22? Yes____ No ☒ 3. Is the facility covered by an individual NPDES permit? Yes____ No ☒ If Yes, Permit Number _____ 4. Is there a pending application on file with EPA for this discharge? Yes____ No ☒ If Yes, date of submittal:			

2. Discharge information. Please provide information about the discharge, (attaching additional sheets as needed)

a) Name of receiving water into which discharge will occur: Muddy River
State Water Quality Classification: Class B Freshwater: Yes Marine Water: No

b) Describe the discharge activities for which the owner/applicant is seeking coverage:

1. Construction dewatering of groundwater intrusion and/or storm water accumulation.
2. Short-term or long-term dewatering of foundation sumps.
3. Other.

c) Number of outfalls 1

For each outfall:

d) Estimate the maximum daily and average monthly flow of the discharge (in gallons per day – GPD). Max Daily Flow 504,000 GPD
Average Monthly Flow 252,000 GPD

e) What is the maximum and minimum monthly pH of the discharge (in s.u.)? Max pH 6.4 Min pH 6.4

f) Identify the source of the discharge (i.e. potable water, surface water, or groundwater). If groundwater, the facility shall submit effluent test results, as required in Section 4.4.5 of the General Permit.

g) What treatment does the wastewater receive prior to discharge? None

h) Is the discharge continuous? Yes ✓ No If no, is the discharge periodic (P) (occurs regularly, i.e., monthly or seasonally, but is not continuous all year) or intermittent (I) (occurs sometimes but not regularly) or both (B)
If (P), number of days or months per year of the discharge and the specific months of discharge ;
If (I), number of days/year there is a discharge
Is the discharge temporary? Yes No ✓
If yes, approximate start date of dewatering approximate end date of dewatering

i) Latitude and longitude of each discharge within 100 feet (See http://www.epa.gov/tri/report/siting_tool): Outfall 1: long. 71.11036 lat. 42.335367;
Outfall 2: long. lat. ; Outfall 3: long. lat. .

j) If the source of the discharge is potable water, please provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water and attach any calculation sheets used to support stream flow and dilution calculations N/A cfs
(See Appendix VII for equations and additional information)

MASSACHUSETTS FACILITIES: See Section 3.4 and Appendix 1 of the General Permit for more information on Areas of Critical Environmental Concern (ACEC):

- k) Does the discharge occur in an ACEC? Yes _____ No ✓
If yes, provide the name of the ACEC: _____

3. Contaminant Information

- a) Are any pH neutralization and/or dechlorination chemicals used in the discharge? If so, include the chemical name and manufacturer; maximum and average daily quantity used as well as the maximum and average daily expected concentrations (mg/l) in the discharge, and the vendor's reported aquatic toxicity (NOAEL and/or LC₅₀ in percent for aquatic organism(s)).
- b) Please report any known remediation activities or water-quality issues in the vicinity of the discharge.

4. Determination of Endangered Species Act Eligibility: Provide documentation of ESA eligibility as required at Part 3.4 and Appendices III and IV. In addition, respond to the following questions.

- a) Are any listed threatened or endangered species, or designated critical habitat, in proximity to the discharge? Yes _____ No ✓
- b) Has any consultation with the federal services been completed? Yes _____ No ✓
- c) Is consultation underway? Yes _____ No ✓
- d) What were the results of the consultation with the U.S. Fish and Wildlife Service and/or NOAA Fisheries Service (check one): a "no jeopardy" opinion ✓ or written concurrence _____ on a finding that the discharges are not likely to adversely affect any endangered species or critical habitat.
- e) Which of the five eligibility criteria listed in Appendix 2, Section B (A,B,C,D,or E) have you met? A
- f) Please attach a copy of the most current federal listing of endangered and threatened species, found at USF&W website. **See Attached**

5. Documentation of National Historic Preservation Act requirements: Please respond to the following questions:

- a) Are any historic properties listed or eligible for listing on the National Register of Historic Places located on the facility site or in proximity to the discharge? Yes _____ No ✓
- b) Have any State or Tribal historic preservation officers been consulted in this determination? Yes _____ or No ✓ If yes, attach the results of the consultation(s).
- c) Which of the three National Historic Preservation Act requirements listed in Appendix 3, Section C (1,2 or 3) have you met? 1

6. Supplemental Information: Please provide any supplemental information. Attach any analytical data used to support the application. Attach any certification(s) required by the general permit

7. Signature Requirements: The Notice of Intent must be signed by the operator in accordance with the signatory requirements of 40 CFR Section 122.22 (see below) including the following certification:

I certify under penalty of law that (1) no biocides or other chemical additives except for those used for pH adjustment and/or dechlorination are used in the dewatering system; (2) the discharge consists solely of dewatering and authorized pH adjustment and/or

dechlorination chemicals; (3) the discharge does not come in contact with any raw materials, intermediate product, water product or finished product; (4) if the discharge of dewatering subsequently mixes with other permitted wastewater (i.e. stormwater) prior to discharging to the receiving water, any monitoring provided under this permit will be only for dewatering discharge; (5) where applicable, the facility has complied with the requirements of this permit specific to the Endangered Species Act and National Historic Preservation Act; and (6) this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate 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, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Facility Name: Mission Park Garage

Operator signature:

Title:

Date:

Federal regulations require this application to be signed as follows:

1. For a corporation, by a principal executive officer of at least the level of vice president;
2. For partnership or sole proprietorship, by a general partner or the proprietor, respectively, or,
3. For a municipality, State, Federal or other public facility, by either a principal executive officer or ranking elected official.



Enter your transmittal number

X250694

Transmittal Number

Your unique Transmittal Number can be accessed online: <http://mass.gov/dep/service/online/trasmfrm.shtml>

Massachusetts Department of Environmental Protection

Transmittal Form for Permit Application and Payment

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

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

3. Three copies of this form will be needed.

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

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

MassDEP
P.O. Box 4062
Boston, MA
02211

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

A. Permit Information

BRPWM-10

1. Permit Code: 7 or 8 character code from permit instructions

Temporary Construction Dewatering

3. Type of Project or Activity

Dewatering General Permit

2. Name of Permit Category

B. Applicant Information – Firm or Individual

Roxbury Tenants of Harvard

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

2. Last Name of Individual

11 New Whitney Street

5. Street Address

Boston

6. City/Town

Lori Taylor

11. Contact Person

3. First Name of Individual

MA

7. State

02115

8. Zip Code

617-232-0571

9. Telephone #

4. MI

10. Ext. #

12. e-mail address (optional)

C. Facility, Site or Individual Requiring Approval

Mission Park Garage

1. Name of Facility, Site Or Individual

10 Vining Street

2. Street Address

Boston

3. City/Town

MA

4. State

02115

5. Zip Code

6. Telephone #

7. Ext. #

8. DEP Facility Number (if Known)

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

10. BWSC Tracking # (if Known)

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

McPhail Associates, LLC

1. Name of Firm Or Individual

2269 Massachusetts Avenue

2. Address

Cambridge

3. City/Town

Jonathan Patch

8. Contact Person

MA

4. State

02140

5. Zip Code

617-868-1420

6. Telephone #

7. Ext. #

9. LSP Number (BWSC Permits only)

E. Permit - Project Coordination

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

EOEA File Number

F. Amount Due

Special Provisions:

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

DEP Use Only

Permit No:

Rec'd Date:

Reviewer:

30169

Check Number

385.00

Dollar Amount

3/12/2012

Date



APPENDIX C

Sketches of the garage drainage system prepared by
T.G. O'Connor Contracting Corp. and dated June 15, 2010.



T.G. O'Connor Contracting Corp.

1098 Turnpike Street
STOUGHTON, MA 02072
(781) 341-5084 Fax (781) 341-5086

JOB

Mission Park

SHEET NO.

OF

CALCULATED BY

DATE

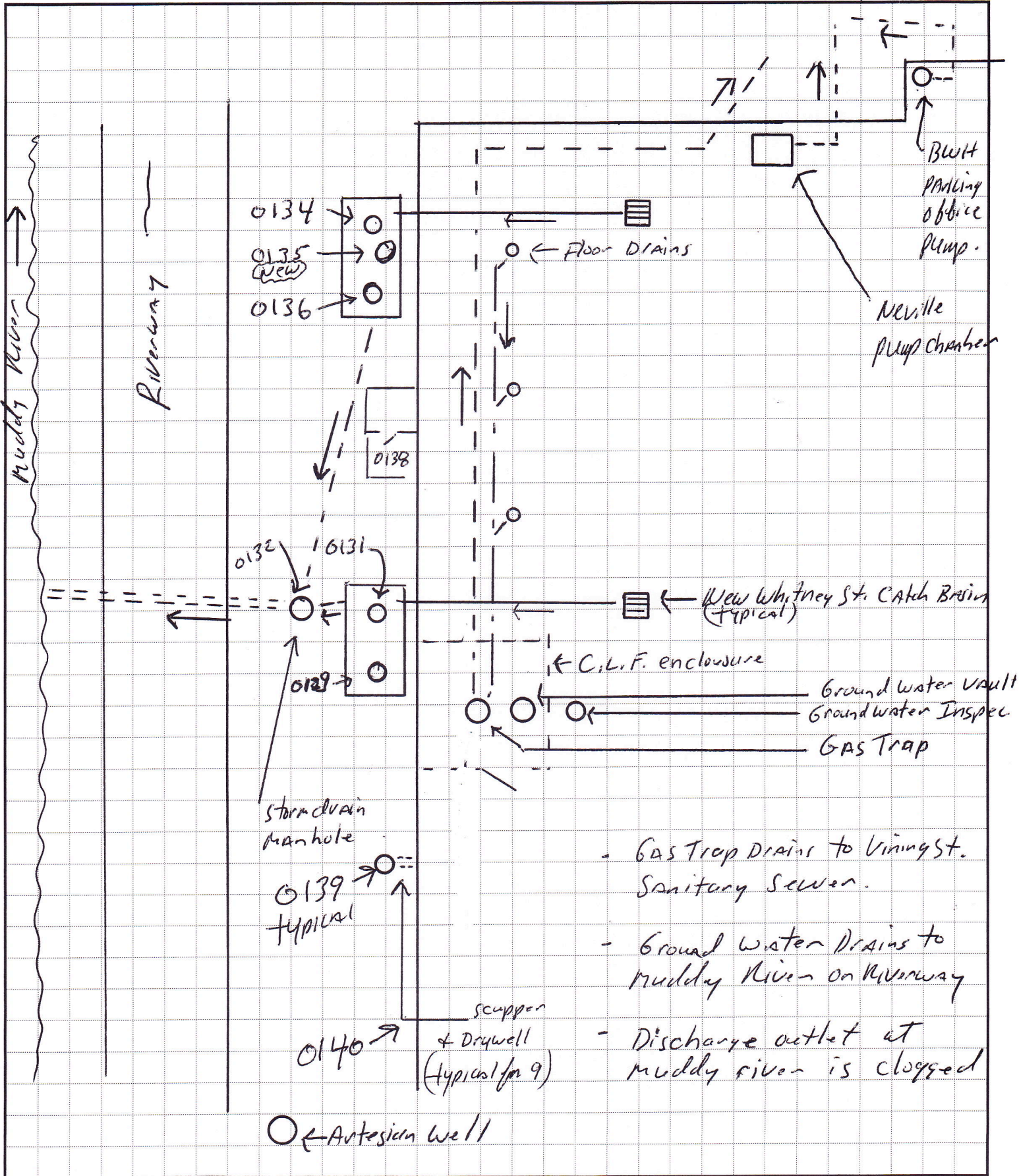
6-15-10

CHECKED BY

DATE

SCALE

Vining St.





T.G. O'Connor Contracting Corp.
1098 Turnpike Street
STOUGHTON, MA 02072
(781) 341-5084 Fax (781) 341-5086

JOB MISSION PARK STORM DRAIN TO MUDDY RIVER

SHEET NO. _____ OF LOCATION 1

CALCULATED BY TGO DATE 9/27/10

CHECKED BY _____ DATE _____

SCALE _____

MUDDY RIVER



Pole # 126



90'



23'



Pole # 125

RIVERWAY
- BITUMINOUS PAVEMENT -

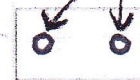
← 10" V.C PIPE

- GRASS EMBANKMENT -

MANHOLE



PARTICLE SEPARATOR
ACCESS COVERS



VENT



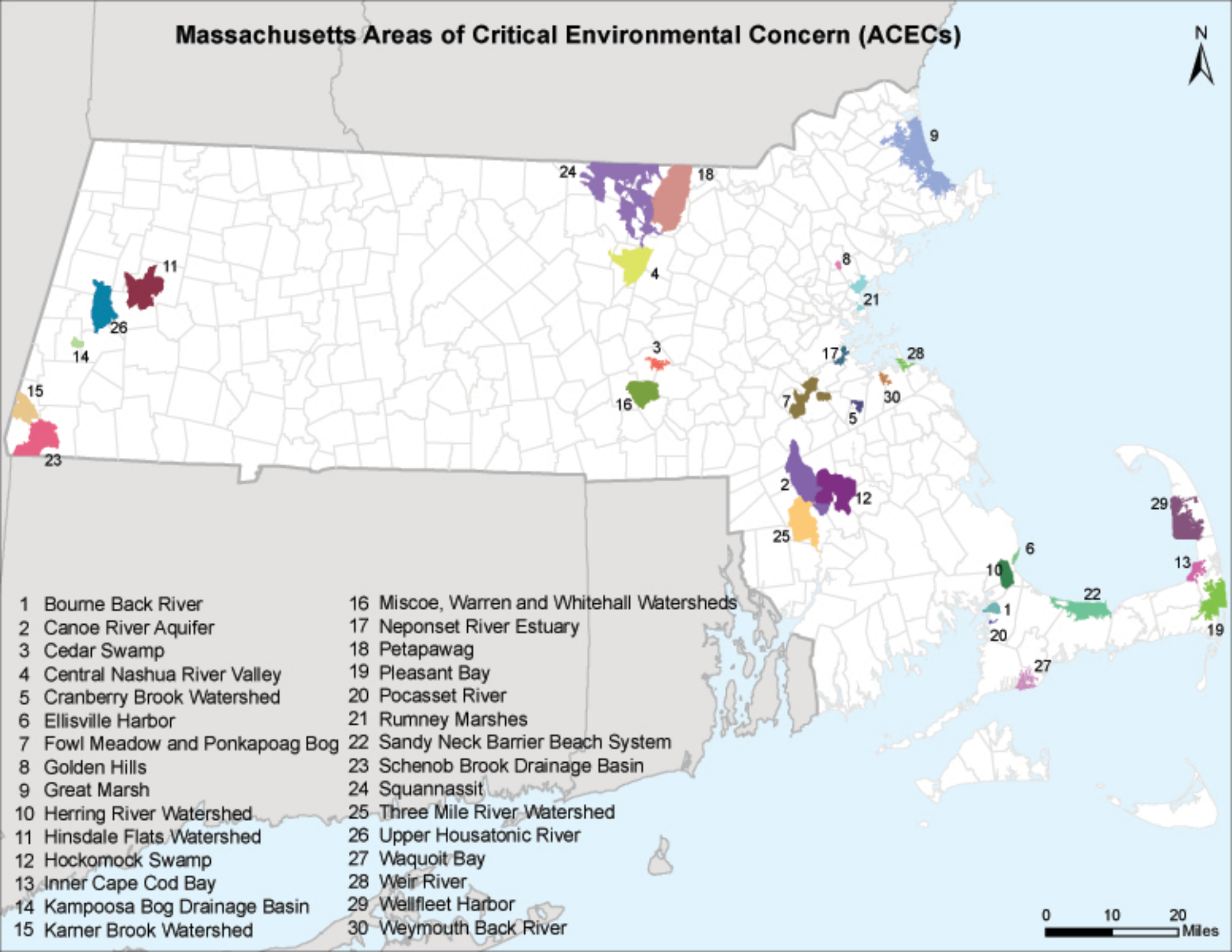
APPENDIX D

Massachusetts Areas of Critical Concern

U.S Fish and Wildlife Services Endangered Species List

Massachusetts Division of Fisheries and Wildlife Endangered Species List

Massachusetts Areas of Critical Environmental Concern (ACECs)



- | | |
|---------------------------------|--|
| 1 Bourne Back River | 16 Miscoe, Warren and Whitehall Watersheds |
| 2 Canoe River Aquifer | 17 Neponset River Estuary |
| 3 Cedar Swamp | 18 Petapawag |
| 4 Central Nashua River Valley | 19 Pleasant Bay |
| 5 Cranberry Brook Watershed | 20 Pocasset River |
| 6 Ellisville Harbor | 21 Rumney Marshes |
| 7 Fowl Meadow and Ponkapoag Bog | 22 Sandy Neck Barrier Beach System |
| 8 Golden Hills | 23 Schenob Brook Drainage Basin |
| 9 Great Marsh | 24 Squannassit |
| 10 Herring River Watershed | 25 Three Mile River Watershed |
| 11 Hinsdale Flats Watershed | 26 Upper Housatonic River |
| 12 Hockomock Swamp | 27 Waquoit Bay |
| 13 Inner Cape Cod Bay | 28 Weir River |
| 14 Kampoosa Bog Drainage Basin | 29 Wellfleet Harbor |
| 15 Karter Brook Watershed | 30 Weymouth Back River |

0 10 20 Miles

MASSACHUSETTS AREAS OF CRITICAL ENVIRONMENTAL CONCERN

November 2010

Total Approximate Acreage: 268,000 acres

Approximate acreage and designation date follow ACEC names below.

Bourne Back River

(1,850 acres, 1989) Bourne

Canoe River Aquifer and Associated Areas (17,200 acres, 1991) Easton, Foxborough, Mansfield, Norton, Sharon, and Taunton

Cedar Swamp

(1,650 acres, 1975) Hopkinton and Westborough

Central Nashua River Valley

(12,900 acres, 1996) Bolton, Harvard, Lancaster, and Leominster

Cranberry Brook Watershed

(1,050 acres, 1983) Braintree and Holbrook

Ellisville Harbor

(600 acres, 1980) Plymouth

Fowl Meadow and Ponkapoag Bog

(8,350 acres, 1992) Boston, Canton, Dedham, Milton, Norwood, Randolph, Sharon, and Westwood

Golden Hills

(500 acres, 1987) Melrose, Saugus, and Wakefield

Great Marsh (originally designated as Parker River/Essex Bay)

(25,500 acres, 1979) Essex, Gloucester, Ipswich, Newbury, and Rowley

Herring River Watershed

(4,450 acres, 1991) Bourne and Plymouth

Hinsdale Flats Watershed

(14,500 acres, 1992) Dalton, Hinsdale, Peru, and Washington

Hockomock Swamp

(16,950 acres, 1990) Bridgewater, Easton, Norton, Raynham, Taunton, and West Bridgewater

Inner Cape Cod Bay

(2,600 acres, 1985) Brewster, Eastham, and Orleans

Kampoosa Bog Drainage Basin

(1,350 acres, 1995) Lee and Stockbridge

Karner Brook Watershed

(7,000 acres, 1992) Egremont and Mount Washington

Miscoe, Warren, and Whitehall Watersheds

(8,700 acres, 2000) Grafton, Hopkinton, and Upton

Neponset River Estuary

(1,300 acres, 1995) Boston, Milton, and Quincy

Petapawag

(25,680 acres, 2002) Ayer, Dunstable, Groton, Pepperell, and Tyngsborough

Pleasant Bay

(9,240 acres, 1987) Brewster, Chatham, Harwich, and Orleans

Pocasset River

(160 acres, 1980) Bourne

Rumney Marshes

(2,800 acres, 1988) Boston, Lynn, Revere, Saugus, and Winthrop

Sandy Neck Barrier Beach System

(9,130 acres, 1978) Barnstable and Sandwich

Schenob Brook Drainage Basin

(13,750 acres, 1990) Mount Washington and Sheffield

Squannassit

(37,420 acres, 2002) Ashby, Ayer, Groton, Harvard, Lancaster, Lunenburg, Pepperell, Shirley, and Townsend

Three Mile River Watershed

(14,280 acres, 2008) Dighton, Norton, Taunton

Upper Housatonic River

(12,280 acres, 2009) Lee, Lenox, Pittsfield, Washington

Waquoit Bay

(2,580 acres, 1979) Falmouth and Mashpee

Weir River

(950 acres, 1986) Cohasset, Hingham, and Hull

Wellfleet Harbor

(12,480 acres, 1989) Eastham, Truro, and Wellfleet

Weymouth Back River

(800 acres, 1982) Hingham and Weymouth

Towns with ACECs within their Boundaries

November 2010

TOWN	ACEC	TOWN	ACEC
Ashby	Squannassit	Mt. Washington	Karner Brook Watershed
Ayer	Petapawag		Schenob Brook
	Squannassit	Newbury	Great Marsh
Barnstable	Sandy Neck Barrier Beach System	Norton	Hockomock Swamp
Bolton	Central Nashua River Valley		Canoe River Aquifer
Boston	Rumney Marshes		Three Mile River Watershed
	Fowl Meadow and Ponkapoag Bog	Norwood	Fowl Meadow and Ponkapoag Bog
	Neponset River Estuary	Orleans	Inner Cape Cod Bay
Bourne	Pocasset River		Pleasant Bay
	Bourne Back River	Pepperell	Petapawag
	Herring River Watershed		Squannassit
Braintree	Cranberry Brook Watershed	Peru	Hinsdale Flats Watershed
Brewster	Pleasant Bay	Pittsfield	Upper Housatonic River
	Inner Cape Cod Bay	Plymouth	Herring River Watershed
Bridgewater	Hockomock Swamp		Ellisville Harbor
Canton	Fowl Meadow and Ponkapoag Bog	Quincy	Neponset River Estuary
Chatham	Pleasant Bay	Randolph	Fowl Meadow and Ponkapoag Bog
Cohasset	Weir River	Raynham	Hockomock Swamp
Dalton	Hinsdale Flats Watershed	Revere	Rumney Marshes
Dedham	Fowl Meadow and Ponkapoag Bog	Rowley	Great Marsh
Dighton	Three Mile River Watershed	Sandwich	Sandy Neck Barrier Beach System
Dunstable	Petapawag	Saugus	Rumney Marshes
Eastham	Inner Cape Cod Bay		Golden Hills
	Wellfleet Harbor	Sharon	Canoe River Aquifer
Easton	Canoe River Aquifer		Fowl Meadow and Ponkapoag Bog
	Hockomock Swamp	Sheffield	Schenob Brook
Egremont	Karner Brook Watershed	Shirley	Squannassit
Essex	Great Marsh	Stockbridge	Kampoosa Bog Drainage Basin
Falmouth	Waquoit Bay	Taunton	Hockomock Swamp
Foxborough	Canoe River Aquifer		Canoe River Aquifer
Gloucester	Great Marsh		Three Mile River Watershed
Grafton	Miscoe-Warren-Whitehall Watersheds	Truro	Wellfleet Harbor
		Townsend	Squannassit
Groton	Petapawag	Tyngsborough	Petapawag
	Squannassit	Upton	Miscoe-Warren-Whitehall Watersheds
Harvard	Central Nashua River Valley		
	Squannassit	Wakefield	Golden Hills
Harwich	Pleasant Bay	Washington	Hinsdale Flats Watershed
Hingham	Weir River		Upper Housatonic River
	Weymouth Back River	Wellfleet	Wellfleet Harbor
Hinsdale	Hinsdale Flats Watershed	W Bridgewater	Hockomock Swamp
Holbrook	Cranberry Brook Watershed	Westborough	Cedar Swamp
Hopkinton	Miscoe-Warren-Whitehall Watersheds	Westwood	Fowl Meadow and Ponkapoag Bog
		Weymouth	Weymouth Back River
	Cedar Swamp	Winthrop	Rumney Marshes
Hull	Weir River		
Ipswich	Great Marsh		
Lancaster	Central Nashua River Valley		
	Squannassit		
Lee	Kampoosa Bog Drainage Basin		
	Upper Housatonic River		
Lenox	Upper Housatonic River		
Leominster	Central Nashua River Valley		
Lunenburg	Squannassit		
Lynn	Rumney Marshes		
Mansfield	Canoe River Aquifer		
Mashpee	Waquoit Bay		
Melrose	Golden Hills		
Milton	Fowl Meadow and Ponkapoag Bog		
	Neponset River Estuary		

FEDERALLY LISTED ENDANGERED AND THREATENED SPECIES
IN MASSACHUSETTS

Only Plymouth County has federally-designated Critical Habitat in Massachusetts. The following are federally-listed species by county:

Common Name	Species	Status	County/General Distribution
Shortnose sturgeon ¹	<i>Acipenser brevirostrum</i>	E	Atlantic coastal waters and Connecticut and Merrimack Rivers
Eastern cougar	<i>Felis concolor cougar</i>	E	Entire state/historic
Indiana bat	<i>Myotis sodalis</i>	E	Berkshire/historic
Bald eagle	<i>Haliaeetus leucocephalus</i>	D ²	Barnstable, Berkshire, Essex, Franklin, Hampden, Hampshire, Plymouth, Worcester
Piping plover	<i>Charadrius melodus</i>	T	Nesting: Barnstable, Essex, Plymouth, Dukes, Nantucket, Bristol (coastal beaches only) Migratory: Atlantic Coast
Roseate tern	<i>Sterna dougallii dougallii</i>	E	Nesting: Barnstable, Plymouth, Dukes (coastal islands) Migratory: Atlantic Coast
Bog turtle	<i>Clemmys muhlenbergii</i>	T	Berkshire
Dwarf wedgemussel	<i>Alasmidonta heterodon</i>	E	Hampshire, Franklin (Connecticut River watershed)
Puritan tiger beetle	<i>Cicindela puritana</i>	T	Hampshire (Connecticut River floodplain)
Northeastern beach tiger beetle	<i>Cicindela dorsalis dorsalis</i>	T	Barnstable, Duke (coastal beaches only)
American burying beetle	<i>Nicrophorus americanus</i>	E	Dukes, Nantucket (Penikese & Nantucket Isl.) reintroduced populations
Small whorled pogonia	<i>Isotria medeoloides</i>	T	Hampshire, Essex, Hampden, Worcester, Middlesex
Sandplain gerardia	<i>Agalinus acuta</i>	E	Barnstable, Duke
Northeastern bulrush	<i>Scirpus ancistrochaetus</i>	E	Franklin

¹ Principal responsibility for this species is vested with the National Marine Fisheries Service.

² Delisted. Protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act.

9/27/2007

FEDERALLY LISTED ENDANGERED AND THREATENED SPECIES
IN NEW HAMPSHIRE

There is no federally-designated Critical Habitat in New Hampshire. The following are federally-listed species by county:

Common Name	Species	Status	County/General Distribution
Shortnose sturgeon ¹	<i>Acipenser brevirostrum</i>	E	Atlantic coastal waters
Bald eagle	<i>Haliaeetus leucocephalus</i>	D ²	Nesting: Belknap, Coos, Merrimack, Cheshire, Sullivan, Strafford Migratory/ wintering: entire state
Piping plover	<i>Charadrius melodus</i>	T	Nesting: Rockingham (coastal beaches)
Roseate tern	<i>Sterna dougallii dougallii</i>	E	Nesting: Isles of Shoals Migratory: Atlantic Coast
Canada lynx	<i>Lynx canadensis</i>	T	Coos
Eastern cougar	<i>Felis concolor cougar</i>	E	Entire state/historic
Gray wolf	<i>Canis lupus</i>	E	Historic
Dwarf wedgemussel	<i>Alasmidonta heterodon</i>	E	Cheshire (S. Branch Ashuelot, Ashuelot River) Sullivan (Connecticut River main stem), Grafton (Connecticut River main stem), Coos (Connecticut River main stem, Johns River)
Puritan tiger beetle	<i>Cicindela puritana</i>	T	Extirpated (Connecticut River floodplain)
Karner blue butterfly	<i>Lycaeides melissa samuelis</i>	E	Merrimack (Concord, Pembroke)
Jesup's milk-vetch,	<i>Astragalus robbinsii</i> var. <i>jesupi</i>	E	Sullivan (Plainfield, Charlestown)
Small whorled pogonia	<i>Isotria medeoloides</i>	T	Belknap, Strafford, Grafton, Merrimack, Rockingham, Carroll, Hillsborough
Northeastern bulrush	<i>Scirpus ancistrochaetus</i>	E	Sullivan

¹ Principal responsibility for this species is vested with the National Marine Fisheries Service.

² Delisted. Protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act.

9/27/2007



New England Field Office

Conserving the Nature of New England

Monday,
March 12, 2012

ENDANGERED SPECIES

Overview
Consultation
N.E. Listed Species
Species Under Review
Recovery Activities
Habitat Conservation
Images
Biological Opinions

PARTNERS FOR FISH & WILDLIFE

Overview
Restoration Initiatives
Species & Habitats of
Special Concern
Accomplishments
How to Participate
Habitat Restoration
Links

ENVIRONMENTAL CONTAMINANTS

Overview
BTAG
NRDAR
Special Studies
Oil Spills

FEDERAL ACTIVITIES

Overview
Federal Projects &
Permits
Wetland Permits
FERC_Hydropower
Projects
River Flow Protection
Wind Energy Projects

OUTREACH

NH Envirothon
Kids Corner
Let's Go Outside

Staff Directory

Our Location

HOME



Endangered Species

New England Listed Species

The following federally-listed species are protected in New England. This list includes links to species information on our National Fish and Wildlife Service website including current Federal Register documents, HCPs, Recovery Plans, Life History accounts.

Vertebrates

Mammals

Eastern Cougar - [Puma \(=Felis\) concolor cougar](#)
Gray Wolf - [Canis lupus](#)
Indiana Bat - [Myotis sodalis](#)
Canada Lynx - [Lynx canadensis](#)

Birds

Atlantic Coast Piping Plover - [Charadrius melodus](#)
Birds of North America Species Account [Piping Plover](#)
Atlantic Coast piping plover website [Piping Plover](#)
Roseate Tern - [Sterna dougallii dougallii](#)
Birds of North America Species Account [Roseate Tern](#)

Reptiles

Bog Turtle - [Clemmys muhlenbergii](#)
Northern Redbelly Cooter (Plymouth redbelly turtle) [Pseudemys rubriventris bangsii](#)
[Northern Redbelly Cooter 5-year Review](#); (pdf size 1.6MB*) May 2007

Fish

Atlantic Salmon - [Salmo salar](#) (Maine only)
[Maine Atlantic Salmon Atlas](#)

Invertebrates

Insects

American Burying Beetle - [Nicrophorus americanus](#)
Karner Blue Butterfly - [Lycaeides melissa samuelis](#)
Karner Blue Butterfly [Fact sheet](#)
Northeastern Beach Tiger Beetle - [Cicindela dorsalis dorsalis](#)
Puritan Tiger Beetle - [Cicindela puritana](#)
[Draft Puritan Tiger Beetle](#); (pdf size 2.4MB*) 5-year Review

Mussels

Dwarf Wedgemussel - [Alasmidonta heterodon](#)
[Dwarf Wedgemussel 5-Year Status Review 2007](#) (pdf size 1.14MB*)

Plants

Jesup's Milkvetch - [Astragalus robbinsii var. jesupi](#)
Northeastern Bulrush - [Scirpus ancistrochaetus](#)
Sandplain Gerardia - [Agalinis acuta](#)
Small Whorled Pogonia - [Isotria medeoloides](#)
Seabeach Amaranth - [Amaranthus pumilus](#) (historic)
American Chaffseed - [Schwalbea americana](#) (historic)
Eastern Prairie Fringed Orchid - [Platanthera leucophaea](#) (Maine only)
Furbish's Lousewort - [Pedicularis furbishiae](#) (Maine only)

Candidate species and species recently delisted are identified below, including links for additional information regarding their status.

Candidate Species

The Service has recently completed a status assessment for the following species and determined that federal listing is "warranted, but precluded", i.e. the status of the species indicates that it should be listed but the listing is superceded by higher listing actions.

While there is currently no obligation for Federal Agencies to consult with us regarding these species, coordination is encouraged to avoid project delays that may occur as a result of the species becoming federally-listed during the planning or construction phases of a given project. In addition, the Service is interested in promoting conservation actions that may result in benefits to these species that will prevent the need to list it. Information regarding our [candidate conservation](#) program may help you decide if you would like to become involved.

- [New England Cottontail; *Sylvilagus transitionalis*](#)
- Red Knot [Calidris canutus rufa](#); [Red Knot Fact Sheet](#)

Delisted Species

Bald Eagle - [Haliaeetus leucocephalus](#)
[Bald Eagle Guidance](#)



NCTC Eagle Cam

This Bald Eagle image is a link to a Service website that chronicles the activities of the eagle nest located on the grounds of the USFWS National Conservation Training Center near the Potomac River in Shepherdstown, West Virginia. The nest has been active for four seasons, fledging several juvenile bald eagles.

Files in PDF format will require Acrobat Reader to access the content. If you do not have a copy, please select the link [or click the image] to take you to the Adobe website where you can download a free copy. [Get Adobe Acrobat Reader](#)

Last updated: October 28, 2010



APPENDIX E

Laboratory Chemical Test Data



ANALYTICAL REPORT

Lab Number:	L1201316
Client:	McPhail Associates 2269 Massachusetts Avenue Cambridge, MA 02140
ATTN:	Ambrose Donovan
Phone:	(617) 868-1420
Project Name:	10 VINING ST
Project Number:	5347.9.00
Report Date:	02/20/12

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

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



Project Name: 10 VINING ST
Project Number: 5347.9.00

Lab Number: L1201316
Report Date: 02/20/12

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1201316-01	GW SUMP 01/25/12	BOSTON, MA	01/25/12 10:15

Project Name: 10 VINING ST
Project Number: 5347.9.00

Lab Number: L1201316
Report Date: 02/20/12

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 all of the requirements of NELAC, for all NELAC accredited parameters. 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. 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. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

Report Submission

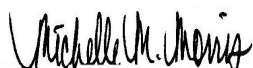
This report replaces the report issued on January 31, 2012. Total Lead results have been removed.

Metals

The WG515515-3 Laboratory Duplicate RPD, performed on L1201316-01, is above the acceptance criteria for Arsenic (35%); however, the sample and Laboratory Duplicate results are less than five times the reporting limit. Therefore, the RPD is valid.

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:

 Michelle M. Morris

Title: Technical Director/Representative

Date: 02/20/12

METALS

Project Name: 10 VINING ST

Lab Number: L1201316

Project Number: 5347.9.00

Report Date: 02/20/12

SAMPLE RESULTS

Lab ID: L1201316-01

Date Collected: 01/25/12 10:15

Client ID: GW SUMP 01/25/12

Date Received: 01/25/12

Sample Location: BOSTON, MA

Field Prep: None

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Antimony, Total	ND		mg/l	0.0005	--	1	01/25/12 17:25	01/27/12 18:05	EPA 3005A	1,6020	BM
Arsenic, Total	0.0011		mg/l	0.0005	--	1	01/25/12 17:25	01/27/12 18:05	EPA 3005A	1,6020	BM
Cadmium, Total	ND		mg/l	0.0002	--	1	01/25/12 17:25	01/27/12 18:05	EPA 3005A	1,6020	BM
Chromium, Total	0.0010		mg/l	0.0005	--	1	01/25/12 17:25	01/27/12 18:05	EPA 3005A	1,6020	BM
Copper, Total	0.0117		mg/l	0.0005	--	1	01/25/12 17:25	01/27/12 18:05	EPA 3005A	1,6020	BM
Iron, Total	0.27		mg/l	0.05	--	1	01/25/12 17:25	01/26/12 11:59	EPA 3005A	19,200.7	AI
Mercury, Total	ND		mg/l	0.0002	--	1	01/26/12 12:00	01/26/12 16:38	EPA 245.1	3,245.1	DM
Nickel, Total	0.0026		mg/l	0.0005	--	1	01/25/12 17:25	01/27/12 18:05	EPA 3005A	1,6020	BM
Silver, Total	ND		mg/l	0.0004	--	1	01/25/12 17:25	01/27/12 18:05	EPA 3005A	1,6020	BM
Zinc, Total	0.0130		mg/l	0.0050	--	1	01/25/12 17:25	01/27/12 18:05	EPA 3005A	1,6020	BM



Project Name: 10 VINING ST

Lab Number: L1201316

Project Number: 5347.9.00

Report Date: 02/20/12

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG515483-1									
Mercury, Total	ND	mg/l	0.0002	--	1	01/26/12 12:00	01/26/12 16:33	3,245.1	DM

Prep Information

Digestion Method: EPA 245.1

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG515513-1									
Iron, Total	ND	mg/l	0.05	--	1	01/25/12 17:25	01/26/12 11:53	19,200.7	AI

Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG515515-1									
Antimony, Total	ND	mg/l	0.0005	--	1	01/25/12 17:25	01/27/12 17:10	1,6020	BM
Arsenic, Total	ND	mg/l	0.0005	--	1	01/25/12 17:25	01/27/12 17:10	1,6020	BM
Cadmium, Total	ND	mg/l	0.0002	--	1	01/25/12 17:25	01/27/12 17:10	1,6020	BM
Chromium, Total	ND	mg/l	0.0005	--	1	01/25/12 17:25	01/27/12 17:10	1,6020	BM
Copper, Total	ND	mg/l	0.0005	--	1	01/25/12 17:25	01/27/12 17:10	1,6020	BM
Nickel, Total	ND	mg/l	0.0005	--	1	01/25/12 17:25	01/27/12 17:10	1,6020	BM
Silver, Total	ND	mg/l	0.0004	--	1	01/25/12 17:25	01/27/12 17:10	1,6020	BM
Zinc, Total	ND	mg/l	0.0050	--	1	01/25/12 17:25	01/27/12 17:10	1,6020	BM

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis Batch Quality Control

Project Name: 10 VINING ST

Project Number: 5347.9.00

Lab Number: L1201316

Report Date: 02/20/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG515483-2								
Mercury, Total	103		-		85-115	-		
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG515513-2								
Iron, Total	100		-		85-115	-		
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG515515-2								
Antimony, Total	93		-		80-120	-		
Arsenic, Total	103		-		80-120	-		
Cadmium, Total	109		-		80-120	-		
Chromium, Total	98		-		80-120	-		
Copper, Total	104		-		80-120	-		
Nickel, Total	104		-		80-120	-		
Silver, Total	99		-		80-120	-		
Zinc, Total	104		-		80-120	-		

Matrix Spike Analysis

Batch Quality Control

Project Name: 10 VINING ST

Project Number: 5347.9.00

Lab Number: L1201316

Report Date: 02/20/12

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG515483-4 QC Sample: L1201365-01 Client ID: MS Sample												
Mercury, Total	ND	0.001	0.0013	129		-	-		70-130	-		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG515513-4 QC Sample: L1201316-01 Client ID: GW SUMP 01/25/12												
Iron, Total	0.27	1	1.3	103		-	-		75-125	-		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG515515-4 QC Sample: L1201316-01 Client ID: GW SUMP 01/25/12												
Antimony, Total	ND	0.5	0.5010	100		-	-		80-120	-		20
Arsenic, Total	0.0011	0.12	0.1264	104		-	-		80-120	-		20
Cadmium, Total	ND	0.051	0.0535	105		-	-		80-120	-		20
Chromium, Total	0.0010	0.2	0.1974	98		-	-		80-120	-		20
Copper, Total	0.0117	0.25	0.2682	103		-	-		80-120	-		20
Nickel, Total	0.0026	0.5	0.5092	101		-	-		80-120	-		20
Silver, Total	ND	0.05	0.0484	97		-	-		80-120	-		20
Zinc, Total	0.0130	0.5	0.5131	100		-	-		80-120	-		20

Project Name: 10 VINING ST
Project Number: 5347.9.00

Lab Duplicate Analysis

Batch Quality Control

Lab Number: L1201316
Report Date: 02/20/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG515483-3 QC Sample: L1201365-01 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/l	NC		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG515513-3 QC Sample: L1201316-01 Client ID: GW SUMP 01/25/12						
Iron, Total	0.27	0.27	mg/l	0		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG515515-3 QC Sample: L1201316-01 Client ID: GW SUMP 01/25/12						
Antimony, Total	ND	ND	mg/l	NC		20
Arsenic, Total	0.0011	0.0008	mg/l	35		20
Cadmium, Total	ND	ND	mg/l	NC		20
Chromium, Total	0.0010	0.001	mg/l	2		20
Copper, Total	0.0117	0.0119	mg/l	1		20
Nickel, Total	0.0026	0.0027	mg/l	3		20
Silver, Total	ND	ND	mg/l	NC		20
Zinc, Total	0.0130	0.0133	mg/l	2		20

INORGANICS & MISCELLANEOUS

Project Name: 10 VINING ST

Project Number: 5347.9.00

Lab Number: L1201316

Report Date: 02/20/12

SAMPLE RESULTS

Lab ID: L1201316-01
 Client ID: GW SUMP 01/25/12
 Sample Location: BOSTON, MA
 Matrix: Water

Date Collected: 01/25/12 10:15
 Date Received: 01/25/12
 Field Prep: None

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
pH (H)	6.4		SU	-	NA	1	-	01/26/12 00:40	30,4500H+-B	DE
Chromium, Hexavalent	ND		mg/l	0.010	--	1	01/25/12 22:00	01/25/12 22:18	30,3500CR-D	JT
Anions by Ion Chromatography - Westborough Lab										
Chloride	850		mg/l	25	--	50	-	01/26/12 23:48	44,300.0	AU



Project Name: 10 VINING ST

Lab Number: L1201316

Project Number: 5347.9.00

Report Date: 02/20/12

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: WG515351-1										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	01/25/12 22:00	01/25/12 22:15	30,3500CR-D	JT
Anions by Ion Chromatography - Westborough Lab for sample(s): 01 Batch: WG515783-1										
Chloride	ND		mg/l	0.50	--	1	-	01/26/12 18:12	44,300.0	AU

Lab Control Sample Analysis

Batch Quality Control

Project Name: 10 VINING ST

Project Number: 5347.9.00

Lab Number: L1201316

Report Date: 02/20/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG515351-2								
Chromium, Hexavalent	102		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG515364-1								
pH	100		-		99-101	-		5
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 Batch: WG515783-2								
Chloride	102		-		90-110	-		

Matrix Spike Analysis

Batch Quality Control

Project Name: 10 VINING ST

Project Number: 5347.9.00

Lab Number: L1201316

Report Date: 02/20/12

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: WG515351-4 QC Sample: L1201316-01 Client ID: GW SUMP 01/25/12												
Chromium, Hexavalent	ND	0.1	0.095	95		-	-		85-115	-		20
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG515783-3 QC Sample: L1201363-02 Client ID: MS Sample												
Chloride	130	100	230	101		-	-		40-151	-		18

Lab Duplicate Analysis Batch Quality Control

Project Name: 10 VINING ST

Project Number: 5347.9.00

Lab Number: L1201316

Report Date: 02/20/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG515351-3 QC Sample: L1201316-01 Client ID: GW SUMP 01/25/12						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG515364-2 QC Sample: L1201337-01 Client ID: DUP Sample						
pH	6.2	6.1	SU	2		5
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG515783-4 QC Sample: L1201363-02 Client ID: DUP Sample						
Chloride	130	130	mg/l	0		18

Project Name: 10 VINING ST

Project Number: 5347.9.00

Lab Number: L1201316

Report Date: 02/20/12

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler

A Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1201316-01A	Plastic 1000ml unpreserved	A	7	2.7	Y	Absent	CL-300(28),PH-4500(.01)
L1201316-01B	Plastic 1000ml unpreserved	A	7	2.7	Y	Absent	HEXCR-3500(1)
L1201316-01C	Plastic 500ml HNO3 preserved	A	<2	2.7	Y	Absent	CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),FE-UI(180),HG-U(28),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180)

*Values in parentheses indicate holding time in days

Project Name: 10 VINING ST
Project Number: 5347.9.00

Lab Number: L1201316
Report Date: 02/20/12

GLOSSARY

Acronyms

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.
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.
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.
NI	- Not Ignitable.
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.

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.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
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 five times (5x) 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.
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.
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 RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.
M	- Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
NJ	- Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

Report Format: Data Usability Report



Project Name: 10 VINING ST**Lab Number:** L1201316**Project Number:** 5347.9.00**Report Date:** 02/20/12**Data Qualifiers**

- 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.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Project Name: 10 VINING ST
Project Number: 5347.9.00

Lab Number: L1201316
Report Date: 02/20/12

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.
- 3 Methods for the Determination of Metals in Environmental Samples, Supplement I. EPA/600/R-94/111. May 1994.
- 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.
- 30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.
- 44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.

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.



Certificate/Approval Program Summary

Last revised January 30, 2012 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. **NELAP Accredited Solid Waste/Soil.**

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB), 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D))

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E).)

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3,3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: 2009024.

Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 353.2, SM2130B, 2320B, 2540C, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, SM2320B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B, 4500P-E, 5210B, 5220D, 5310C, 9010B, 9040B, 9030B, 7470A, 7196A, 2340B, EPA 200.7, 6010, 200.8, 6020, 245.1, 1311, 1312, 3005A, Enterolert, 9223D, 9222D. Organic Parameters: 608, 8081, 8082, 8330, 8151A, 624, 8260, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

Solid Waste/Soil (Inorganic Parameters: 9010B, 9012A, 9014A, 9040B, 9045C, 6010B, 7471A, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260B, 8270C, 8330, 8151A, 8081A, 8082, 3540C, 3546, 3580A, 3630C, 5030B, 5035.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

Drinking Water (Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl) (EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate); (EPA 353.2 for: Nitrate-N, Nitrite-N); (SM4500NO3-F for: Nitrate-N and Nitrite-N); 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B. Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics); (504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), EPA 332. Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; ColilertQT SM9223B; MF-SM9222D.)

Page 20 of 24
Non-Potable Water (Inorganic Parameters: (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn); (EPA 200.7 for: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn); 245.1, SM4500H,B, EPA 120.1,

SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: 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-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. Microbiology Parameters: (ColilertQT SM9223B;Enterolert-QT: SM9222D-MF.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 245.2, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. Organic Parameters: 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2120B, 2310B, 2320B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A, 8151A.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040B, 9045C, 9050C, 9065,1311, 1312, 3005A, 3050B. Organic Parameters: SW-846 3540C, 3546, 3550B, 3580A, 3630C, 5030B, 5035, 8260B, 8270C, 8330, 8151A, 8015B, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.2, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500CL-E, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 6020, 6020A, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, 4500CN-CE, EPA 245.1, 245.2, SW-846 9040B, 3005A, 3015, EPA 6010B, 6010C, 7196A, 3060A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8081A, 8081B, 8082, 8082A, 8151A, 8330, NJ OQA-QAM-025 Rev.7, NJ EPH.)

Solid & Chemical Materials (Inorganic Parameters: SW-846, 6010B, 6010C, 7196A, 3060A, 9010B, 9030B, 1010, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9014, 9012A, 9040B, 9045C, 9050A, 9065. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3545, 3546, 3550B, 3580A, 3630C, 5030B, 5035L, 5035H, NJ OQA-QAM-025 Rev.7, NJ EPH.)

New York Department of Health Certificate/Lab ID: 11148. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-04-1-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 9010B, 9030B.. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8015B, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. Organic Parameters: MA-EPH, MA-VPH.

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. **NELAP Accredited.**
Drinking Water (Organic Parameters: EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 1312, 200.7, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P, BE. Organic Parameters: EPA 3510C, 3005A, 3630C, 5030B, 625, 624, 608, 8081A, 8081B, 8082, 802A, 8151A, 8260B, 8270C, 8270D, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3050B, 3060A, 6010B, 6010C, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065, SM 4500NH₃-H. Organic Parameters: 3540C, 3546, 3580A, 3630C, 5035, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 8330)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. **NELAP Accredited via NY-DOH.**

Refer to MA-DEP Certificate for Potable and Non-Potable Water.

Refer to NJ-DEP Certificate for Potable and Non-Potable Water.

Texas Commission on Environmental Quality Certificate/Lab ID: T104704476-09-1. **NELAP Accredited.**

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH₃-H, 4500NO₂B, 4500P-E, 4500 S²⁻D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Virginia Division of Consolidated Laboratory Services Certificate/Lab ID: 460195. **NELAP Accredited.**

Non-Potable Water (Inorganic Parameters: EPA 3005A, 3015, 1312, 6010B, 6010C, SM4500S-D, SM4500-CN-CE, Lachat 10-204-00-1-X. Organic Parameters: EPA 8260B)

Solid & Hazardous Waste (Inorganic Parameters: EPA 3050B, 1311, 1312, 6010B, 6010C, 9030B, 9010B, 9012A, 9014. Organic Parameters: EPA 5035, 5030B, 8260B.)

Department of Defense, L-A-B Certificate/Lab ID: L2217.

Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO₃-F, 5220D, 5310C, 2320B, 2540C, 3005A, 3015, 9010B, 9056. Organic Parameters: EPA 8260B, 8270C, 8330A, 625, 8082, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9010, 9012A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8270C, 8330A/B-prep, 8082, 8081A, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

The following analytes are not included in our current NELAP/TNI Scope of Accreditation:

EPA 8260B: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A**: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C**: Methyl naphthalene, Dimethyl naphthalene, Total Methyl naphthalenes, Total Dimethyl naphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625**: 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO₂ in a soil matrix, NO₃ in a soil matrix, SO₄ in a soil matrix.



CHAIN OF CUSTODY

PAGE 1 OF 1

WESTBORO, MA
TEL: 508-898-9220
FAX: 508-898-9193

MANSFIELD, MA
TEL: 508-822-9300
FAX: 508-822-3288

Client Information

Client: McPhail Assoc.
Address: 2269 Mass Ave
Cambridge, MA
Phone: 617-868-1420
Fax:

Email: Jwp@mcphailgeo.com

☐ These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits:

If MS is required, indicate in Sample Specific Comments which samples and what tests MS to be performed.
(Note: All **CAM** methods for inorganic analyses require MS every 20 soil samples)

* Metals to be run and reported as Total not Dissolved per Bill Burns - LC

Project Information

Project Name: 10 Vining St
Project Location: Boston, MA
Project #: 5347.900
Project Manager: JWP
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: 1/31/12 Time:

Date Rec'd in Lab: 1/25/12ALPHA Job #: 11201316

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☒ ADEx ☐ Add'l Deliverables

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program EPA NPDES Criteria Dewatering General Permit (DGP)

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTO

☐ Yes ☒ No Are MCP Analytical Methods Required?
☐ Yes ☒ No Is Matrix Spike (MS) Required on this SDG? (If yes see note in Comments)
☐ Yes ☒ No Are CT RCP (Reasonable Confidence Protocols) Required?

ANALYSIS
Dissolved Metals: Sb, Ni, Ag, Zn, Pb
Hex Chrom
pH, Chloride

SAMPLE HANDLING

Filtration
☐ Done
☐ Not needed
☒ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Sample Specific Comments

TOTAL # BOTTLES

3

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT
MA MCP or CT RCP?

Container Type P P PPreservative C A A

Relinquished By:

Date/Time

Received By:

Date/Time

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 Terms and Conditions. See reverse side.



CHAIN OF CUSTODY

PAGE 1 OF 1

WESTBORO, MA
TEL: 508-898-9220
FAX: 508-898-9193

MANSFIELD, MA
TEL: 508-822-9300
FAX: 508-822-3288

Client Information

Client: McPhail Assoc.
Address: 2269 Mass Ave
Cambridge, MA
Phone: 617-868-1420
Fax:

Email: Jwp@mcphailgeo.com

☐ These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits:

If MS is required, indicate in Sample Specific Comments which samples and what tests MS to be performed.
(Note: All **CAM** methods for inorganic analyses require MS every 20 soil samples)

* Metals to be run and reported as Total not Dissolved per Bill Burns - LC
**Do not report Total Pb per J. Patch - LC

Project Information

Project Name: 10 Vining St
Project Location: Boston, MA
Project #: 5347.900
Project Manager: JWP
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: 1/31/12 Time:

Date Rec'd in Lab: 1/25/12ALPHA Job #: 11201316

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☒ ADEX ☐ Add'l Deliverables

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program EPA NPDES Criteria Dewatering General Permit (DGP)

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTO

☐ Yes ☒ No Are MCP Analytical Methods Required?
☐ Yes ☒ No Is Matrix Spike (MS) Required on this SDG? (If yes see note in Comments)
☐ Yes ☒ No Are CT RCP (Reasonable Confidence Protocols) Required?

ANALYSIS
Dissolved Metals: Sb, Ni, Ag, Zn, Pb *
Hex Chrom
pH, Chloride

SAMPLE HANDLING

Filtration
☐ Done
☐ Not needed
☒ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Sample Specific Comments

TOTAL # BOTTLES

3

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT
MA MCP or CT RCP?

Container Type P P PPreservative C A A

Relinquished By:

Date/Time

Received By:

Date/Time

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 Terms and Conditions. See reverse side.



ANALYTICAL REPORT

Lab Number:	L1201428
Client:	McPhail Associates 2269 Massachusetts Avenue Cambridge, MA 02140
ATTN:	Ambrose Donovan
Phone:	(617) 868-1420
Project Name:	10 VINING ST.
Project Number:	5347.9.00
Report Date:	01/30/12

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

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



Project Name: 10 VINING ST.
Project Number: 5347.9.00

Lab Number: L1201428
Report Date: 01/30/12

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1201428-01	MUDDY RIVER OUTFALL	BOSTON, MA	01/26/12 10:15

Project Name: 10 VINING ST.**Lab Number:** L1201428**Project Number:** 5347.9.00**Report Date:** 01/30/12

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.

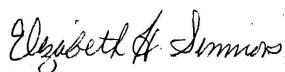
Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (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. 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. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

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:



Elizabeth Simmons

Title: Technical Director/Representative

Date: 01/30/12

METALS

Project Name: 10 VINING ST.

Lab Number: L1201428

Project Number: 5347.9.00

Report Date: 01/30/12

SAMPLE RESULTS

Lab ID: L1201428-01

Date Collected: 01/26/12 10:15

Client ID: MUDDY RIVER OUTFALL

Date Received: 01/26/12

Sample Location: BOSTON, MA

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Hardness by SM 2340B - Westborough Lab											
Hardness	140		mg/l	0.66	--	1	01/27/12 12:07	01/27/12 14:09	EPA 3005A	19,200.7	MG



Project Name: 10 VINING ST.

Lab Number: L1201428

Project Number: 5347.9.00

Report Date: 01/30/12

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Hardness by SM 2340B - Westborough Lab for sample(s): 01 Batch: WG515638-1										
Hardness	ND		mg/l	0.66	--	1	01/27/12 12:07	01/27/12 13:52	19,200.7	MG

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: 10 VINING ST.

Project Number: 5347.9.00

Lab Number: L1201428

Report Date: 01/30/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Hardness by SM 2340B - Westborough Lab Associated sample(s): 01 Batch: WG515638-2								
Hardness	94		-		85-115	-		

Matrix Spike Analysis Batch Quality Control

Project Name: 10 VINING ST.

Lab Number: L1201428

Project Number: 5347.9.00

Report Date: 01/30/12

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Hardness by SM 2340B - Westborough Lab Associated sample(s): 01 QC Batch ID: WG515638-4 QC Sample: L1200573-01 Client ID: MS Sample												
Hardness	57	66.2	120	95		-	-		75-125	-		20

Project Name: 10 VINING ST.**Project Number:** 5347.9.00**Lab Number:** L1201428**Report Date:** 01/30/12**Sample Receipt and Container Information**

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA**Cooler Information Custody Seal****Cooler**

A Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1201428-01A	Plastic 500ml HNO3 preserved	A	<2	3	Y	Absent	HARDU(180)

*Values in parentheses indicate holding time in days

Project Name: 10 VINING ST.
Project Number: 5347.9.00

Lab Number: L1201428
Report Date: 01/30/12

GLOSSARY

Acronyms

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.
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.
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.
NI	- Not Ignitable.
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.

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.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
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 five times (5x) 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.
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.
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 RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.
M	- Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
NJ	- Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

Report Format: Data Usability Report



Project Name: 10 VINING ST.**Lab Number:** L1201428**Project Number:** 5347.9.00**Report Date:** 01/30/12**Data Qualifiers**

- 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.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

Project Name: 10 VINING ST.
Project Number: 5347.9.00

Lab Number: L1201428
Report Date: 01/30/12

REFERENCES

- 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.

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.



Certificate/Approval Program Summary

Last revised January 3, 2012 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. **NELAP Accredited Solid Waste/Soil.**

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB), 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D))

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E).)

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3,3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: 2009024.

Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 353.2, SM2130B, 2320B, 2540C, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, SM2320B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B, 4500P-E, 5210B, 5220D, 5310C, 9010B, 9040B, 9030B, 7470A, 7196A, 2340B, EPA 200.7, 6010, 200.8, 6020, 245.1, 1311, 1312, 3005A, Enterolert, 9223D, 9222D. Organic Parameters: 608, 8081, 8082, 8330, 8151A, 624, 8260, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

Solid Waste/Soil (Inorganic Parameters: 9010B, 9012A, 9014A, 9040B, 9045C, 6010B, 7471A, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260B, 8270C, 8330, 8151A, 8081A, 8082, 3540C, 3546, 3580A, 3630C, 5030B, 5035.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

Drinking Water (Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl) (EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate); (EPA 353.2 for: Nitrate-N, Nitrite-N); (SM4500NO3-F for: Nitrate-N and Nitrite-N); 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B. Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics); (504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), EPA 332. Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; ColilertQT SM9223B; MF-SM9222D.)

Non-Potable Water (Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn); (EPA 200.7 for: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn); 245.1, SM4500H,B, EPA 120.1,

SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: 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-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. Microbiology Parameters: (ColilertQT SM9223B;Enterolert-QT: SM9222D-MF.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 245.2, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. Organic Parameters: 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2120B, 2310B, 2320B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A, 8151A.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040B, 9045C, 9050C, 9065,1311, 1312, 3005A, 3050B. Organic Parameters: SW-846 3540C, 3546, 3550B, 3580A, 3630C, 5030B, 5035, 8260B, 8270C, 8330, 8151A, 8015B, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.2, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500CI-E, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 6020, 6020A, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, 4500CN-CE, EPA 245.1, 245.2, SW-846 9040B, 3005A, 3015, EPA 6010B, 6010C, 7196A, 3060A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8081A, 8081B, 8082, 8082A, 8151A, 8330, NJ OQA-QAM-025 Rev.7, NJ EPH.)

Solid & Chemical Materials (Inorganic Parameters: SW-846, 6010B, 6010C, 7196A, 3060A, 9010B, 9030B, 1010, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9014, 9012A, 9040B, 9045C, 9050A, 9065. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3545, 3546, 3550B, 3580A, 3630C, 5030B, 5035L, 5035H, NJ OQA-QAM-025 Rev.7, NJ EPH.)

New York Department of Health Certificate/Lab ID: 11148. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-04-1-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 9010B, 9030B.. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8015B, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. Organic Parameters: MA-EPH, MA-VPH.

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. **NELAP Accredited.**
Drinking Water (Organic Parameters: EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 1312, 200.7, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P, BE. Organic Parameters: EPA 3510C, 3005A, 3630C, 5030B, 625, 624, 608, 8081A, 8081B, 8082, 802A, 8151A, 8260B, 8270C, 8270D, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3050B, 3060A, 6010B, 6010C, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065, SM 4500NH₃-H. Organic Parameters: 3540C, 3546, 3580A, 3630C, 5035, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 8330)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. **NELAP Accredited via NY-DOH.**

Refer to MA-DEP Certificate for Potable and Non-Potable Water.

Refer to NJ-DEP Certificate for Potable and Non-Potable Water.

Texas Commission on Environmental Quality Certificate/Lab ID: T104704476-09-1. **NELAP Accredited.**

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH₃-H, 4500NO₂B, 4500P-E, 4500 S²⁻D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Virginia Division of Consolidated Laboratory Services Certificate/Lab ID: 460195. **NELAP Accredited.**

Non-Potable Water (Inorganic Parameters: EPA 3005A, 3015, 1312, 6010B, 6010C, SM4500S-D, SM4500-CN-CE, Lachat 10-204-00-1-X. Organic Parameters: EPA 8260B)

Solid & Hazardous Waste (Inorganic Parameters: EPA 3050B, 1311, 1312, 6010B, 6010C, 9030B, 9010B, 9012A, 9014. Organic Parameters: EPA 5035, 5030B, 8260B.)

Department of Defense Certificate/Lab ID: L2217.

Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO₃-F, 5220D, 5310C, 2320B, 2540C, 3005A, 3015, 9010B, 9056. Organic Parameters: EPA 8260B, 8270C, 8330A, 625, 8082, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9010, 9012A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8270C, 8330A/B-prep, 8082, 8081A, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

The following analytes are not included in our current NELAP/TNI Scope of Accreditation:

EPA 8260B: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A**: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C**: Methyl naphthalene, Dimethyl naphthalene, Total Methyl naphthalenes, Total Dimethyl naphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625**: 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO₂ in a soil matrix, NO₃ in a soil matrix, SO₄ in a soil matrix.

