



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 1

5 Post Office Square, Suite 100

BOSTON, MA 02109-3912

CERTIFIED MAIL RETURN RECEIPT REQUESTED

JUL 19 2013

Dennis Durrand
Project Manager
Cranshaw Construction
2310 Washington Street
Newton Lower Falls, MA 02462

Re: Authorization to discharge under the Remediation General Permit (RGP) –
MAG910000. Icon building construction on parcel of land containing the former building
floor slab and foundation located at 75 Brainerd Road, Allston, MA 02134, Suffolk
County; Authorization MAG# 910584

Dear Mr. Durrand:

Based on the review of a Notice of Intent (NOI) submitted on behalf of 75 Brainerd Road
LCC, by the firm McPhail Associates, LLC, for the site referenced above, the U.S.
Environmental Protection Agency (EPA) hereby authorizes you, as the named Operator,
to discharge in accordance with the provisions of the RGP at that site. Your authorization
number is listed above.

The checklist enclosed with this RGP authorization indicates the pollutants which you are
required to monitor. Also indicated on the checklist are the effluent limits, test methods
and minimum levels (MLs) for each pollutant. Please note that the checklist does not
represent the complete requirements of the RGP. Operators must comply with all of the
applicable requirements of this permit, including influent and effluent monitoring,
narrative water quality standards, record keeping, and reporting requirements, found in
Parts I and II, and Appendices I – VIII of the RGP. See EPA's website for the complete
RGP and other information at: <http://www.epa.gov/region1/npdes/mass.html#dgp>.

Please note the enclosed checklist includes monitoring of chlorinated volatiles organic
compounds (CVOC) detected in the soil and ground water at the referenced site, as well
as other CVOC parameters from the RGP's VOC list for a more comprehensive
protection to the receiving waters. The checklist also includes other parameters for which
your laboratory reports indicated there was insufficient sensitivity to detect these
parameters at the minimum levels established in Appendix VI of the RGP.

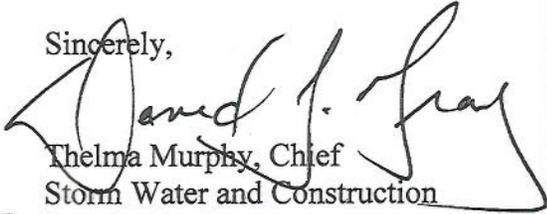
Finally, please note the checklist of pollutants attached to this authorization is subject to a
recertification if the operations at the site result in a discharge lasting longer than six

months. A recertification can be submitted to EPA within six (6) to twelve (12) months of operations in accordance with the 2010 RGP regulations.

This general permit and authorization to discharge will expire on September 9, 2015. You have reported that this project will terminate on June 1, 2014. If for any reason the discharge terminates sooner you are required to submit a Notice of Termination (NOT) to the attention of the contact person indicated below within 30 days of project completion.

Thank you in advance for your cooperation in this matter. Please contact Victor Alvarez at 617-918-1572 or alvarez.victor@epa.gov, if you have any questions.

Sincerely,


for
Thelma Murphy, Chief
Storm Water and Construction
Permits Section

Enclosure

cc: Robert Kubit, MassDEP
Paul Canavan, BWSC
William J. Burns, McPhail Associates, LLC

**2010 Remediation General Permit
Summary of Monitoring Parameters^[1]**

NPDES Authorization Number:	MAG910584
Authorization Issued:	July, 2013
Facility/Site Name:	Icon Building Construction on a parcel of land containing the slab floor and foundation.
Facility/Site Address:	75 Brainerd Road, Allston, MA 02134, Suffolk County Email address of owner: jayb@mvernon.com
Legal Name of Operator:	Cranshaw Construction
Operator contact name, title, and Address:	Mr. Dennis Durrand, Project Manager. Newton Lower Falls, MA 02462, Middlesex County Email: ddurand@cranshaw.com
Estimated date of Completion:	June 1, 2014
Category and Sub-Category:	Non Petroleum Discharges. Sub-category B. Volatile Organic Compound with Additional Contamination.
RGP Termination Date:	September 10, 2015
Receiving Water:	Charles River

Monitoring & Limits are applicable if checked. All samples are to be collected as grab samples

	<u>Parameter</u>	<u>Effluent Limit/Method#/ML</u> (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
✓	1. Total Suspended Solids (TSS)	30 milligrams/liter (mg/L) **, 50 mg/L for hydrostatic testing ** Me#160.2/ML5ug/L
	2. Total Residual Chlorine (TRC) ¹	Freshwater = 11 ug/L ** Saltwater = 7.5 ug/L **/ Me#330.5/ML 20ug/L
✓	3. Total Petroleum Hydrocarbons (TPH)	5.0 mg/L/ Me# 1664A/ML 5.0mg/L
	4. Cyanide (CN) ^{2,3}	Freshwater = 5.2 ug/l ** Saltwater = 1.0 ug/L **/ Me#335.4/ML 10ug/L
	5. Benzene (B)	5ug/L /50.0 ug/L for hydrostatic testing only/ Me#8260C/ML 2 ug/L
✓	6. Toluene (T)	(limited as ug/L total BTEX)/ Me#8260C/ML 2ug/L
	7. Ethylbenzene (E)	(limited as ug/L total BTEX) Me#8260C/ML 2ug/L

	<u>Parameter</u>	<u>Effluent Limit/Method#/ML</u> (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
	8. (m,p,o) Xylenes (X)	(limited as ug/L total BTEX) Me#8260C/ ML 2ug/L
	9. Total Benzene, Toluene, Ethyl Benzene, and Xylenes (BTEX) ⁴	100 ug/L/ Me#8260C/ ML 2ug/L
	10. Ethylene Dibromide (EDB) (1,2- Dibromoethane)	0.05 ug/l/ Me#8260C/ ML 10ug/L
	11. Methyl-tert-Butyl Ether (MtBE)	70.0 ug/l/Me#8260C/ML 10ug/L
✓	12.tert-Butyl Alcohol (TBA) (TertiaryButanol)	Monitor Only(ug/L)/Me#8260C/ML 10ug/L
	13. tert-Amyl Methyl Ether (TAME)	Monitor Only(ug/L)/Me#8260C/ML 10ug/L
	14. Naphthalene ⁵	20 ug/L /Me#8260C/ML 2ug/L
	15. Carbon Tetrachloride	4.4 ug/L /Me#8260C/ ML 5ug/L
	16. 1,2 Dichlorobenzene (o-DCB)	600 ug/L /Me#8260C/ ML 5ug/L
	17. 1,3 Dichlorobenzene (m-DCB)	320 ug/L /Me#8260C/ ML 5ug/L
✓	18. 1,4 Dichlorobenzene (p-DCB)	5.0 ug/L /Me#8260C/ ML 5ug/L
	18a. Total dichlorobenzene	763 ug/L - NH only /Me#8260C/ ML 5ug/L
	19. 1,1 Dichloroethane (DCA)	70 ug/L /Me#8260C/ ML 5ug/L
✓	20. 1,2 Dichloroethane (DCA)	5.0 ug/L /Me#8260C/ ML 5ug/L
✓	21. 1,1 Dichloroethene (DCE)	3.2 ug/L/Me#8260C/ ML 5ug/L
✓	22. cis-1,2 Dichloroethene (DCE)	70 ug/L/Me#8260C/ ML 5ug/L
✓	23. Methylene Chloride	4.6 ug/L/Me#8260C/ ML 5ug/L
✓	24. Tetrachloroethene (PCE)	5.0 ug/L/Me#8260C/ ML 5ug/L
✓	25. 1,1,1 Trichloro-ethane (TCA)	200 ug/L/Me#8260C/ ML 5ug/L
✓	26. 1,1,2 Trichloro-ethane (TCA)	5.0 ug/L /Me#8260C/ ML 5ug/L
✓	27. Trichloroethene (TCE)	5.0 ug/L /Me#8260C/ ML 5ug/L
✓	28. Vinyl Chloride (Chloroethene)	2.0 ug/L /Me#8260C/ ML 5ug/L
	29. Acetone	Monitor Only(ug/L)/Me#8260C/ML 50ug/L
	30. 1,4 Dioxane	Monitor Only /Me#1624C/ML 50ug/L
	31. Total Phenols	300 ug/L Me#420.1&420.2/ML 2 ug/L/ Me# 420.4 /ML 50ug/L
	32. Pentachlorophenol (PCP)	1.0 ug/L /Me#8270D/ML 5ug/L,Me#604 &625/ML 10ug/L
	33. Total Phthalates (Phthalate esters) ⁶	3.0 ug/L ** /Me#8270D/ML 5ug/L, Me#606/ML 10ug/L& Me#625/ML 5ug/L
	34. Bis (2-Ethylhexyl) Phthalate [Di- (ethylhexyl)	6.0 ug/L /Me#8270D/ML 5ug/L,Me#606/ML 10ug/L & Me#625/ML

	<u>Parameter</u>	<u>Effluent Limit/Method#/ML</u> (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
	Phthalate]	5ug/L
√	35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	10.0 ug/L
√	a. Benzo(a) Anthracene ⁷	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
√	b. Benzo(a) Pyrene ⁷	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
√	c. Benzo(b)Fluoranthene ⁷	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
√	d. Benzo(k)Fluoranthene ⁷	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
√	e. Chrysene ⁷	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
√	f. Dibenzo(a,h)anthracene ⁷	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
√	g. Indeno(1,2,3-cd) Pyrene ⁷	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML5ug/L
	36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	100 ug/L
	h. Acenaphthene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	i. Acenaphthylene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	j. Anthracene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	k. Benzo(ghi) Perylene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	l. Fluoranthene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	m. Fluorene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	n. Naphthalene ⁵	20 ug/l / Me#8270/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	o. Phenanthrene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	p. Pyrene	X/Me#8270D/ML5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	37. Total Polychlorinated Biphenyls (PCBs) ^{8,9}	0.000064 ug/L/Me# 608/ ML 0.5 ug/L
√	38. Chloride	Monitor only/Me# 300.0/ ML 100 ug/L

Metal parameter	Total Recoverable Metal Limit @ H ¹⁰ = 50 mg/l CaCO ₃ for discharges in Massachusetts (ug/l) 11/12		Minimum level=ML
	Freshwater	Saltwater	
39. Antimony	5.6/ML 10		
40. Arsenic **	10/ML20	36/ML 20	
41. Cadmium **	0.2/ML10	8.9/ML 10	
42. Chromium III (trivalent) **	48.8/ML15	100/ML 15	
43. Chromium VI (hexavalent) **	11.4/ML10	50.3/ML 10	
44. Copper **	5.2/ML15	3.7/ML 15	
45. Lead **	1.3/ML20	8.5/ML 20	
46. Mercury **	0.9/ML0.2	1.1/ML 0.2	
47. Nickel **	29/ML20	8.2/ML 20	
48. Selenium **	5/ML20	71/ML 20	
49. Silver	1.2/ML10	2.2/ML 10	
50. Zinc **	66.6/ML15	85.6/ML 15	
51. Iron	1,000/ML 20		

	Other Parameters	Limit
✓	52. Instantaneous Flow	Site specific in CFS
✓	53. Total Flow	Site specific in CFS
✓	54. pH Range for Class A & Class B Waters in MA	6.5-8.3; 1/Month/Grab ¹³
	55. pH Range for Class SA & Class SB Waters in MA	6.5-8.3; 1/Month/Grab ¹³
	56. pH Range for Class B Waters in NH	6.5-8; 1/Month/Grab ¹³
	57. Daily maximum temperature - Warm water fisheries	83°F; 1/Month/Grab ¹⁴
	58. Daily maximum temperature - Cold water fisheries	68°F; 1/Month/Grab ¹⁴
	59. Maximum Change in Temperature in MA - Any Class A water body	1.5°F; 1/Month/Grab ¹⁴
	60. Maximum Change in Temperature in MA - Any Class B water body- Warm Water	5°F; 1/Month/Grab ¹⁴
	61. Maximum Change in Temperature in MA - Any Class B water body - Cold water and Lakes/Ponds	3°F; 1/Month/Grab ¹⁴
	62. Maximum Change in Temperature in MA - Any Class SA water body - Coastal	1.5°F; 1/Month/Grab ¹⁴
	63. Maximum Change in Temperature in MA - Any Class SB water body - July to September	1.5°F; 1/Month/Grab ¹⁴
	64. Maximum Change in Temperature in MA -Any Class SB water body - October to June	4°F; 1/Month/Grab ¹⁴

Footnotes:

¹ Although the maximum values for TRC are 11ug/l and 7.5 ug/l for freshwater, and saltwater respectively, the compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI (i.e., Method 330.5, 20 ug/l).

² Limits for cyanide are based on EPA's water quality criteria expressed as micrograms per liter. There is currently no EPA approved test method for free cyanide. Therefore, total cyanide must be reported.

³ Although the maximum values for cyanide are 5.2 ug/l and 1.0 ug/l for freshwater and saltwater, respectively, the compliance limits are equal to the minimum level (ML) of the Method 335.4 as listed in Appendix VI (i.e., 10 ug/l).

⁴ BTEX = sum of Benzene, Toluene, Ethylbenzene, and total Xylenes.

⁵ Naphthalene can be reported as both a purgeable (VOC) and extractable (SVOC) organic compound. If both VOC and SVOC are analyzed, the highest value must be used unless the QC criteria for one of the analyses is not met. In such cases, the value from the analysis meeting the QC criteria must be used.

⁶ The sum of individual phthalate compounds(not including the #34, Bis (2-Ethylhexyl) Phthalate). The compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI.

Total values calculated for reporting on NOIs and discharge monitoring reports shall be calculated by adding the measured concentration of each constituent. If the measurement of a constituent is less than the ML, the permittee shall use a value of zero for that constituent. For each test, the permittee shall also attach the raw data for each constituent to the discharge monitoring report, including the minimum level and minimum detection level for the analysis.

⁷ Although the maximum value for the individual PAH compounds is 0.0038 ug/l, the compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI.

⁸ In the November 2002 WQC, EPA has revised the definition of Total PCBs for aquatic life as total PCBs is the sum of all homologue, all isomer, all congener, or all "Orochlor analyses." Total values calculated for reporting on NOIs and discharge monitoring reports shall be calculated by adding the measured concentration of each constituent. If the measure of a constituent is less than the ML, the permittee shall use a value of zero for that constituent. For each test, the permittee shall also attach the raw data for each constituent to the discharge monitoring report, including the minimum level and minimum detection level for the analysis.

⁹ Although the maximum value for total PCBs is 0.000064 ug/l, the compliance limit is equal to the minimum level (ML) of the test method used as listed in Appendix VI (i.e., 0.5 ug/l for Method 608 or 0.00005 ug/l when Method 1668a is approved).

¹⁰ Hardness. Cadmium, Chromium III, Copper, Lead, Nickel, Silver, and Zinc are Hardness Dependent.

¹¹ For a Dilution Factor (DF) from 1 to 5, metals limits are calculated using DF times the base limit for the metal. See Appendix IV. For example, iron limits are calculated using $DF \times 1,000 \text{ug/L}$ (the iron base limit). Therefore DF is 1.5, the iron limit will be 1,500 ug/L; DF 2, then iron limit = $1,000 \times 2 = 2,000 \text{ug/L}$, etc. not to exceed the $DF=5$.

¹² Minimum Level (ML) is the lowest level at which the analytical system gives a recognizable signal and acceptable calibration point for the analyte. The ML represents the lowest concentration at which an analyte can be measured with a known level of confidence. The ML is calculated by multiplying the laboratory-determined method detection limit by 3.18 (see 40 CFR Part 136, Appendix B).

¹³ pH sampling for compliance with permit limits may be performed using field methods as provided for in EPA test Method 150.1.

¹⁴ Temperature sampling per Method 170.1



**NOTICE OF INTENT FOR DISCHARGE
UNDER MASSACHUSETTS REMEDIAL
GENERAL PERMIT MAG910000**

**ICON BUILDING
75 BRAINERD ROAD**

ALLSTON MASSACHUSETTS

to

U.S. Environmental Protection Agency

June 20, 2013

Project No. 5344



June 20, 2013

U.S Environmental Protection Agency
RGP-NOC Processing Municipal Assistance Unit (CMU)
1 Congress Street, Suite 1100
Boston, MA 02114-2023

Attention: RGP-NOC Processing

Reference: Icon Building; 75 Brainerd Road; Allston, Massachusetts
Notice of Intent for Construction Dewatering Discharge Under Massachusetts Remedial
General Discharge MAG910000

Ladies and Gentlemen:

On behalf of 75 Brainerd Road, LLC, McPhail Associates, LLC has prepared the attached Notice of Intent for coverage under the Massachusetts Remedial General Permit MAG910000 (RGP) for the temporary discharge of groundwater into the Charles River via a storm drain system during construction 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 with the authorization of 75 Brainerd Road, LLC. These services are subject to the limitations contained in **Appendix A**.

Fronting onto Brainerd Road to the south and Redford Street to the west, the subject site is bounded by the 9-23 Griggs Street property to the east, and a mixed use building to the north. The subject site is comprised of two abutting parcels of land listed with the addresses of 75 Brainerd Road and 10 Redford Street occupying a total area of approximately 24,822 square feet. The existing ground surface across the two parcels slopes gently upward from the southeast to the northwest, from about Elevation +44 to Elevation +46. The limits of the subject site are depicted on **Figure 2**, Site Location Plan.

The majority of the subject site is comprised of the 75 Brainerd Road parcel which is currently used as a temporary parking lot and storage area for a nearby construction site. Until recently, a majority of the parcel was covered by a one-story concrete and brick building that was formerly occupied by a manufacturer of architectural signage. During January 2013, the above grade portions of building were demolished, however, the former building floor slab and foundation were left in place. The remaining portions of the parcel that are not covered by the floor slab of the former building consist of asphalt paved and exposed soil surfaces.

Abutting to the north, the 10 Redford Street parcel is occupied by the Michael J. Hynes Auto Body shop. A single-story concrete block L-shaped building containing 4 garage bays and employee offices currently occupy the northeastern and northwestern portions of the parcel. An asphalt paved driveway runs adjacent to the northwestern side of the existing building connecting Redford Street with the rear of the parcel. A concrete pad and vehicle lift are located adjacent to the northeastern exterior of the existing building. An asphalt paved alleyway abuts the southeastern end of the existing building. The southwestern portion of the parcel is occupied by a concrete and asphalt paved parking lot.

The 75 Brainerd Road and 10 Redford Street properties will be redeveloped into a multi-story residential building known as Icon. The footprint of the new Icon building will occupy the entire area of the 75 Brainerd Road and 10 Redford Street parcels. It is understood that the proposed Icon building will include a single level of below grade parking that will occupy a footprint of approximately 23,360 square feet along with additional parking provided at the ground floor level. The lowest level of the proposed building is



understood to be at approximately Elevation +39.

The subject site is listed with the Massachusetts Department of Environmental Protection (DEP) under RTN 3-31244 due to a release of chlorinated volatile organic compounds (CVOCs) and petroleum related constituents in soil and groundwater. In general, Reportable Concentrations of trichloroethene (TCE), tetrachloroethene (PCE) and cis-1,2- dichloroethene (cis-1,2-DCE) are present in fill and natural soil located directly beneath the floor slab at the northern portion of the former 75 Brainerd Road building. In addition, Reportable Concentrations of TCE, PCE, cis-1,2-DCE, and toluene have been detected in soil located adjacent to the northeast exterior of the former 75 Brainerd Road building. Groundwater beneath the basement located at the southeastern portion of the former 75 Brainerd Road building is affected by Reportable Concentrations of TCE and vinyl chloride. A Release Abatement Measure (RAM) Plan has been prepared and submitted to the DEP for the in-situ treatment of groundwater and the management, excavation and off-site disposal of soil to reduce levels of the contaminants of concern at the site.

The depth to groundwater at the site has been measured from 7 to 10.7 feet below the existing ground surface corresponding to elevations ranging from about +36.5 to +38.7. Excavation within the proposed building footprint will extend to a depth of approximately Elevation +36 corresponding to approximately 2.7 feet below the observed groundwater level. Hence, construction dewatering will be required to allow for the construction of footings and the below-grade portions of the building foundation. In addition, storm water run-off is anticipated to accumulate within localized trenches after periods of heavy precipitation requiring dewatering. It is anticipated that dewatering by means of strategically located sumps and trenches should suffice during foundation construction operations.

Based on the results of groundwater chemical analyses, it is our opinion that a settling tank, bag filter and a granular activated carbon (GAC) filtration system will be required to settle out particulate matter and remove levels of CVOCs in the water to meet allowable total suspended solids (TSS) and CVOC discharge limits established by the US EPA prior to discharge. One settling tank, 5,000-gallon in capacity, two bag filters and a GAC filtration system will be incorporated into the discharge system in series to meet allowable discharge limits for TSS and CVOCs established by the RGP. It is our opinion that the removal of sediment will also result in a reduction in total metals and polynuclear aromatic hydrocarbons to levels below the RGP effluent limits. A schematic of the treatment system is shown on **Figure 3**.

A review of the Boston Water & Sewer GIS database of existing sewer and storm drain systems indicates that the area surrounding the subject site is serviced by a dedicated storm drain located beneath Redford Street and Brainerd Road which bound the western and southern sides of the site, respectively. Specifically, a 12-inch diameter dedicated storm drain located beneath Griggs Street flows south connecting to a 15-inch storm drain located beneath Brainerd Road. The Brainerd Road storm drain flows northeast to a 48-inch storm drain beneath Harvard Street connecting to a 60x72- inch box culvert storm drain. The box culvert storm drain pitches to the northeast beneath Commonwealth Avenue where it eventually connects to a 72x72-inch box culvert that runs north and parallel to Acorn Street. The storm drain culvert discharges into the Charles River through an outfall identified as SDO035. The Charles River is considered a Class C water body. The location of the relevant catch basin with relation to the site is indicated on **Figure 2**. The storm drain flow pattern and location of discharge into the Charles River is shown on plans provided by the Boston Water & Sewer Commission which are included as **Figures 4A** through **4E**.

In conclusion, it is our opinion that groundwater at the site is acceptable for discharge into the storm drain system and ultimately into the Charles River under a Remedial General Permit. Sampling and analysis of the effluent will be carried out in accordance with the terms of the Remedial General Permit.



US EPA
June 20, 2013
Page 3

Supplemental information appended to this letter in support of the RGP includes the following;

- Notice of Intent Transmittal Form for Permit Application
Boston Water & Sewer Dewatering Discharge Permit Application (**Appendix B**);
- A summary of groundwater analysis (**Appendix C, Table 1, Table 2 and Table 3**);
- A review of Areas of Critical Concern and Endangered and Threatened Species (**Appendix D**);
- A review of National Historic Places (**Attachment E**); and
- Best Management Practice Plan (**Appendix F**)

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 "William J. Burns".

William J. Burns

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

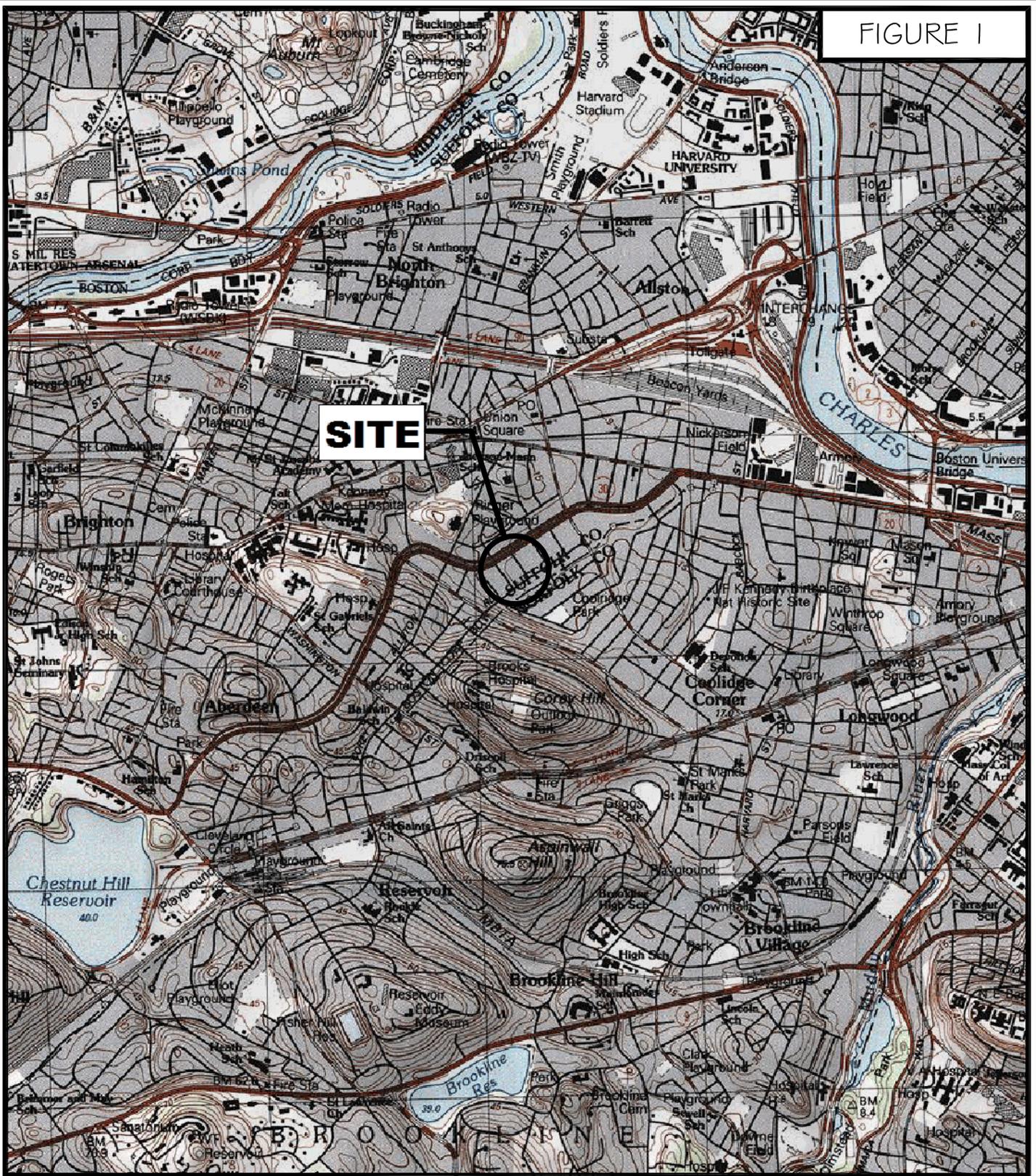
Ambrose J. Donovan, P.E., L.S.P.

Enclosures

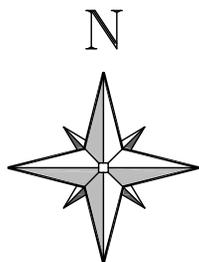
F:\WP5\REPORTS\5344 RGP.wpd

wJB/pjd

FIGURE 1



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



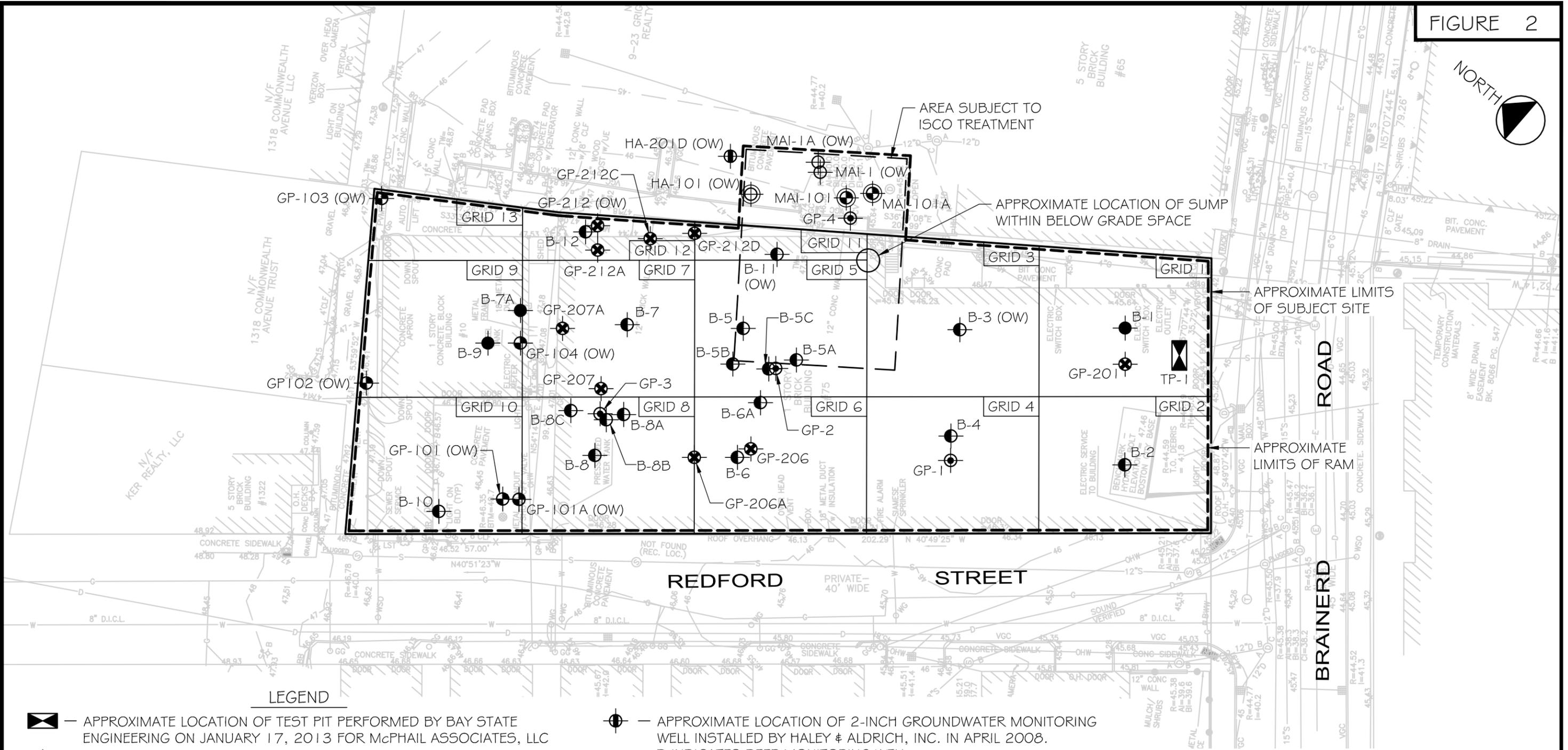
SCALE 1:25,000

PROJECT LOCATION PLAN

75 BRAINERD ROAD

ALLSTON

MASSACHUSETTS



LEGEND

- APPROXIMATE LOCATION OF TEST PIT PERFORMED BY BAY STATE ENGINEERING ON JANUARY 17, 2013 FOR McPHAIL ASSOCIATES, LLC
- APPROXIMATE LOCATION OF GEOPROBE PERFORMED BY TDS, INC. ON DECEMBER 4, 2012 FOR McPHAIL ASSOCIATES, LLC
- APPROXIMATE LOCATION OF GEOPROBE PERFORMED BY TDS, INC. ON JANUARY 7, 2012 FOR McPHAIL ASSOCIATES, LLC
- APPROXIMATE LOCATION OF GEOPROBE PERFORMED BY TDS, INC. ON JANUARY 21, 2013 FOR McPHAIL ASSOCIATES, LLC
- APPROXIMATE LOCATION OF BORING PERFORMED BY TDS, INC. DURING JANUARY 15 TO JANUARY 17, 2013 FOR McPHAIL ASSOCIATES, LLC
- APPROXIMATE LOCATION OF GEOPROBE PERFORMED BY TDS, INC. ON FEBRUARY 18, 2013 FOR McPHAIL ASSOCIATES, LLC
- LOCATION OF MONITORING WELLS INSTALLED BY TDS INC. ON AUGUST 26, 2011 FOR McPHAIL ASSOCIATES, INC.

- APPROXIMATE LOCATION OF 2-INCH GROUNDWATER MONITORING WELL INSTALLED BY HALEY & ALDRICH, INC. IN APRIL 2008. D INDICATES DEEP MONITORING WELL
- APPROXIMATE LOCATION OF MONITORING WELL INSTALLED BY HALEY & ALDRICH, INC. IN FEBRUARY AND MARCH 2005
- APPROXIMATE LOCATION OF MONITORING WELLS INSTALLED BY TDS, INC. ON SEPTEMBER 21, 2012 FOR McPHAIL ASSOCIATES, INC.
- (OW) — INDICATES OBSERVATION WELL INSTALLED WITHIN COMPLETED BOREHOLE

REFERENCE: THIS PLAN WAS PREPARED FROM A 20-SCALE DRAWING ENTITLED, "TOPOGRAPHIC PLAN" DATED AUGUST 29, 2012 PREPARED BY NITSCH ENGINEERING

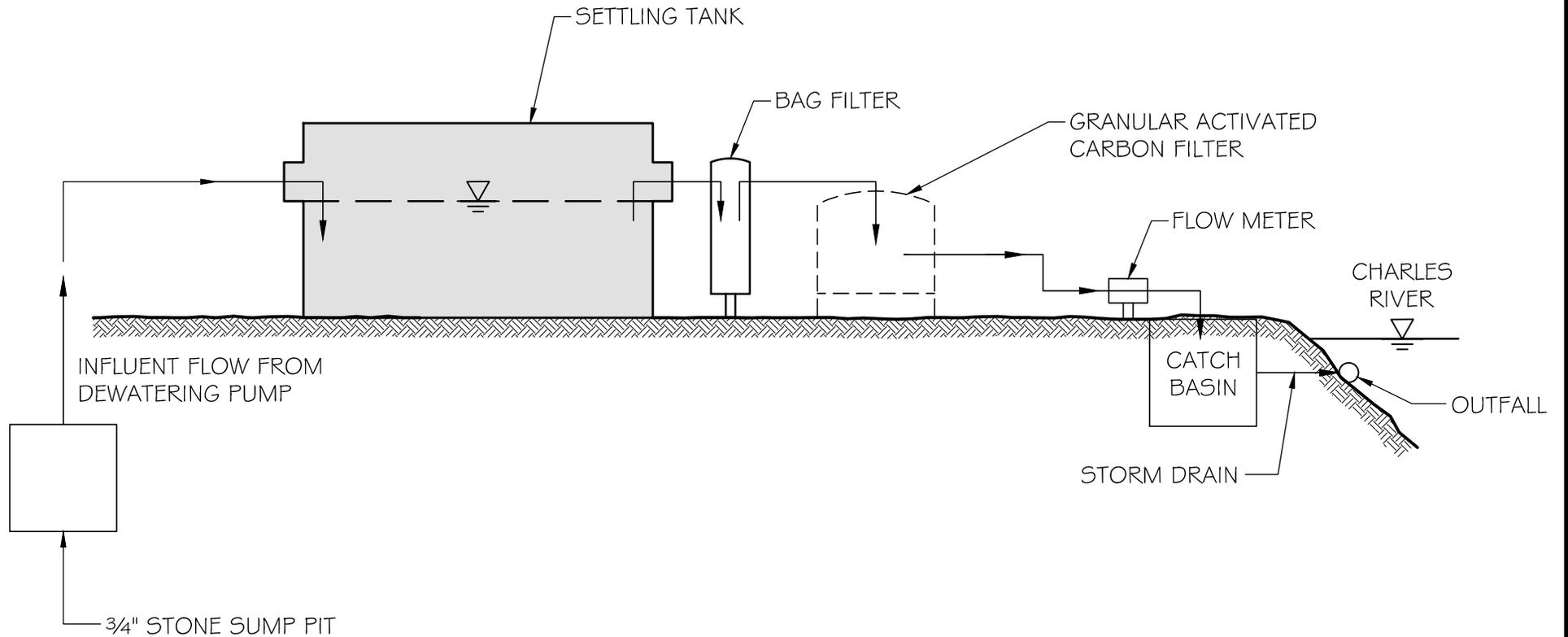


FILE NAME: H:\Acad\JOB95344\SMF\5344-E02a.dwg

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

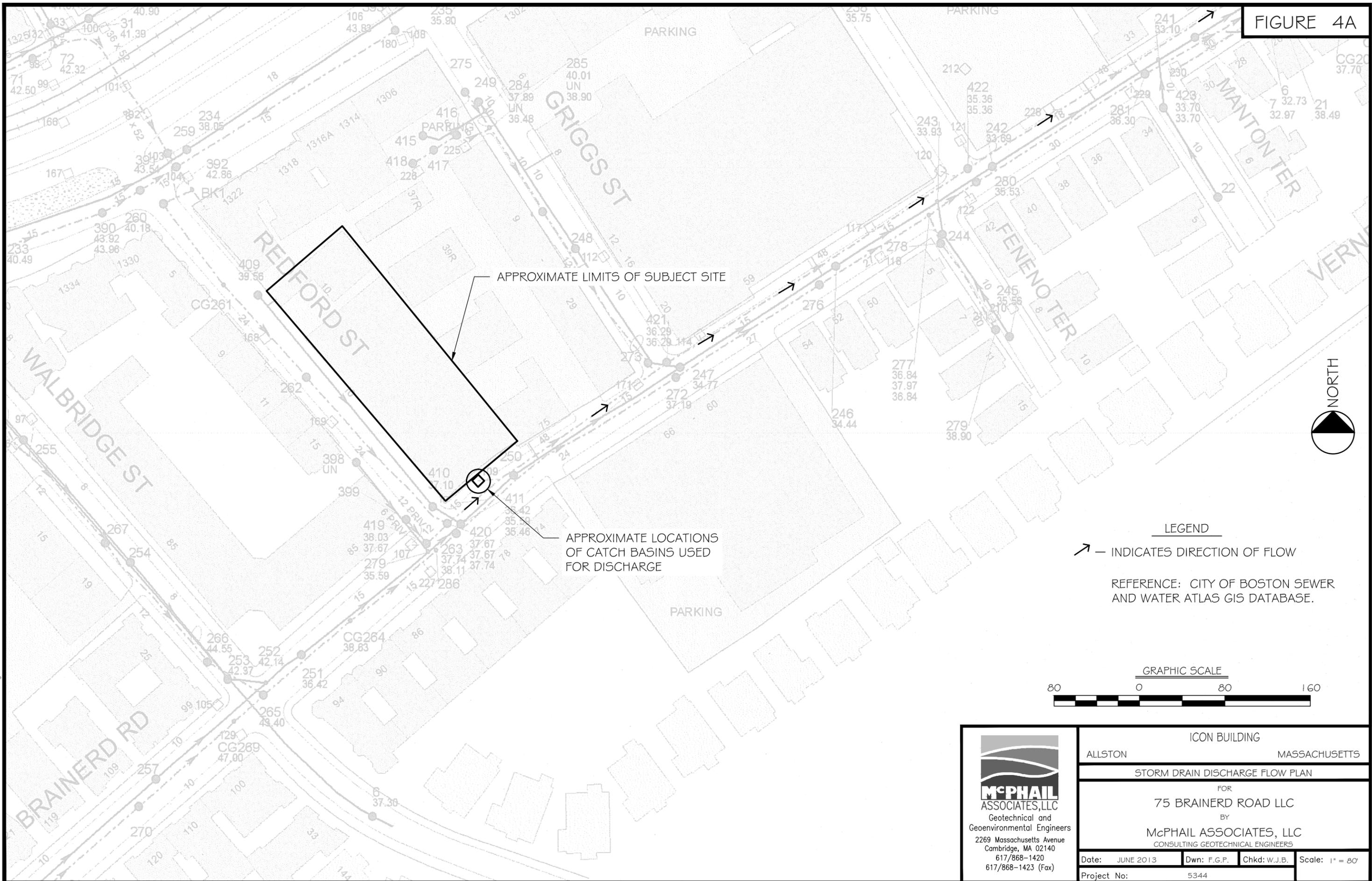
ICON BUILDING			
ALLSTON		MASSACHUSETTS	
SITE PLAN			
FOR			
75 BRAINERD ROAD, LLC			
BY			
McPHAIL ASSOCIATES, LLC			
Date: JUNE 2013	Dwn: F.G.P.	Chkd: W.J.B.	Scale: 1" = 30'
Project No: 5344			

FIGURE 3



 McPHAIL ASSOCIATES, LLC Geotechnical and Geoenvironmental Engineers 2269 Massachusetts Avenue Cambridge, MA 02140 617/868-1420 617/868-1423 (Fax)	ICON BUILDING	
	ALLSTON	MASSACHUSETTS
	SCHEMATIC OF TREATMENT SYSTEM	
	FOR 75 BRAINERD ROAD LLC	
	BY McPHAIL ASSOCIATES, LLC CONSULTING GEOTECHNICAL ENGINEERS	
Date: JUNE 2013	Dwn: F.G.P.	Chkd: W.J.B.
Project No: 5344	Scale: N.T.S.	

FIGURE 4A

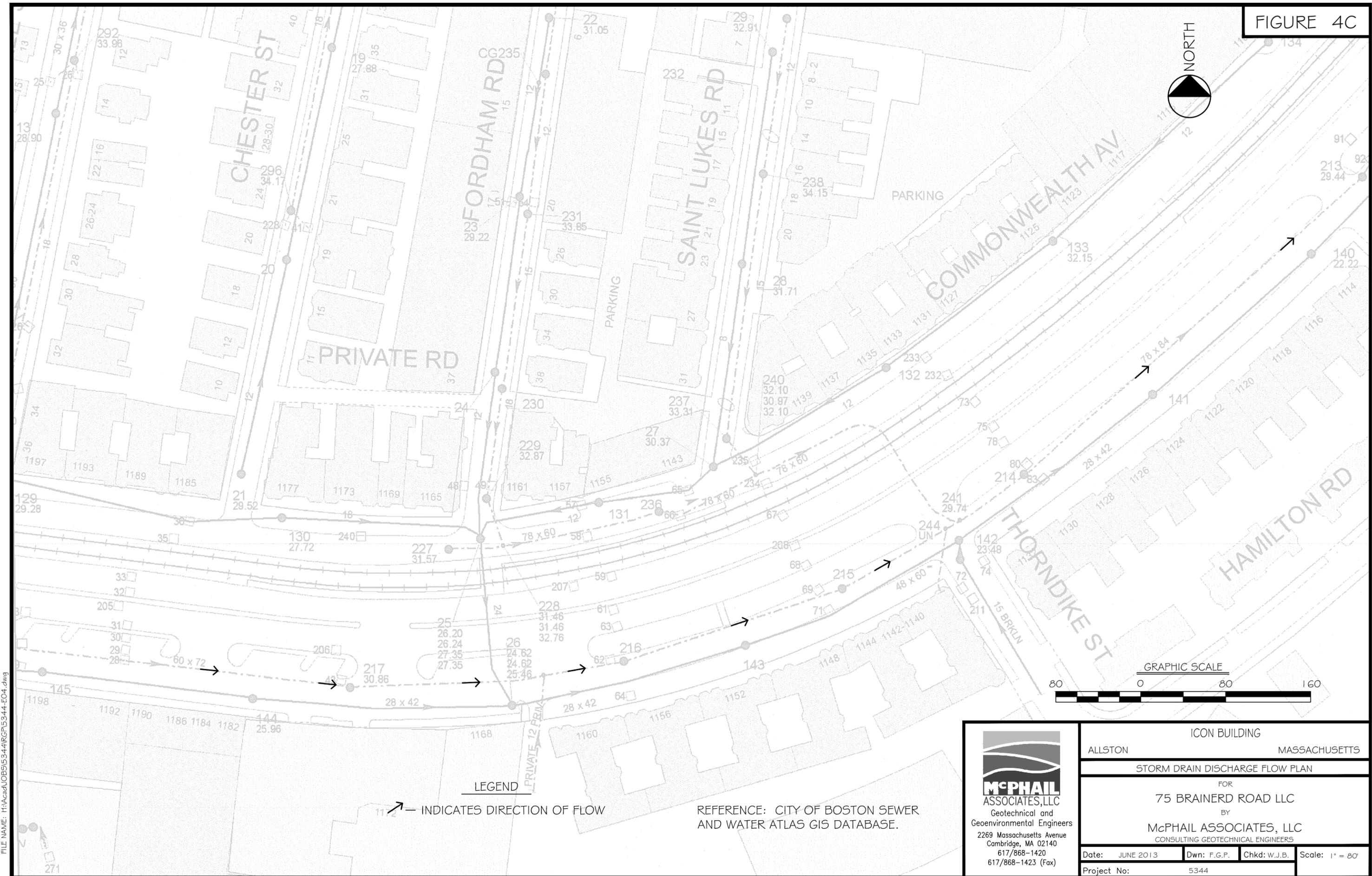


FILE NAME: H:\Acad\JOB5344\RGPS344-E04.dwg

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

ICON BUILDING			
ALLSTON			MASSACHUSETTS
STORM DRAIN DISCHARGE FLOW PLAN			
FOR			
75 BRAINERD ROAD LLC			
BY			
McPHAIL ASSOCIATES, LLC			
CONSULTING GEOTECHNICAL ENGINEERS			
Date: JUNE 2013	Dwn: F.G.P.	Chkd: W.J.B.	Scale: 1" = 80'
Project No: 5344			

FIGURE 4C



FILE NAME: H:\Acad\JOB5344\RGPS344-E04.dwg

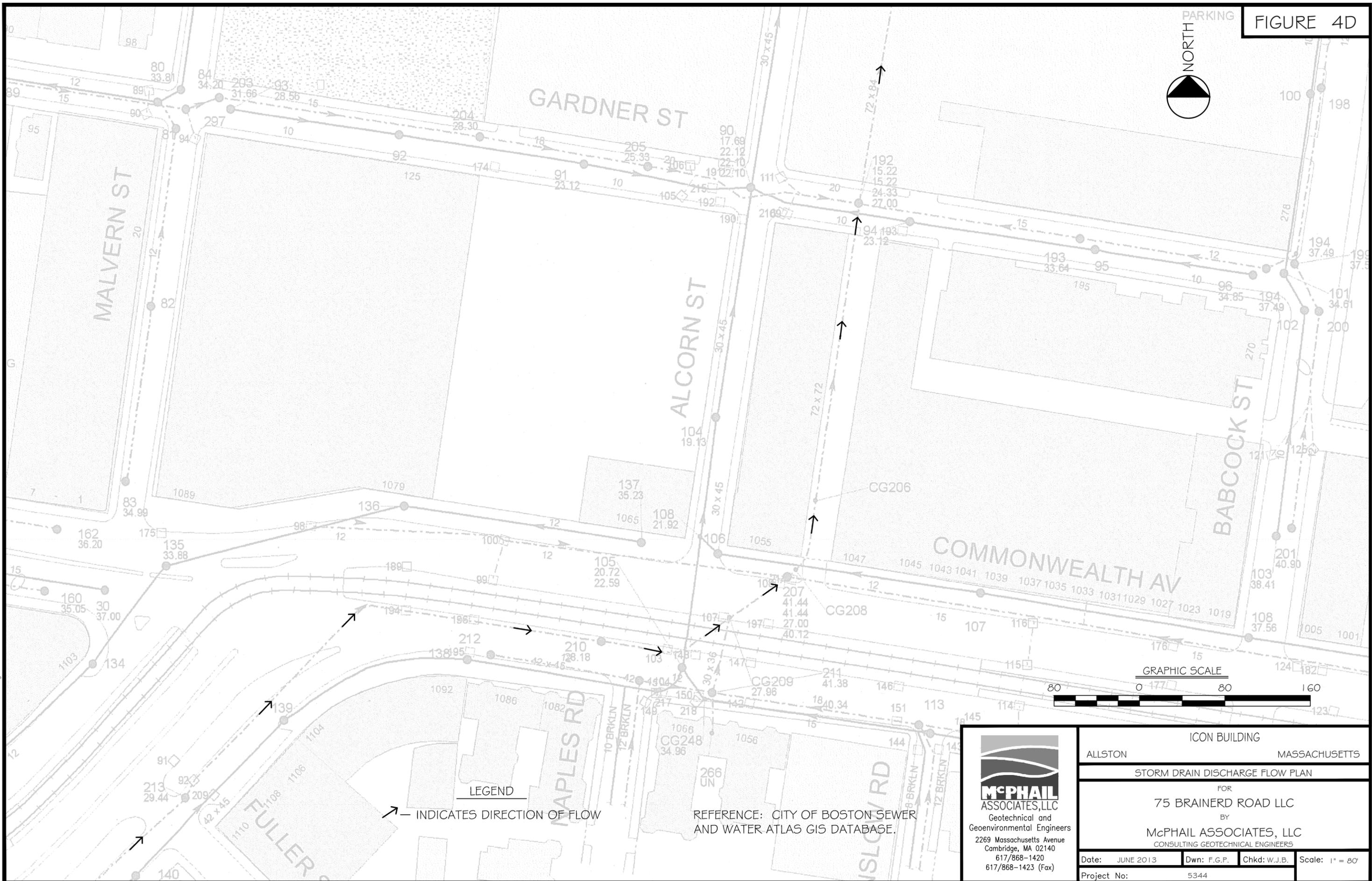
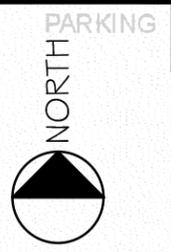
LEGEND
→ INDICATES DIRECTION OF FLOW

REFERENCE: CITY OF BOSTON SEWER AND WATER ATLAS GIS DATABASE.

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

ALLSTON		MASSACHUSETTS	
STORM DRAIN DISCHARGE FLOW PLAN			
FOR 75 BRAINERD ROAD LLC BY McPHAIL ASSOCIATES, LLC CONSULTING GEOTECHNICAL ENGINEERS			
Date: JUNE 2013	Dwn: F.G.P.	Chkd: W.J.B.	Scale: 1" = 80'
Project No: 5344			

FIGURE 4D



FILE NAME: H:\Acad\JOB95344\RGPS344-E04.dwg

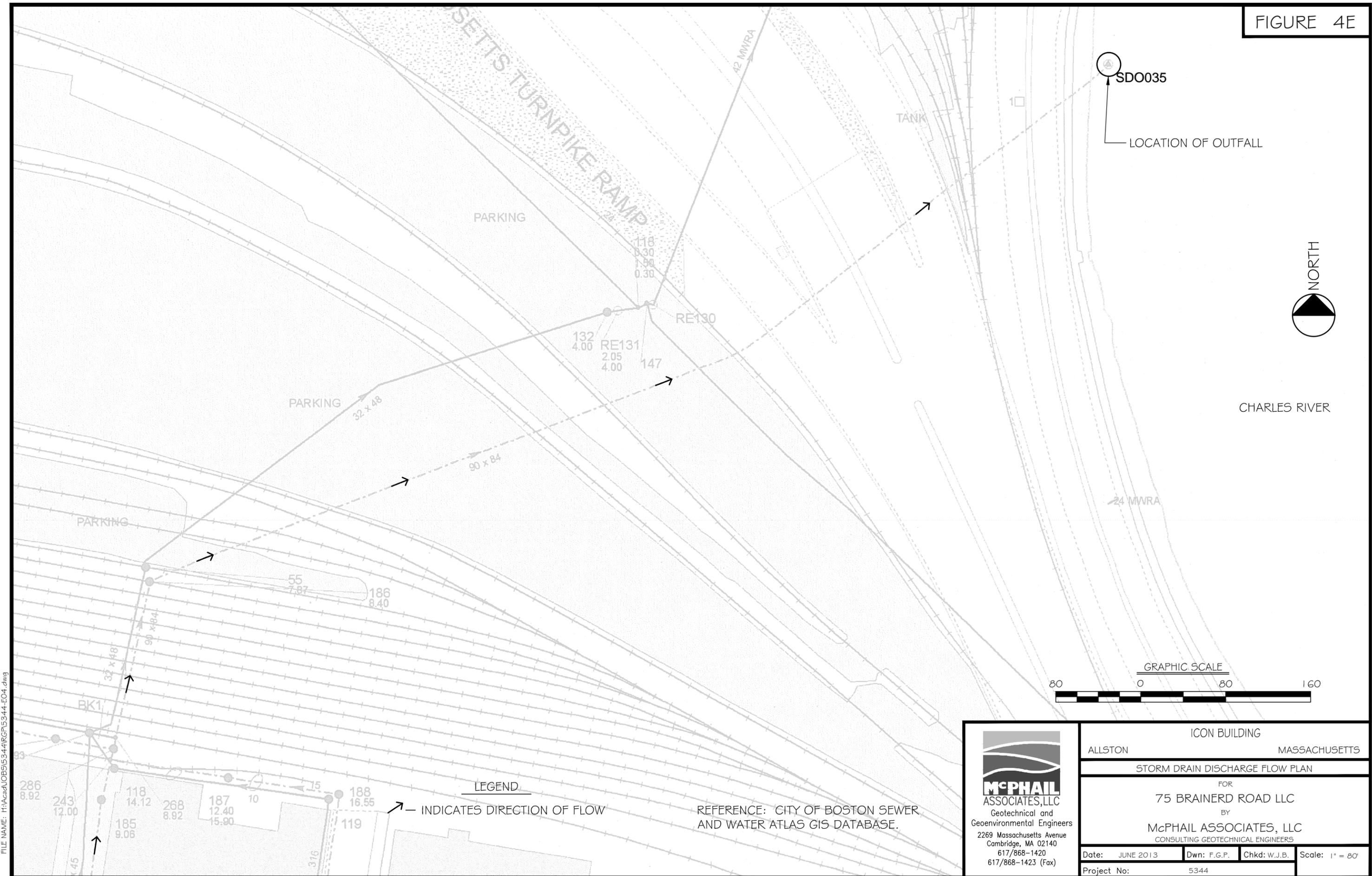
LEGEND
INDICATES DIRECTION OF FLOW

REFERENCE: CITY OF BOSTON SEWER AND WATER ATLAS GIS DATABASE.

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

ICON BUILDING		MASSACHUSETTS	
ALLSTON			
STORM DRAIN DISCHARGE FLOW PLAN			
FOR			
75 BRAINERD ROAD LLC			
BY			
McPHAIL ASSOCIATES, LLC			
CONSULTING GEOTECHNICAL ENGINEERS			
Date: JUNE 2013	Dwn: F.G.P.	Chkd: W.J.B.	Scale: 1" = 80'
Project No: 5344			

FIGURE 4E



LEGEND
 — INDICATES DIRECTION OF FLOW

REFERENCE: CITY OF BOSTON SEWER AND WATER ATLAS GIS DATABASE.

FILE NAME: H:\acad\LOB5\344\RGPF5344-E04.dwg

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

ICON BUILDING	
ALLSTON	MASSACHUSETTS
STORM DRAIN DISCHARGE FLOW PLAN	
FOR 75 BRAINERD ROAD LLC	
BY MCPHAIL ASSOCIATES, LLC CONSULTING GEOTECHNICAL ENGINEERS	
Date: JUNE 2013	Dwn: F.G.P. Chkd: W.J.B.
Project No: 5344	Scale: 1" = 80'



ATTACHMENT A

LIMITATIONS

The purpose of this report is to present the results of testing of groundwater samples obtained from monitoring wells located at 75 Brainerd Road in Allston, Massachusetts, in support of an application for approval of construction site dewatering discharge into surface waters of the Commonwealth of Massachusetts under EPA's Massachusetts Remedial General Permit MAG910000.

The observations were made under the conditions stated in this report. The conclusions presented above were based on these observations. If variations in the nature and extent of subsurface conditions between the widely 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 chemical test data obtained from analysis of groundwater samples, and are contingent upon their validity. The data have been reviewed, and interpretations have been made in the text. It should also be noted that fluctuations in the types and levels of contaminants and variations in their flow paths may occur due to changes in seasonal water table, past practices used in disposal and other factors.

Chemical analyses have been performed for specific constituents during the course of this site assessment, as described in the text. However, it should be noted that additional chemical 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 75 Brainerd Road, LLC and Cranshaw Construction. This report and the findings contained herein shall not, in whole or in part, be disseminated or conveyed to any other party nor used in whole or in part by any other party without prior written consent of McPhail Associates, LLC.



APPENDIX B

Notice of Intent Transmittal Form

Boston Water & Sewer Dewatering Discharge Permit Application

B. Suggested Form for Notice of Intent (NOI) for the Remediation General Permit

1. General facility/site information. Please provide the following information about the site:

a) Name of facility/site : Icon Building		Facility/site mailing address:			
Location of facility/site :	Facility SIC code(s):	Street:	75 Brainerd Road		
longitude: -71.133					
latitude: 42.348					
b) Name of facility/site owner : 75 Brainerd Road LLC		Town: Allston			
Email address of facility/site owner : jayb@mvernon.com		State: MA	Zip: 02134	County: Suffolk	
Telephone no. of facility/site owner : 617-267-0006					
Fax no. of facility/site owner : 617-267-8908		Owner is (check one): 1. Federal <input type="radio"/> 2. State/Tribal <input type="radio"/>			
Address of owner (if different from site):		3. Private <input checked="" type="radio"/> 4. Other <input type="radio"/> if so, describe:			
Street: 29 Commonwealth Avenue, 6th Floor					
Town: Boston	State: MA	Zip: 02116	County: Suffolk		
c) Legal name of operator : Cranshaw Construction		Operator telephone no: 617-965-7300			
		Operator fax no.:	Operator email:	ddurand@cranshaw.com	
Operator contact name and title:		Mr. Dennis Durrand Project Manager			
Address of operator (if different from owner):		Street:	2310 Washington Street		
Town: Newton Lower Falls	State: MA	Zip: 02462	County: Middlesex		

d) Check Y for “yes” or N for “no” for the following:

1. Has a prior NPDES permit exclusion been granted for the discharge? Y N , if Y, number:
2. Has a prior NPDES application (Form 1 & 2C) ever been filed for the discharge? Y N , if Y, date and tracking #:
3. Is the discharge a “new discharge” as defined by 40 CFR 122.2? Y N
4. For sites in Massachusetts, is the discharge covered under the Massachusetts Contingency Plan (MCP) and exempt from state permitting? Y N

e) Is site/facility subject to any State permitting, license, or other action which is causing the generation of discharge? Y N
 If Y, please list:

1. site identification # assigned by the state of NH or MA:
2. permit or license # assigned:
3. state agency contact information: name, location, and telephone number:

f) Is the site/facility covered by any other EPA permit, including:

1. Multi-Sector General Permit? Y N , if Y, number:
2. Final Dewatering General Permit? Y N , if Y, number:
3. EPA Construction General Permit? Y N , if Y, number:
4. Individual NPDES permit? Y N , if Y, number:
5. any other water quality related individual or general permit? Y N , if Y, number:

g) Is the site/facility located within or does it discharge to an Area of Critical Environmental Concern (ACEC)? Y N

h) Based on the facility/site information and any historical sampling data, identify the sub-category into which the potential discharge falls.

<u>Activity Category</u>	<u>Activity Sub-Category</u>
I - Petroleum Related Site Remediation	A. Gasoline Only Sites <input type="checkbox"/> B. Fuel Oils and Other Oil Sites (including Residential Non-Business Remediation Discharges) <input type="checkbox"/> C. Petroleum Sites with Additional Contamination <input type="checkbox"/>
II - Non Petroleum Site Remediation	A. Volatile Organic Compound (VOC) Only Sites <input type="checkbox"/> B. VOC Sites with Additional Contamination <input checked="" type="checkbox"/> C. Primarily Heavy Metal Sites <input type="checkbox"/>
III - Contaminated Construction Dewatering	A. General Urban Fill Sites <input type="checkbox"/> B. Known Contaminated Sites <input checked="" type="checkbox"/>

IV - Miscellaneous Related Discharges	A. Aquifer Pump Testing to Evaluate Formerly Contaminated Sites <input type="checkbox"/> B. Well Development/Rehabilitation at Contaminated/Formerly Contaminated Sites <input type="checkbox"/> C. Hydrostatic Testing of Pipelines and Tanks <input type="checkbox"/> D. Long-Term Remediation of Contaminated Sumps and Dikes <input type="checkbox"/> E. Short-term Contaminated Dredging Drain Back Waters (if not covered by 401/404 permit) <input type="checkbox"/>
---------------------------------------	---

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

a) Describe the discharge activities for which the owner/applicant is seeking coverage:	
Temporary Construction Dewatering	
b) Provide the following information about each discharge:	
1) Number of discharge points:	2) What is the maximum and average flow rate of discharge (in cubic feet per second, ft ³ /s)?
1	Max. flow <input type="text" value="0.223"/> Is maximum flow a design value ? Y <input checked="" type="radio"/> N <input type="radio"/> Average flow (include units) <input type="text" value="0.1115 ft<sup>3</sup>/s"/> Is average flow a design value or estimate? <input type="text" value="estimate"/>
3) Latitude and longitude of each discharge within 100 feet:	
pt.1: lat. <input type="text" value="42.348"/> long. <input type="text" value="71.133"/>	pt.2: lat. <input type="text"/> long. <input type="text"/> ;
pt.3: lat. <input type="text"/> long. <input type="text"/>	pt.4: lat. <input type="text"/> long. <input type="text"/> ;
pt.5: lat. <input type="text"/> long. <input type="text"/>	pt.6: lat. <input type="text"/> long. <input type="text"/> ;
pt.7: lat. <input type="text"/> long. <input type="text"/>	pt.8: lat. <input type="text"/> long. <input type="text"/> ; etc.
4) If hydrostatic testing, total volume of the discharge (gals): <input type="text"/>	5) Is the discharge intermittent <input checked="" type="radio"/> or seasonal <input type="radio"/> ? Is discharge ongoing? Y <input type="radio"/> N <input checked="" type="radio"/>
c) Expected dates of discharge (mm/dd/yy): start <input type="text" value="08/01/2013"/> end <input type="text" value="05/01/2014"/>	
d) Please attach a line drawing or flow schematic showing water flow through the facility including: 1. sources of intake water. 2. contributing flow from the operation. 3. treatment units. and 4. discharge points and receiving waters(s). <input type="text" value="Please refer to the attached report"/>	

3. Contaminant information.

a) Based on the sub-category selected (see Appendix III), indicate whether each listed chemical is **believed present** or **believed absent** in the potential discharge. Attach additional sheets as needed.

<u>Parameter *</u>	<u>CAS Number</u>	<u>Believed Absent</u>	<u>Believed Present</u>	<u># of Samples</u>	<u>Sample Type (e.g., grab)</u>	<u>Analytical Method Used (method #)</u>	<u>Minimum Level (ML) of Test Method</u>	<u>Maximum daily value</u>		<u>Average daily value</u>	
								<u>concentration (ug/l)</u>	<u>mass (kg)</u>	<u>concentration (ug/l)</u>	<u>mass (kg)</u>
1. Total Suspended Solids (TSS)		<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	30,2540D		27			
2. Total Residual Chlorine (TRC)		<input type="checkbox"/>	<input type="checkbox"/>								
3. Total Petroleum Hydrocarbons (TPH)		<input checked="" type="checkbox"/>	<input type="checkbox"/>			74,1664A	4000	ND			
4. Cyanide (CN)	57125	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	30,4500CN-CE	5	ND			
5. Benzene (B)	71432	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13	grab	1,8260B	2	ND			
6. Toluene (T)	108883	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13	grab	1,8260B	3	ND			
7. Ethylbenzene (E)	100414	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13	grab	1,8260B	2	ND			
8. (m,p,o) Xylenes (X)	108883; 106423; 95476; 1330207	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13	grab	1,8260B	4	ND			
9. Total BTEX ²	n/a	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13	grab	1,8260B		ND			
10. Ethylene Dibromide (EDB) (1,2-Dibromoethane) ³	106934	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13		1,8260B	8	ND			
11. Methyl-tert-Butyl Ether (MtBE)	1634044	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13	grab	1,8260B	4	ND			
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75650	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13	grab	1,8260B	40	ND			

* Numbering system is provided to allow cross-referencing to Effluent Limits and Monitoring Requirements by Sub-Category included in Appendix III, as well as the Test Methods and Minimum Levels associated with each parameter provided in Appendix VI.

² BTEX = Sum of Benzene, Toluene, Ethylbenzene, total Xylenes.

³ EDB is a groundwater contaminant at fuel spill and pesticide application sites in New England.

<u>Parameter *</u>	<u>CAS Number</u>	<u>Believed Absent</u>	<u>Believed Present</u>	<u># of Samples</u>	<u>Sample Type (e.g., grab)</u>	<u>Analytical Method Used (method #)</u>	<u>Minimum Level (ML) of Test Method</u>	<u>Maximum daily value</u>		<u>Average daily value</u>	
								<u>concentration (ug/l)</u>	<u>mass (kg)</u>	<u>concentration (ug/l)</u>	<u>mass (kg)</u>
13. tert-Amyl Methyl Ether (TAME)	9940508	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13		1,8260B		ND			
14. Naphthalene	91203	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13	grab	1,8260B	0.2	ND			
15. Carbon Tetrachloride	56235	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13	grab	1,8260B	2	ND			
16. 1,2 Dichlorobenzene (o-DCB)	95501	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13	grab	1,8260B	10	ND			
17. 1,3 Dichlorobenzene (m-DCB)	541731	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13	grab	1,8260B	10	ND			
18. 1,4 Dichlorobenzene (p-DCB)	106467	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13	grab	1,8260B	10	ND			
18a. Total dichlorobenzene		<input checked="" type="checkbox"/>	<input type="checkbox"/>	13	grab	1,8260B		ND			
19. 1,1 Dichloroethane (DCA)	75343	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13	grab	1,8260B	3	ND			
20. 1,2 Dichloroethane (DCA)	107062	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13	grab	1,8260B	2	ND			
21. 1,1 Dichloroethene (DCE)	75354	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13	grab	1,8260B	2	ND			
22. cis-1,2 Dichloroethene (DCE)	156592	<input type="checkbox"/>	<input checked="" type="checkbox"/>	13	grab	1,8260B		72	0.0393	8.85	0.0024
23. Methylene Chloride	75092	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13	grab	1,8260B	12	ND			
24. Tetrachloroethene (PCE)	127184	<input type="checkbox"/>	<input checked="" type="checkbox"/>	13	grab	1,8260B		4	0.00218	1.31	0.0004
25. 1,1,1 Trichloro-ethane (TCA)	71556	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13	grab	1,8260B		1.1	0.0006	1.49	0.0004
26. 1,1,2 Trichloro-ethane (TCA)	79005	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13	grab	1,8260B		2.6	0.00142	1.52	0.0004
27. Trichloroethene (TCE)	79016	<input type="checkbox"/>	<input checked="" type="checkbox"/>	13	grab	1,8260B		270	0.14739	40.85	0.0111

<u>Parameter *</u>	<u>CAS Number</u>	<u>Believed Absent</u>	<u>Believed Present</u>	<u># of Samples</u>	<u>Sample Type (e.g., grab)</u>	<u>Analytical Method Used (method #)</u>	<u>Minimum Level (ML) of Test Method</u>	<u>Maximum daily value</u>		<u>Average daily value</u>	
								<u>concentration (ug/l)</u>	<u>mass (kg)</u>	<u>concentration (ug/l)</u>	<u>mass (kg)</u>
28. Vinyl Chloride (Chloroethene)	75014	<input type="checkbox"/>	<input checked="" type="checkbox"/>	13	grab	1,8260B		2.8	0.00153	1.37	.00076
29. Acetone	67641	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13	grab	1,8260B	20	ND			
30. 1,4 Dioxane	123911	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13	grab	1,8260B	8	ND			
31. Total Phenols	108952	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab			30	0.01638		
32. Pentachlorophenol (PCP)	87865	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	1,827C	0.8	ND			
33. Total Phthalates (Phthalate esters) ⁴		<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	1,827C		ND			
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	117817	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	1,827C	3	ND			
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		<input type="checkbox"/>	<input checked="" type="checkbox"/>					10.92	0.00596		
a. Benzo(a) Anthracene	56553	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	1,827C		1.8	0.00098		
b. Benzo(a) Pyrene	50328	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	1,827C		1.4	0.00076		
c. Benzo(b)Fluoranthene	205992	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	1,827C		2.7	0.00147		
d. Benzo(k)Fluoranthene	207089	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	1,827C		1.1	0.0006		
e. Chrysene	21801	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	1,827C		2.1	0.00115		
f. Dibenzo(a,h)anthracene	53703	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	1,827C		0.42	0.00023		
g. Indeno(1,2,3-cd) Pyrene	193395	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	1,827C		1.4	0.00029		
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		<input checked="" type="checkbox"/>	<input type="checkbox"/>					12.23	0.00668		

⁴The sum of individual phthalate compounds.

<u>Parameter *</u>	<u>CAS Number</u>	<u>Believed Absent</u>	<u>Believed Present</u>	<u># of Samples</u>	<u>Sample Type (e.g., grab)</u>	<u>Analytical Method Used (method #)</u>	<u>Minimum Level (ML) of Test Method</u>	<u>Maximum daily value</u>		<u>Average daily value</u>	
								<u>concentration (ug/l)</u>	<u>mass (kg)</u>	<u>concentration (ug/l)</u>	<u>mass (kg)</u>
h. Acenaphthene	83329	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	1,827C	0.2	ND			
i. Acenaphthylene	208968	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	1,827C	0.2	ND			
j. Anthracene	120127	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	1,827C		0.53	0.00029		
k. Benzo(ghi) Perylene	191242	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	1,827C		1.4	0.00076		
l. Fluoranthene	206440	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	1,827C		4.2	0.00229		
m. Fluorene	86737	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	1,827C		0.2	0.00011		
n. Naphthalene	91203	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	1,827C	0.2	ND			
o. Phenanthrene	85018	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	1,827C		2.5	0.00136		
p. Pyrene	129000	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	1,827C		3.4	0.00186		
37. Total Polychlorinated Biphenyls (PCBs)	85687; 84742; 117840; 84662; 131113; 117817.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab			ND			
38. Chloride	16887006	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	44,300		566000	308.97		
39. Antimony	7440360	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	16020	0.5	ND			
40. Arsenic	7440382	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	16020	0.5	ND			
41. Cadmium	7440439	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	16020	0.2	ND			
42. Chromium III (trivalent)	16065831	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	30,3500CR-D	1	ND			
43. Chromium VI (hexavalent)	18540299	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	30,3500-CR	10	ND			
44. Copper	7440508	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	16020		5.33	0.00289		
45. Lead	7439921	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	16020		1.3	0.00071		
46. Mercury	7439976	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	3,245.1	0.2	ND			
47. Nickel	7440020	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	16020		2.5	0.00136		
48. Selenium	7782492	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	16020	5	ND			
49. Silver	7440224	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	16020	0.4	ND			
50. Zinc	7440666	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	16020		16.85	0.00920		
51. Iron	7439896	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	19,200.7		80	0.04367		
Other (describe):		<input type="checkbox"/>	<input type="checkbox"/>								

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
		<input type="checkbox"/>	<input type="checkbox"/>								
		<input type="checkbox"/>	<input type="checkbox"/>								

b) For discharges where **metals** are believed present, please fill out the following (attach results of any calculations):

<p><i>Step 1:</i> Do any of the metals in the influent exceed the effluent limits in Appendix III (i.e., the limits set at zero dilution)? Y <input checked="" type="radio"/> N <input type="radio"/></p>	<p>If yes, which metals? copper and lead</p>								
<p><i>Step 2:</i> For any metals which exceed the Appendix III limits, calculate the dilution factor (DF) using the formula in Part I.A.3.c (step 2) of the NOI instructions or as determined by the State prior to the submission of this NOI. What is the dilution factor for applicable metals?</p> <table border="1"> <tr> <td>Metal: Lead</td> <td>DF: 100</td> </tr> <tr> <td>Metal: Copper</td> <td>DF: 100</td> </tr> <tr> <td>Metal:</td> <td>DF:</td> </tr> <tr> <td>Metal:</td> <td>DF:</td> </tr> </table> <p>Etc.</p>	Metal: Lead	DF: 100	Metal: Copper	DF: 100	Metal:	DF:	Metal:	DF:	<p>Look up the limit calculated at the corresponding dilution factor in Appendix IV. Do any of the metals in the influent have the potential to exceed the corresponding effluent limits in Appendix IV (i.e., is the influent concentration above the limit set at the calculated dilution factor)? Y <input type="radio"/> N <input checked="" type="radio"/> If Y, list which metals:</p>
Metal: Lead	DF: 100								
Metal: Copper	DF: 100								
Metal:	DF:								
Metal:	DF:								

4. Treatment system information. Please describe the treatment system using separate sheets as necessary, including:

<p>a) A description of the treatment system, including a schematic of the proposed or existing treatment system:</p> <p>settling tank, bag filters and granular activated carbon filtration in series</p>						
<p>b) Identify each applicable treatment unit (check all that apply):</p>	<p>Frac. tank <input checked="" type="checkbox"/></p>	<p>Air stripper <input type="checkbox"/></p>	<p>Oil/water separator <input type="checkbox"/></p>	<p>Equalization tanks <input type="checkbox"/></p>	<p>Bag filter <input checked="" type="checkbox"/></p>	<p>GAC filter <input checked="" type="checkbox"/></p>
	<p>Chlorination <input type="checkbox"/></p>	<p>De-chlorination <input type="checkbox"/></p>	<p>Other (please describe):</p>			

c) Proposed **average** and **maximum flow rates** (gallons per minute) for the discharge and the **design flow rate(s)** (gallons per minute) of the treatment system:

Average flow rate of discharge gpm Maximum flow rate of treatment system gpm
 Design flow rate of treatment system gpm

d) A description of chemical additives being used or planned to be used (attach MSDS sheets):

5. Receiving surface water(s). Please provide information about the receiving water(s), using separate sheets as necessary:

a) Identify the discharge pathway:	Direct to receiving water <input type="checkbox"/>	Within facility (sewer) <input type="checkbox"/>	Storm drain <input checked="" type="checkbox"/>	Wetlands <input type="checkbox"/>	Other (describe): <input type="text"/>
------------------------------------	--	--	---	-----------------------------------	---

b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters:

Please refer to attached report for narrative description and plan

c) Attach a detailed map(s) indicating the site location and location of the outfall to the receiving water:

1. For multiple discharges, number the discharges sequentially.
 2. For indirect dischargers, indicate the location of the discharge to the indirect conveyance and the discharge to surface water
- The map should also include the location and distance to the nearest sanitary sewer as well as the locus of nearby sensitive receptors (based on USGS topographical mapping), such as surface waters, drinking water supplies, and wetland areas.

d) Provide the state water quality classification of the receiving water

e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water cfs
 Please attach any calculation sheets used to support stream flow and dilution calculations.

f) Is the receiving water a listed 303(d) water quality impaired or limited water? Y N If yes, for which pollutant(s)?

chlorophyll-a, combined biota/habitat bioassessments, DDT, dissolved oxygen, oil and grease, secchi disk transparency, nutrient/eutrophication, biological indicators, phosphorous, PCB in fish tissue

Is there a final TMDL? Y N If yes, for which pollutant(s)?

6. ESA and NHPA Eligibility.

Please provide the following information according to requirements of Permit Parts I.A.4 and I.A.5 Appendices II and VII.

<p>a) Using the instructions in Appendix VII and information on Appendix II, under which criterion listed in Part I.C are you eligible for coverage under this general permit? A <input checked="" type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E <input type="radio"/> F <input type="radio"/></p> <p>b) If you selected Criterion D or F, has consultation with the federal services been completed? Y <input type="radio"/> N <input type="radio"/> Underway <input type="radio"/></p> <p>c) If consultation with U.S. Fish and Wildlife Service and/or NOAA Fisheries Service was completed, was a written concurrence finding that the discharge is “not likely to adversely affect” listed species or critical habitat received? Y <input type="radio"/> N <input type="radio"/></p> <p>d) Attach documentation of ESA eligibility as described in the NOI instructions and required by Appendix VII, Part I.C, Step 4.</p>
<p>e) Using the instructions in Appendix VII, under which criterion listed in Part II.C are you eligible for coverage under this general permit? 1 <input type="radio"/> 2 <input checked="" type="radio"/> 3 <input type="radio"/></p> <p>f) If Criterion 3 was selected, attach all written correspondence with the State or Tribal historic preservation officers, including any terms and conditions that outline measures the applicant must follow to mitigate or prevent adverse effects due to activities regulated by the RGP.</p>

7. Supplemental information.

<p>Please provide any supplemental information. Attach any analytical data used to support the application. Attach any certification(s) required by the general permit.</p>
<p>Please refer to attached report</p>

8. Signature Requirements: The Notice of Intent must be signed by the operator in accordance with the signatory requirements of 40 CFR Section 122.22, including the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly 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/Site Name:	Icon Building	
Operator signature:		
Printed Name & Title:	Mr. Dennis Durrand	Project Manager
Date:	6/20/13	



**Boston Water and
Sewer Commission**
980 Harrison Avenue
Boston, MA 02119-2540

DEWATERING DISCHARGE PERMIT APPLICATION

OWNER / AUTHORIZED APPLICANT PROVIDE INFORMATION HERE:

Company Name: Cranshaw Construction Address: 2310 Washington Street

Phone number: 67-965-7300 Fax number: 617-527-19777

Contact person name: Mr. Dennis Durrand Title: Project Manager

Cell number: _____ Email address: ddurand@cranshaw.com.com

Permit Request (check one): New Application Permit Extension Other (Specify): _____

Owner's Information (if different from above):

Owner of property being dewatered: 75 Brainerd Road, LLC

Owner's mailing address: 29 Commonwealth Ave; 6th Floor, Boston, MA 02116 Phone number: 617-267-0006

Location of Discharge & Proposed Treatment System(s):

Street number and name: 75 Brainerd Road Neighborhood Allston

Discharge is to a: Sanitary Sewer Combined Sewer Storm Drain Other (specify): _____

Describe Proposed Pre-Treatment System(s): Settling tank, bag filter, granular activated carbon filter in series

BWSC Outfall No. SDO035 Receiving Waters Charles River

Temporary Discharges (Provide Anticipated Dates of Discharge): From July 14, 2013 To July 14, 2014

- | | | |
|---|--|---|
| <input type="checkbox"/> Groundwater Remediation | <input type="checkbox"/> Tank Removal/Installation | <input checked="" type="checkbox"/> Foundation Excavation |
| <input type="checkbox"/> Utility/Manhole Pumping | <input type="checkbox"/> Test Pipe | <input type="checkbox"/> Trench Excavation |
| <input checked="" type="checkbox"/> Accumulated Surface Water | <input type="checkbox"/> Hydrogeologic Testing | <input type="checkbox"/> Other _____ |

Permanent Discharges

- | | |
|---|---|
| <input type="checkbox"/> Foundation Drainage | <input type="checkbox"/> Crawl Space/Footing Drain |
| <input type="checkbox"/> Accumulated Surface Water | <input type="checkbox"/> Non-contact/Uncontaminated Cooling |
| <input type="checkbox"/> Non-contact/Uncontaminated Process | <input type="checkbox"/> Other; _____ |

1. Attach a Site Plan showing the source of the discharge and the location of the point of discharge (i.e. the sewer pipe or catch basin). Include meter type, meter number, size, make and start reading. Note. All discharges to the Commission's sewer system will be assessed current sewer charges.
2. If discharging to a sanitary or combined sewer, attach a copy of MWRA's Sewer Use Discharge permit or application.
3. If discharging to a separate storm drain, attach a copy of EPA's NPDES Permit or NOI application, or NPDES Permit exclusion letter for the discharge, as well as other relevant information.
4. Dewatering Drainage Permit will be denied or revoked if applicant fails to obtain the necessary permits from MWRA or EPA.

Submit Completed Application to: Boston Water and Sewer Commission
Engineering Customer Services
980 Harrison Avenue, Boston, MA 02119
Attn: Francis M. McLaughlin, Manager Engineering Customer Services
E-mail: MclaughlinF@bwsc.org
Phone: 617-989-7208 Fax: 617-989-7716

BWSC Use Only: Date Received _____ Comments: _____



APPENDIX C

RESULTS OF GROUNDWATER ANALYSIS

From January 2012 through January 2013, McPhail Associates, LLC completed a series of subsurface explorations across the subject site. Groundwater samples that were obtained from observation wells located across the subject site were submitted for laboratory analysis for the presence of VOC, VPH, EPH, target PAH analytes, and dissolved RCRA-8 metals. In addition, groundwater samples were obtained from a sump located within the basement of the former 75 Brainerd Road building and from monitoring wells located at the southwestern portion of the 9-23 Griggs Street parcel. The parameters selected for laboratory analysis were based in part to further assess recognized environmental conditions that were identified during the above mentioned environmental due diligence assessments and to further assess the extent of CVOC contamination identified at the subject site. The results of the laboratory testing performed on the previously obtained groundwater samples are summarized in **Table 1**.

In summary, laboratory analysis of groundwater samples obtained from the subject site did not detect the presence of VPH, EPH, target PAHs or dissolved RCRA-8 metals at concentrations which exceed the applicable RCGW-2 reporting thresholds.

With the exception of the basement sump and monitoring well GP-4, the results of the groundwater analysis did not detect the presence of VOCs in excess of the Method 1 GW-2 risk characterization standards. The analysis of the groundwater sample obtained from the basement sump, which was located at the southeastern portion of the former building, detected a level of TCE and vinyl chloride at concentrations of 270 ug/l and 2.8 ug/l, respectively. The groundwater sample obtained from GP-4, which is located approximately 15 feet downgradient from the basement sump on the adjacent 9-23 Griggs Street parcel, exhibited a level of TCE at 46 ug/l.

On May 11, 2012, McPhail Associates, LLC obtained a sample of groundwater from monitoring well B-303(OW) and submitted the sample to a certified laboratory for analysis for the presence of compounds required under the EPA's Remediation General Permit (RGP) application, including pH, total suspended solids (TSS), total petroleum hydrocarbons (TPH), cyanide, volatile organic compounds (VOCs) including total benzene, toluene, ethylbenzene and xylenes (BTEX), poly-aromatic hydrocarbons (PAHs), semi-volatile organic compounds (SVOCs), total phenols, PCBs, and total recoverable metals.

The results of the laboratory analysis are summarized in **Table 2**, and laboratory data is included in **Appendix C**. The results of laboratory analysis indicate the following:

1. **pH:** The tested sample exhibited a pH level of 6.6 Standard Units (S.U.) which is within the recommended range of 6.5 to 8.5 S.U. for discharge into freshwater.



2. **TSS:** Total suspended solids (TSS) were detected at a concentration of 27 milligrams per liter (mg/l) which is below the 30 mg/l limit established by the US EPA for discharge into surface water. However, it is likely that proposed dewatering activities will cause concentrations of TSS in the influent to fluctuate which will require mitigation. As a result, groundwater that is pumped during construction activities will pass through one (1) 5,000 gallon sediment settling tank and bag filters prior to discharge in order to reduce the concentration of TSS in the effluent.
3. **VOCs:** With the exception of TCE, VOCs were not detected in excess of the applicable RGP effluent limits. The groundwater sample exhibited a concentration of TCE at 220 micrograms per liter (ug/l) which exceeds the RGP effluent limit of 5 ug/l. As detailed in the letter portion of this submittal, groundwater will pass through a treatment system that will include a granular activated carbon filter prior to off-site discharge. It is anticipated that the treatment system will reduce the level of TCE detected in the groundwater to below the EPA RGP effluent limit prior to discharge into the City of Boston storm drain system.
4. **TPH:** Laboratory analysis of the groundwater sample indicated no detectable levels of TPH.
5. **SVOCs and Total Phenols:** The laboratory reported concentrations of Total Group I and Group II PAHs at 10.92 ug/l and 12.23 ug/l, respectively. The total concentration of Group I PAHs exceeds the EPA RGP effluent limit of 10 ug/l. Of the detected PAHs, only benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene and indeno(1,2,3-cd)pyrene exceeded the RGP effluent limits. The analytical results indicated the presence of total phenols at a concentration of 30 ug/l which is below the RGP effluent limit of 300 ug/l. The remaining SVOCs were not detected in excess of the laboratory method detection limits. Given that PAHs are not considered readily soluble in groundwater and that TPH was not detected in the groundwater sample, the detected concentrations of PAHs are likely attributable to sediment in the sample rather than a release of a petroleum-based product. However, groundwater will pass through a treatment system that will include a sediment tank, bag filters and a granular activated carbon filter prior to off-site discharge. As a result, it is anticipated that the treatment system will reduce levels of Group I PAHs to below the EPA effluent limit prior to discharge into the City of Boston storm drain system.
6. **PCBs:** The laboratory results indicated no detectable levels of PCBs.
7. **Cyanide:** Cyanide was not detected in the tested groundwater sample at a concentration in excess of the laboratory method detection limit of 0.5 mg/l.
8. **Total Metals:** The laboratory reported no detectable levels of antimony, arsenic, cadmium, chromium III chromium VI, mercury, selenium, and silver. Levels of copper, lead, nickel, zinc and iron were reported at levels of 5.33 ug/l, 1.3 ug/l, 2.52 ug/l, 16.85 ug/l and 80 ug/l, respectively. The detected levels of zinc and iron are below the EPA effluent limits of 66.6 ug/l and 1,000 ug/l respectively, for discharge to a freshwater body.



The detected levels of copper and lead exceed the EPA effluent limit of 5.2 ug/l and 1.3 ug/l, respectively, for discharge into a freshwater body. As a result, a Dilution Factor (DF) was calculated for the detected levels of total copper and lead pursuant to the procedure contained in MAG910000, Appendix V. The purpose of the DF calculation is to establish Total Recoverable Limits for metals, taking into consideration the anticipated dilution of the detected analyte upon discharge into the Charles River. The calculated DF was then used to find the appropriate Dilution Range Concentrations (DRCs) contained in MAG910000, Appendix IV. The Minimum Flow Rate calculated by the USGS Streamstats GIS database at the location of discharge into the Charles River for 7 consecutive days with a recurrence interval of 10 years (7Q10 flow) is 24.6 thus resulting in a DF of 109. A DF greater than 100 corresponds to a dilution concentration of 520 ug/l and 132 ug/l, respectively. Therefore, based on calculations of the applicable dilution factor the detected levels of copper and lead do not exceed the applicable EPA established effluent limits.

The results of chemical analysis for the PAHs, total and dissolved metals in conjunction with the elevated level of Total Suspended Solids in the tested sample, suggest that the detected levels of PAHs, total copper and lead are attributable to the presence of soil particles in the tested sample. As noted above, TSS reduction measures to the groundwater will be implemented prior to discharge to reduce the concentration TSS and thus the PAHs, copper and lead concentrations in the effluent.

**TABLE 1
ANALYTICAL RESULTS-GROUNDWATER**

RTN 3-31244
75 Brainerd Road; Allston, MA
Project No. 5344

LOCATION			GP-1	GP-2	GP-3	BASEMENT SUMP	GP 101	GP 101A	GP 103	GP 104	B-3 WELL	B-11 WELL	GP-2 WELL	GP-212 (OW)
SAMPLING DATE	Method 1	Method 1	1/10/2012	1/10/2012	1/10/2012	1/13/2012	12/6/2012	12/6/2012	12/6/2012	12/6/2012	1/21/2013	1/21/2013	1/21/2013	2/25/2013
LAB SAMPLE ID	GW-2	GW-3	L1200460-01	L1200460-02	L1200460-03	L1200760-01	L1222111-01	L1222111-02	L1222111-03	L1222111-04	L1301277-01	L1301277-02	L1301277-03	L1303188-01
MCP Dissolved Metals (ug/l)														
Arsenic, Dissolved		900	ND(5)	-	ND(5)	-	-	-	-	-	-	-	-	-
Barium, Dissolved		50000	122	-	143	-	-	-	-	-	-	-	-	-
Cadmium, Dissolved		4	ND(4)	-	ND(4)	-	-	-	-	-	-	-	-	-
Chromium, Dissolved		300	ND(10)	-	ND(10)	-	-	-	-	-	-	-	-	-
Lead, Dissolved		10	ND(10)	-	ND(10)	-	-	-	-	-	-	-	-	-
Mercury, Dissolved		20	ND(0.2)	-	ND(0.2)	-	-	-	-	-	-	-	-	-
Selenium, Dissolved		100	ND(10)	-	ND(10)	-	-	-	-	-	-	-	-	-
Silver, Dissolved		7	ND(7)	-	ND(7)	-	-	-	-	-	-	-	-	-
Manganese, Dissolved														
Extractable Petroleum Hydrocarbons (ug/l)														
C9-C18 Aliphatics	1000	20000	ND(100)	ND(100)	ND(100)	-	-	ND(100)	ND(100)	ND(100)	-	-	-	-
C19-C36 Aliphatics		20000	ND(100)	ND(100)	ND(100)	-	-	ND(100)	ND(100)	ND(100)	-	-	-	-
C11-C22 Aromatics, Adjusted	50000	30000	ND(100)	ND(100)	ND(100)	-	-	ND(100)	ND(100)	ND(100)	-	-	-	-
Naphthalene	1000	20000	ND(10)	ND(10)	ND(10)	-	-	-	-	-	-	-	-	-
2-Methylnaphthalene	10000	3000	ND(10)	ND(10)	ND(10)	-	-	-	-	-	-	-	-	-
Acenaphthylene		3000	ND(10)	ND(10)	ND(10)	-	-	-	-	-	-	-	-	-
Acenaphthene		5000	ND(10)	ND(10)	ND(10)	-	-	-	-	-	-	-	-	-
Fluorene		3000	ND(10)	ND(10)	ND(10)	-	-	-	-	-	-	-	-	-
Phenanthrene		50	ND(10)	ND(10)	ND(10)	-	-	-	-	-	-	-	-	-
Anthracene		3000	ND(10)	ND(10)	ND(10)	-	-	-	-	-	-	-	-	-
Fluoranthene		200	ND(10)	ND(10)	ND(10)	-	-	-	-	-	-	-	-	-
Pyrene		20	ND(10)	ND(10)	ND(10)	-	-	-	-	-	-	-	-	-
Benzo(a)anthracene		1000	ND(10)	ND(10)	ND(10)	-	-	-	-	-	-	-	-	-
Chrysene		3000	ND(10)	ND(10)	ND(10)	-	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene		400	ND(10)	ND(10)	ND(10)	-	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene		100	ND(10)	ND(10)	ND(10)	-	-	-	-	-	-	-	-	-
Benzo(a)pyrene		500	ND(10)	ND(10)	ND(10)	-	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)Pyrene		100	ND(10)	ND(10)	ND(10)	-	-	-	-	-	-	-	-	-
Dibenzo(a,h)anthracene		40	ND(10)	ND(10)	ND(10)	-	-	-	-	-	-	-	-	-
Benzo(ghi)perylene		3000	ND(10)	ND(10)	ND(10)	-	-	-	-	-	-	-	-	-
MCP Volatile Organics (ug/l)														
Chloroform	400	10000	ND(1)	ND(1)	2	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
Tetrachloroethene	50	30000	ND(1)	ND(1)	ND(1)	4	ND(1)							
1,1,1-Trichloroethane	4000	20000	1.9	4.8	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	1.1	ND(1)
Vinyl chloride	2	50000	ND(1)	ND(1)	ND(1)	2.8	ND(1)							
trans-1,2-Dichloroethene	90	50000	ND(1)	ND(1)	ND(1)	1.1	ND(1)							
Trichloroethene	30	5000	5.6	4.8	2.5	270	ND(1)	3	ND(1)	ND(1)	ND(1)	ND(1)	2.2	18
cis-1,2-Dichloroethene	100	50000	ND(1)	ND(1)	ND(1)	72	ND(1)	10						
Acetone	50000	50000	ND(5)	60	ND(5)	30	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	6	ND(5)
Tetrahydrofuran			ND(5)	ND(5)	ND(5)	6.9	ND(5)							
Naphthalene	1000	20000	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	8.3	ND(2)
SUM			7.5	74.8	4.5	386.8	ND	3	ND	ND	ND	ND	17.6	28
Volatile Petroleum Hydrocarbons (ug/l)														
C9-C10 Aromatics	5000	4000	ND(50)	ND(50)	ND(50)	-	-	ND(50)	-	ND(50)	-	-	-	-
C5-C8 Aliphatics, Adjusted	1000	4000	ND(50)	ND(50)	ND(50)	-	-	ND(50)	-	ND(50)	-	-	-	-
C9-C12 Aliphatics, Adjusted	1000	20000	ND(50)	ND(50)	ND(50)	-	-	ND(50)	-	ND(50)	-	-	-	-

ND-Not detect in excess of the laboratory method detection limits in ()
 Bold-exceeds Method 1 GW-2 standards
 Tested compounds not shown do not exceed laboratory detection limits

TABLE 2
ANALYTICAL RESULTS - GROUNDWATER
RGP CHARACTERIZATION
(Results reported in micrograms per liter (ug/l) unless otherwise noted)

75 Brainerd Road; Allston, MA
Project No. 5344

LOCATION	RGP	GP-2
SAMPLING DATE	Effluent	5/10/2013
LAB SAMPLE ID	Criteria	L1308435-01
General Chemistry		
Solids, Total Suspended (mg/l)	30	27
Cyanide, Total	5.2	ND(5)
TPH	5000	ND(4000)
pH (sU)	6.5-8.3	6.6
Benzene	Total BTEX	ND(2)
Toluene	Total BTEX	ND(3)
Ethylbenzene	Total BTEX	ND(2)
p/m-Xylene	Total BTEX	ND(4)
o-Xylene	Total BTEX	ND(4)
Xylenes, Total	Total BTEX	ND(4)
Total BTEX	100	ND
1,2-Dibromoethane	0.05	ND(8)
Methyl tert butyl ether	70	ND(4)
Tert-Butyl Alcohol	Monitor Only	ND(40)
Tertiary-Amyl Methyl Ether	Monitor Only	ND(8)
Naphthalene	20	ND(10)
Carbon tetrachloride	4.4	ND(2)
1,2-Dichlorobenzene	600	ND(10)
1,3-Dichlorobenzene	320	ND(10)
1,4-Dichlorobenzene	5	ND(10)
Total dichlorobenzene		ND
1,1-Dichloroethane	70	ND(3)
1,2-Dichloroethane	5	ND(2)
1,1-Dichloroethene	3.2	ND(2)
cis-1,2-Dichloroethene	70	23
Methylene chloride	4.6	ND(12)
Tetrachloroethene	5	2
1,1,1-Trichloroethane	200	2.6
1,1,2-Trichloroethane	5	ND(3)
Trichloroethene	5	220
Vinyl chloride	2	ND(4)
Acetone	Monitor Only	ND(20)
1,4-Dioxane		ND(3)
2,4,6-Trichlorophenol		ND(5)
p-Chloro-m-cresol		ND(2)
2-Chlorophenol		ND(2)
2,4-Dichlorophenol		ND(5)
2,4-Dimethylphenol		ND(5)
2-Nitrophenol		ND(10)
4-Nitrophenol		ND(10)
2,4-Dinitrophenol		ND(20)
4,6-Dinitro-o-cresol		ND(10)
Phenol		ND(5)
2-Methylphenol		ND(5)
3-Methylphenol/4-Methylphenol		ND(5)
2,4,5-Trichlorophenol		ND(5)
Phenolics, Total	300	30
Pentachlorophenol	1	ND(0.8)
Butyl benzyl phthalate	Total phthalate	ND(5)
Di-n-butylphthalate	Total phthalate	ND(5)
Di-n-octylphthalate	Total phthalate	ND(5)
Diethyl phthalate	Total phthalate	ND(5)
Dimethyl phthalate	Total phthalate	ND(5)
Total phthalate	3	ND
Bis(2-ethylhexyl)phthalate	6	ND(3)
Total Group I PAHs	10	10.92
Benzo(a)anthracene	0.0038	1.8
Benzo(a)pyrene	0.0038	1.4
Benzo(b)fluoranthene	0.0038	2.7
Benzo(k)fluoranthene	0.0038	1.1
Chrysene	0.0038	2.1
Dibenzo(a,h)anthracene	0.0038	0.42
Indeno(1,2,3-cd)Pyrene	0.0038	1.4
Total Group II PAHs	100	12.23
Acenaphthene	Total Group II	ND(0.2)
Acenaphthylene	Total Group II	ND(0.2)
Anthracene	Total Group II	0.53
Benzo(ghi)perylene	Total Group II	1.4
Fluoranthene	Total Group II	4.2
Fluorene	Total Group II	0.2
Naphthalene	Total Group II	ND(0.2)
Phenanthrene	Total Group II	2.5
Pyrene	Total Group II	3.4
Polychlorinated Biphenyls by GC (ug/l)		
Total PCBs	0.0000064	ND
Anions by Ion Chromatography (ug/l)		
Chloride	Monitor Only	566000
Total Metals (ug/l)		
Antimony, Total	5.6	ND(0.5)
Arsenic, Total	10	ND(0.5)
Cadmium, Total	0.2	ND(0.2)
Chromium, Total	48.8	ND(1)
Chromium, Hexavalent	11.4	ND(10)
Copper, Total	5.2	5.33
Lead, Total	1.3	1.3
Mercury, Total	0.9	ND(0.2)
Nickel, Total	29	2.52
Selenium, Total	5	ND(5)
Silver, Total	1.2	ND(0.4)
Zinc, Total	66.6	16.85
Iron, Total	1000	80

ND-not detected in excess of the laboratory method detection limits in ()
Bold-exceeds RGP Effluent Standard
Tested compounds not shown do not exceed laboratory detection limits

TABLE 3
Calculations of Mass of Compounds

Icon Building
75 Brainerd Road; Allston, Massachusetts
McPhail Job No. 5344

Max flow (GPM) =		100	
Max Flow (MGD) =		0.144	
Compound #	Max Concentration (ug/l)	Max Concentration (mg/l)	MASS (kg)
Copper	5.30	0.0053	0.00289
Lead	1.30	0.0013	0.00071
Nickel	2.50	0.0025	0.00136
Zinc	16.85	0.01685	0.00920
Iron	80.00	0.08	0.04367
cis-1,2 Dichloroethene	72.00	0.072	0.03930
Tetrachloroethene	4.00	0.004	0.00218
1,1,1-trichloroethane	1.10	0.0011	0.00060
1,1,2 trichloroethane	2.60	0.0026	0.00142
trichloroethene	270.00	0.27	0.14739
vinyl chloride	2.80	0.0028	0.00153
total phenols	30.00	0.03	0.01638
Benzo(a)anthracene	1.80	0.0018	0.00098
Benzo(a)pyrene	1.40	0.0014	0.00076
Benzo(b)fluoranthene	2.70	0.0027	0.00147
Benzo(k)fluoranthene	1.10	0.0011	0.00060
Chrysene	2.10	0.0021	0.00115
Dibenzo(a,h)anthracene	0.42	0.00042	0.00023
Indeno(1,2,3-cd)Pyrene	1.40	0.0014	0.00076
Anthracene	0.53	0.00053	0.00029
Benzo(ghi)perylene	1.40	0.0014	0.00076
Fluoranthene	4.20	0.0042	0.00229
Fluorene	0.20	0.0002	0.00011
Phenanthrene	2.50	0.0025	0.00136
Pyrene	3.40	0.0034	0.00186
Total Group I PAHs	10.92	0.01092	0.00596
Total Group II PAHs	12.23	0.01223	0.00668
Chloride	566000.00	566	308.97425
Avg flow (GPM) =		50	
Avg Flow (MGD) =		0.072	
Compound #	Average Concentration (ug/l)	Average Concentration (mg/l)	MASS (kg)
cis-1,2 Dichloroethene	8.85	0.00885	0.0024
Tetrachloroethene	1.31	0.00131	0.0004
1,1,1-trichloroethane	1.49	0.00149	0.0004
1,1,2 trichloroethane	1.52	0.00152	0.0004
trichloroethene	40.85	0.04085	0.0111
vinyl chloride	2.8	0.0028	0.00076

GPM = Gallons Per Minute
MGD = Million Gallons Per Day
ug/l = Micrograms per liter
mg/l = Milligrams per liter
kg = Kilograms



ANALYTICAL REPORT

Lab Number:	L1308435
Client:	McPhail Associates 2269 Massachusetts Avenue Cambridge, MA 02140
ATTN:	Bill Burns
Phone:	(617) 868-1420
Project Name:	75 BRAINERD RD
Project Number:	5344
Report Date:	05/16/13

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: 75 BRAINERD RD
Project Number: 5344

Lab Number: L1308435
Report Date: 05/16/13

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1308435-01	GP-2	Not Specified	05/10/13 14:00

Project Name: 75 BRAINERD RD
Project Number: 5344

Lab Number: L1308435
Report Date: 05/16/13

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. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

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.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples free of charge for 30 days from the date the project is completed. After 30 days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: 75 BRAINERD RD
Project Number: 5344

Lab Number: L1308435
Report Date: 05/16/13

Case Narrative (continued)

Sample Receipt

L1308435-01 was received without the container for Cyanide analysis. An aliquot was taken from an unpreserved container and preserved appropriately.

Semivolatile Organics

The WG607406-1 Method Blank, associated with L1308435-01, has a concentration above the reporting limit for Bis(2-ethylhexyl)phthalate. Since the sample was non-detect for this target analyte, no further actions were taken. The results of the original analysis are reported.

The WG607406-2/-3 LCS/LCSD recoveries, associated with L1308435-01, are below the acceptance criteria for Benzidine (0%/0%); however, it has been identified as a "difficult" analyte. The results of the associated samples are reported.

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:  Cynthia McQueen

Title: Technical Director/Representative

Date: 05/16/13

ORGANICS

VOLATILES

Project Name: 75 BRAINERD RD**Lab Number:** L1308435**Project Number:** 5344**Report Date:** 05/16/13**SAMPLE RESULTS**

Lab ID: L1308435-01
Client ID: GP-2
Sample Location: Not Specified
Matrix: Water
Analytical Method: 1,8260C-SIM(M)
Analytical Date: 05/16/13 13:10
Analyst: MM

Date Collected: 05/10/13 14:00
Date Received: 05/10/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-SIM - Westborough Lab						
1,4-Dioxane	ND		ug/l	3.0	--	1

Project Name: 75 BRAINERD RD

Lab Number: L1308435

Project Number: 5344

Report Date: 05/16/13

SAMPLE RESULTS

Lab ID: L1308435-01 D
 Client ID: GP-2
 Sample Location: Not Specified
 Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 05/16/13 13:29
 Analyst: PD

Date Collected: 05/10/13 14:00
 Date Received: 05/10/13
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	12	--	4
1,1-Dichloroethane	ND		ug/l	3.0	--	4
Chloroform	ND		ug/l	3.0	--	4
Carbon tetrachloride	ND		ug/l	2.0	--	4
1,2-Dichloropropane	ND		ug/l	7.0	--	4
Dibromochloromethane	ND		ug/l	2.0	--	4
1,1,2-Trichloroethane	ND		ug/l	3.0	--	4
Tetrachloroethene	2.0		ug/l	2.0	--	4
Chlorobenzene	ND		ug/l	2.0	--	4
Trichlorofluoromethane	ND		ug/l	10	--	4
1,2-Dichloroethane	ND		ug/l	2.0	--	4
1,1,1-Trichloroethane	2.6		ug/l	2.0	--	4
Bromodichloromethane	ND		ug/l	2.0	--	4
trans-1,3-Dichloropropene	ND		ug/l	2.0	--	4
cis-1,3-Dichloropropene	ND		ug/l	2.0	--	4
1,1-Dichloropropene	ND		ug/l	10	--	4
Bromoform	ND		ug/l	8.0	--	4
1,1,2,2-Tetrachloroethane	ND		ug/l	2.0	--	4
Benzene	ND		ug/l	2.0	--	4
Toluene	ND		ug/l	3.0	--	4
Ethylbenzene	ND		ug/l	2.0	--	4
Chloromethane	ND		ug/l	10	--	4
Bromomethane	ND		ug/l	4.0	--	4
Vinyl chloride	ND		ug/l	4.0	--	4
Chloroethane	ND		ug/l	4.0	--	4
1,1-Dichloroethene	ND		ug/l	2.0	--	4
trans-1,2-Dichloroethene	ND		ug/l	3.0	--	4
Trichloroethene	220		ug/l	2.0	--	4
1,2-Dichlorobenzene	ND		ug/l	10	--	4
1,3-Dichlorobenzene	ND		ug/l	10	--	4
1,4-Dichlorobenzene	ND		ug/l	10	--	4

Project Name: 75 BRAINERD RD

Lab Number: L1308435

Project Number: 5344

Report Date: 05/16/13

SAMPLE RESULTS

Lab ID: L1308435-01 D
 Client ID: GP-2
 Sample Location: Not Specified

Date Collected: 05/10/13 14:00
 Date Received: 05/10/13
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	4.0	--	4
p/m-Xylene	ND		ug/l	4.0	--	4
o-Xylene	ND		ug/l	4.0	--	4
Xylenes, Total	ND		ug/l	4.0	--	4
cis-1,2-Dichloroethene	23		ug/l	2.0	--	4
Dibromomethane	ND		ug/l	20	--	4
1,4-Dichlorobutane	ND		ug/l	20	--	4
1,2,3-Trichloropropane	ND		ug/l	20	--	4
Styrene	ND		ug/l	4.0	--	4
Dichlorodifluoromethane	ND		ug/l	20	--	4
Acetone	ND		ug/l	20	--	4
Carbon disulfide	ND		ug/l	20	--	4
2-Butanone	ND		ug/l	20	--	4
Vinyl acetate	ND		ug/l	20	--	4
4-Methyl-2-pentanone	ND		ug/l	20	--	4
2-Hexanone	ND		ug/l	20	--	4
Ethyl methacrylate	ND		ug/l	20	--	4
Acrylonitrile	ND		ug/l	20	--	4
Bromochloromethane	ND		ug/l	10	--	4
Tetrahydrofuran	ND		ug/l	20	--	4
2,2-Dichloropropane	ND		ug/l	10	--	4
1,2-Dibromoethane	ND		ug/l	8.0	--	4
1,3-Dichloropropane	ND		ug/l	10	--	4
1,1,1,2-Tetrachloroethane	ND		ug/l	2.0	--	4
Bromobenzene	ND		ug/l	10	--	4
n-Butylbenzene	ND		ug/l	2.0	--	4
sec-Butylbenzene	ND		ug/l	2.0	--	4
tert-Butylbenzene	ND		ug/l	10	--	4
o-Chlorotoluene	ND		ug/l	10	--	4
p-Chlorotoluene	ND		ug/l	10	--	4
1,2-Dibromo-3-chloropropane	ND		ug/l	10	--	4
Hexachlorobutadiene	ND		ug/l	2.0	--	4
Isopropylbenzene	ND		ug/l	2.0	--	4
p-Isopropyltoluene	ND		ug/l	2.0	--	4
Naphthalene	ND		ug/l	10	--	4
n-Propylbenzene	ND		ug/l	2.0	--	4
1,2,3-Trichlorobenzene	ND		ug/l	10	--	4
1,2,4-Trichlorobenzene	ND		ug/l	10	--	4
1,3,5-Trimethylbenzene	ND		ug/l	10	--	4

Project Name: 75 BRAINERD RD

Lab Number: L1308435

Project Number: 5344

Report Date: 05/16/13

SAMPLE RESULTS

Lab ID: L1308435-01 D

Date Collected: 05/10/13 14:00

Client ID: GP-2

Date Received: 05/10/13

Sample Location: Not Specified

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2,4-Trimethylbenzene	ND		ug/l	10	--	4
trans-1,4-Dichloro-2-butene	ND		ug/l	10	--	4
Ethyl ether	ND		ug/l	10	--	4
Tert-Butyl Alcohol	ND		ug/l	40	--	4
Tertiary-Amyl Methyl Ether	ND		ug/l	8.0	--	4

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	99		70-130

Project Name: 75 BRAINERD RD

Lab Number: L1308435

Project Number: 5344

Report Date: 05/16/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C-SIM(M)

Analytical Date: 05/16/13 12:06

Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG608589-3					
1,4-Dioxane	ND		ug/l	3.0	--

Project Name: 75 BRAINERD RD
Project Number: 5344

Lab Number: L1308435
Report Date: 05/16/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 05/16/13 12:07
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG608602-3					
Methylene chloride	ND		ug/l	3.0	--
1,1-Dichloroethane	ND		ug/l	0.75	--
Chloroform	ND		ug/l	0.75	--
Carbon tetrachloride	ND		ug/l	0.50	--
1,2-Dichloropropane	ND		ug/l	1.8	--
Dibromochloromethane	ND		ug/l	0.50	--
1,1,2-Trichloroethane	ND		ug/l	0.75	--
Tetrachloroethene	ND		ug/l	0.50	--
Chlorobenzene	ND		ug/l	0.50	--
Trichlorofluoromethane	ND		ug/l	2.5	--
1,2-Dichloroethane	ND		ug/l	0.50	--
1,1,1-Trichloroethane	ND		ug/l	0.50	--
Bromodichloromethane	ND		ug/l	0.50	--
trans-1,3-Dichloropropene	ND		ug/l	0.50	--
cis-1,3-Dichloropropene	ND		ug/l	0.50	--
1,1-Dichloropropene	ND		ug/l	2.5	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	0.75	--
Ethylbenzene	ND		ug/l	0.50	--
Chloromethane	ND		ug/l	2.5	--
Bromomethane	ND		ug/l	1.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	1.0	--
1,1-Dichloroethene	ND		ug/l	0.50	--
trans-1,2-Dichloroethene	ND		ug/l	0.75	--
Trichloroethene	ND		ug/l	0.50	--
1,2-Dichlorobenzene	ND		ug/l	2.5	--
1,3-Dichlorobenzene	ND		ug/l	2.5	--
1,4-Dichlorobenzene	ND		ug/l	2.5	--

Project Name: 75 BRAINERD RD
Project Number: 5344

Lab Number: L1308435
Report Date: 05/16/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 05/16/13 12:07
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG608602-3					
Methyl tert butyl ether	ND		ug/l	1.0	--
p/m-Xylene	ND		ug/l	1.0	--
o-Xylene	ND		ug/l	1.0	--
Xylenes, Total	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	0.50	--
Dibromomethane	ND		ug/l	5.0	--
1,4-Dichlorobutane	ND		ug/l	5.0	--
1,2,3-Trichloropropane	ND		ug/l	5.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	5.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	5.0	--
2-Butanone	ND		ug/l	5.0	--
Vinyl acetate	ND		ug/l	5.0	--
4-Methyl-2-pentanone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Ethyl methacrylate	ND		ug/l	5.0	--
Acrylonitrile	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.5	--
Tetrahydrofuran	ND		ug/l	5.0	--
2,2-Dichloropropane	ND		ug/l	2.5	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.5	--
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	--
Bromobenzene	ND		ug/l	2.5	--
n-Butylbenzene	ND		ug/l	0.50	--
sec-Butylbenzene	ND		ug/l	0.50	--
tert-Butylbenzene	ND		ug/l	2.5	--
o-Chlorotoluene	ND		ug/l	2.5	--
p-Chlorotoluene	ND		ug/l	2.5	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	--

Project Name: 75 BRAINERD RD
Project Number: 5344

Lab Number: L1308435
Report Date: 05/16/13

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 05/16/13 12:07
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG608602-3					
Hexachlorobutadiene	ND		ug/l	0.50	--
Isopropylbenzene	ND		ug/l	0.50	--
p-Isopropyltoluene	ND		ug/l	0.50	--
Naphthalene	ND		ug/l	2.5	--
n-Propylbenzene	ND		ug/l	0.50	--
1,2,3-Trichlorobenzene	ND		ug/l	2.5	--
1,2,4-Trichlorobenzene	ND		ug/l	2.5	--
1,3,5-Trimethylbenzene	ND		ug/l	2.5	--
1,2,4-Trimethylbenzene	ND		ug/l	2.5	--
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	--
Ethyl ether	ND		ug/l	2.5	--
Tert-Butyl Alcohol	ND		ug/l	10	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	99		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: 75 BRAINERD RD

Project Number: 5344

Lab Number: L1308435

Report Date: 05/16/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG608589-1 WG608589-2								
1,4-Dioxane	106		96		70-130	10		25

Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG608602-1 WG608602-2								
Methylene chloride	110		109		70-130	1		20
1,1-Dichloroethane	104		102		70-130	2		20
Chloroform	106		102		70-130	4		20
Carbon tetrachloride	97		94		63-132	3		20
1,2-Dichloropropane	104		103		70-130	1		20
Dibromochloromethane	92		89		63-130	3		20
1,1,2-Trichloroethane	102		102		70-130	0		20
Tetrachloroethene	85		81		70-130	5		20
Chlorobenzene	97		97		75-130	0		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: 75 BRAINERD RD

Project Number: 5344

Lab Number: L1308435

Report Date: 05/16/13

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG608602-1 WG608602-2								
Trichlorofluoromethane	116		112		62-150	4		20
1,2-Dichloroethane	102		102		70-130	0		20
1,1,1-Trichloroethane	100		98		67-130	2		20
Bromodichloromethane	102		98		67-130	4		20
trans-1,3-Dichloropropene	96		94		70-130	2		20
cis-1,3-Dichloropropene	100		100		70-130	0		20
1,1-Dichloropropene	104		100		70-130	4		20
Bromoform	84		82		54-136	2		20
1,1,1,2-Tetrachloroethane	111		114		67-130	3		20
Benzene	105		102		70-130	3		25
Toluene	99		97		70-130	2		25
Ethylbenzene	98		96		70-130	2		20
Chloromethane	87		79		64-130	10		20
Bromomethane	45		44		39-139	2		20
Vinyl chloride	100		94		55-140	6		20
Chloroethane	113		109		55-138	4		20
1,1-Dichloroethene	102		96		61-145	6		25
trans-1,2-Dichloroethene	102		100		70-130	2		20
Trichloroethene	100		98		70-130	2		25
1,2-Dichlorobenzene	100		98		70-130	2		20
1,3-Dichlorobenzene	99		98		70-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 75 BRAINERD RD

Project Number: 5344

Lab Number: L1308435

Report Date: 05/16/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG608602-1 WG608602-2								
1,4-Dichlorobenzene	100		98		70-130	2		20
Methyl tert butyl ether	100		98		63-130	2		20
p/m-Xylene	94		91		70-130	3		20
o-Xylene	94		92		70-130	2		20
cis-1,2-Dichloroethene	105		103		70-130	2		20
Dibromomethane	104		101		70-130	3		20
1,4-Dichlorobutane	103		103		70-130	0		20
1,2,3-Trichloropropane	113		116		64-130	3		20
Styrene	94		92		70-130	2		20
Dichlorodifluoromethane	84		81		36-147	4		20
Acetone	141		131		58-148	7		20
Carbon disulfide	100		96		51-130	4		20
2-Butanone	126		118		63-138	7		20
Vinyl acetate	101		102		70-130	1		20
4-Methyl-2-pentanone	93		92		59-130	1		20
2-Hexanone	100		98		57-130	2		20
Ethyl methacrylate	95		94		70-130	1		20
Acrylonitrile	102		102		70-130	0		20
Bromochloromethane	100		98		70-130	2		20
Tetrahydrofuran	103		104		58-130	1		20
2,2-Dichloropropane	101		97		63-133	4		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 75 BRAINERD RD

Project Number: 5344

Lab Number: L1308435

Report Date: 05/16/13

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG608602-1 WG608602-2								
1,2-Dibromoethane	96		97		70-130	1		20
1,3-Dichloropropane	101		102		70-130	1		20
1,1,1,2-Tetrachloroethane	92		90		64-130	2		20
Bromobenzene	98		98		70-130	0		20
n-Butylbenzene	107		104		53-136	3		20
sec-Butylbenzene	104		102		70-130	2		20
tert-Butylbenzene	101		100		70-130	1		20
o-Chlorotoluene	107		106		70-130	1		20
p-Chlorotoluene	105		104		70-130	1		20
1,2-Dibromo-3-chloropropane	106		104		41-144	2		20
Hexachlorobutadiene	88		87		63-130	1		20
Isopropylbenzene	103		101		70-130	2		20
p-Isopropyltoluene	101		99		70-130	2		20
Naphthalene	100		102		70-130	2		20
n-Propylbenzene	106		104		69-130	2		20
1,2,3-Trichlorobenzene	94		94		70-130	0		20
1,2,4-Trichlorobenzene	95		93		70-130	2		20
1,3,5-Trimethylbenzene	102		101		64-130	1		20
1,2,4-Trimethylbenzene	102		100		70-130	2		20
trans-1,4-Dichloro-2-butene	89		88		70-130	1		20
Ethyl ether	102		112		59-134	9		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 75 BRAINERD RD

Project Number: 5344

Lab Number: L1308435

Report Date: 05/16/13

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG608602-1 WG608602-2								
tert-Butyl Alcohol	100		100		70-130	0		20
Tertiary-Amyl Methyl Ether	98		97		66-130	1		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	100		102		70-130
Toluene-d8	99		99		70-130
4-Bromofluorobenzene	106		105		70-130
Dibromofluoromethane	102		103		70-130

SEMIVOLATILES

Project Name: 75 BRAINERD RD

Lab Number: L1308435

Project Number: 5344

Report Date: 05/16/13

SAMPLE RESULTS

Lab ID: L1308435-01
 Client ID: GP-2
 Sample Location: Not Specified
 Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 05/14/13 21:24
 Analyst: JB

Date Collected: 05/10/13 14:00
 Date Received: 05/10/13
 Field Prep: Not Specified
 Extraction Method: EPA 3510C
 Extraction Date: 05/11/13 17:33

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzidine	ND		ug/l	20	--	1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	--	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	--	1
1,2-Dichlorobenzene	ND		ug/l	2.0	--	1
1,3-Dichlorobenzene	ND		ug/l	2.0	--	1
1,4-Dichlorobenzene	ND		ug/l	2.0	--	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	--	1
2,4-Dinitrotoluene	ND		ug/l	5.0	--	1
2,6-Dinitrotoluene	ND		ug/l	5.0	--	1
Azobenzene	ND		ug/l	2.0	--	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	--	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	--	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	--	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	--	1
Hexachlorocyclopentadiene	ND		ug/l	20	--	1
Isophorone	ND		ug/l	5.0	--	1
Nitrobenzene	ND		ug/l	2.0	--	1
NDPA/DPA	ND		ug/l	2.0	--	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	--	1
Butyl benzyl phthalate	ND		ug/l	5.0	--	1
Di-n-butylphthalate	ND		ug/l	5.0	--	1
Di-n-octylphthalate	ND		ug/l	5.0	--	1
Diethyl phthalate	ND		ug/l	5.0	--	1
Dimethyl phthalate	ND		ug/l	5.0	--	1
Aniline	ND		ug/l	2.0	--	1
4-Chloroaniline	ND		ug/l	5.0	--	1
2-Nitroaniline	ND		ug/l	5.0	--	1
3-Nitroaniline	ND		ug/l	5.0	--	1
4-Nitroaniline	ND		ug/l	5.0	--	1
Dibenzofuran	ND		ug/l	2.0	--	1
n-Nitrosodimethylamine	ND		ug/l	2.0	--	1

Project Name: 75 BRAINERD RD

Lab Number: L1308435

Project Number: 5344

Report Date: 05/16/13

SAMPLE RESULTS

Lab ID: L1308435-01

Date Collected: 05/10/13 14:00

Client ID: GP-2

Date Received: 05/10/13

Sample Location: Not Specified

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,6-Trichlorophenol	ND		ug/l	5.0	--	1
p-Chloro-m-cresol	ND		ug/l	2.0	--	1
2-Chlorophenol	ND		ug/l	2.0	--	1
2,4-Dichlorophenol	ND		ug/l	5.0	--	1
2,4-Dimethylphenol	ND		ug/l	5.0	--	1
2-Nitrophenol	ND		ug/l	10	--	1
4-Nitrophenol	ND		ug/l	10	--	1
2,4-Dinitrophenol	ND		ug/l	20	--	1
4,6-Dinitro-o-cresol	ND		ug/l	10	--	1
Phenol	ND		ug/l	5.0	--	1
2-Methylphenol	ND		ug/l	5.0	--	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	--	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	--	1
Benzoic Acid	ND		ug/l	50	--	1
Benzyl Alcohol	ND		ug/l	2.0	--	1
Carbazole	ND		ug/l	2.0	--	1
Pyridine	ND		ug/l	5.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	47		21-120
Phenol-d6	32		10-120
Nitrobenzene-d5	93		23-120
2-Fluorobiphenyl	82		15-120
2,4,6-Tribromophenol	91		10-120
4-Terphenyl-d14	101		41-149

Project Name: 75 BRAINERD RD

Lab Number: L1308435

Project Number: 5344

Report Date: 05/16/13

SAMPLE RESULTS

Lab ID: L1308435-01
 Client ID: GP-2
 Sample Location: Not Specified
 Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 05/15/13 10:25
 Analyst: AS

Date Collected: 05/10/13 14:00
 Date Received: 05/10/13
 Field Prep: Not Specified
 Extraction Method: EPA 3510C
 Extraction Date: 05/11/13 17:38

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.20	--	1
2-Chloronaphthalene	ND		ug/l	0.20	--	1
Fluoranthene	4.2		ug/l	0.20	--	1
Hexachlorobutadiene	ND		ug/l	0.50	--	1
Naphthalene	ND		ug/l	0.20	--	1
Benzo(a)anthracene	1.8		ug/l	0.20	--	1
Benzo(a)pyrene	1.4		ug/l	0.20	--	1
Benzo(b)fluoranthene	2.7		ug/l	0.20	--	1
Benzo(k)fluoranthene	1.1		ug/l	0.20	--	1
Chrysene	2.1		ug/l	0.20	--	1
Acenaphthylene	ND		ug/l	0.20	--	1
Anthracene	0.53		ug/l	0.20	--	1
Benzo(ghi)perylene	1.4		ug/l	0.20	--	1
Fluorene	0.20		ug/l	0.20	--	1
Phenanthrene	2.5		ug/l	0.20	--	1
Dibenzo(a,h)anthracene	0.42		ug/l	0.20	--	1
Indeno(1,2,3-cd)Pyrene	1.4		ug/l	0.20	--	1
Pyrene	3.4		ug/l	0.20	--	1
1-Methylnaphthalene	ND		ug/l	0.20	--	1
2-Methylnaphthalene	ND		ug/l	0.20	--	1
Pentachlorophenol	ND		ug/l	0.80	--	1
Hexachlorobenzene	ND		ug/l	0.80	--	1
Hexachloroethane	ND		ug/l	0.80	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	46		21-120
Phenol-d6	33		10-120
Nitrobenzene-d5	88		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	84		10-120
4-Terphenyl-d14	98		41-149

Project Name: 75 BRAINERD RD
Project Number: 5344

Lab Number: L1308435
Report Date: 05/16/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 05/14/13 19:34
Analyst: JB

Extraction Method: EPA 3510C
Extraction Date: 05/11/13 17:33

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG607406-1					
Acenaphthene	ND		ug/l	2.0	--
Benzidine	ND		ug/l	20	--
1,2,4-Trichlorobenzene	ND		ug/l	5.0	--
Hexachlorobenzene	ND		ug/l	2.0	--
Bis(2-chloroethyl)ether	ND		ug/l	2.0	--
2-Chloronaphthalene	ND		ug/l	2.0	--
1,2-Dichlorobenzene	ND		ug/l	2.0	--
1,3-Dichlorobenzene	ND		ug/l	2.0	--
1,4-Dichlorobenzene	ND		ug/l	2.0	--
3,3'-Dichlorobenzidine	ND		ug/l	5.0	--
2,4-Dinitrotoluene	ND		ug/l	5.0	--
2,6-Dinitrotoluene	ND		ug/l	5.0	--
Azobenzene	ND		ug/l	2.0	--
Fluoranthene	ND		ug/l	2.0	--
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	--
4-Bromophenyl phenyl ether	ND		ug/l	2.0	--
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	--
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	--
Hexachlorobutadiene	ND		ug/l	2.0	--
Hexachlorocyclopentadiene	ND		ug/l	20	--
Hexachloroethane	ND		ug/l	2.0	--
Isophorone	ND		ug/l	5.0	--
Naphthalene	ND		ug/l	2.0	--
Nitrobenzene	ND		ug/l	2.0	--
NDPA/DPA	ND		ug/l	2.0	--
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	--
Bis(2-ethylhexyl)phthalate	4.0		ug/l	3.0	--
Butyl benzyl phthalate	ND		ug/l	5.0	--
Di-n-butylphthalate	ND		ug/l	5.0	--
Di-n-octylphthalate	ND		ug/l	5.0	--
Diethyl phthalate	ND		ug/l	5.0	--

Project Name: 75 BRAINERD RD
Project Number: 5344

Lab Number: L1308435
Report Date: 05/16/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 05/14/13 19:34
Analyst: JB

Extraction Method: EPA 3510C
Extraction Date: 05/11/13 17:33

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG607406-1					
Dimethyl phthalate	ND		ug/l	5.0	--
Benzo(a)anthracene	ND		ug/l	2.0	--
Benzo(a)pyrene	ND		ug/l	2.0	--
Benzo(b)fluoranthene	ND		ug/l	2.0	--
Benzo(k)fluoranthene	ND		ug/l	2.0	--
Chrysene	ND		ug/l	2.0	--
Acenaphthylene	ND		ug/l	2.0	--
Anthracene	ND		ug/l	2.0	--
Benzo(ghi)perylene	ND		ug/l	2.0	--
Fluorene	ND		ug/l	2.0	--
Phenanthrene	ND		ug/l	2.0	--
Dibenzo(a,h)anthracene	ND		ug/l	2.0	--
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	--
Pyrene	ND		ug/l	2.0	--
Biphenyl	ND		ug/l	2.0	--
Aniline	ND		ug/l	2.0	--
4-Chloroaniline	ND		ug/l	5.0	--
1-Methylnaphthalene	ND		ug/l	2.0	--
2-Nitroaniline	ND		ug/l	5.0	--
3-Nitroaniline	ND		ug/l	5.0	--
4-Nitroaniline	ND		ug/l	5.0	--
Dibenzofuran	ND		ug/l	2.0	--
2-Methylnaphthalene	ND		ug/l	2.0	--
n-Nitrosodimethylamine	ND		ug/l	2.0	--
2,4,6-Trichlorophenol	ND		ug/l	5.0	--
p-Chloro-m-cresol	ND		ug/l	2.0	--
2-Chlorophenol	ND		ug/l	2.0	--
2,4-Dichlorophenol	ND		ug/l	5.0	--
2,4-Dimethylphenol	ND		ug/l	5.0	--
2-Nitrophenol	ND		ug/l	10	--
4-Nitrophenol	ND		ug/l	10	--

Project Name: 75 BRAINERD RD
Project Number: 5344

Lab Number: L1308435
Report Date: 05/16/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 05/14/13 19:34
Analyst: JB

Extraction Method: EPA 3510C
Extraction Date: 05/11/13 17:33

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG607406-1					
2,4-Dinitrophenol	ND		ug/l	20	--
4,6-Dinitro-o-cresol	ND		ug/l	10	--
Pentachlorophenol	ND		ug/l	10	--
Phenol	ND		ug/l	5.0	--
2-Methylphenol	ND		ug/l	5.0	--
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	--
2,4,5-Trichlorophenol	ND		ug/l	5.0	--
Benzoic Acid	ND		ug/l	50	--
Benzyl Alcohol	ND		ug/l	2.0	--
Carbazole	ND		ug/l	2.0	--
Pyridine	ND		ug/l	5.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	58		21-120
Phenol-d6	36		10-120
Nitrobenzene-d5	102		23-120
2-Fluorobiphenyl	85		15-120
2,4,6-Tribromophenol	94		10-120
4-Terphenyl-d14	119		41-149

Project Name: 75 BRAINERD RD
Project Number: 5344

Lab Number: L1308435
Report Date: 05/16/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 05/15/13 08:56
Analyst: AS

Extraction Method: EPA 3510C
Extraction Date: 05/11/13 17:38

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG607407-1					
Acenaphthene	ND		ug/l	0.20	--
2-Chloronaphthalene	ND		ug/l	0.20	--
Fluoranthene	ND		ug/l	0.20	--
Hexachlorobutadiene	ND		ug/l	0.50	--
Naphthalene	ND		ug/l	0.20	--
Benzo(a)anthracene	ND		ug/l	0.20	--
Benzo(a)pyrene	ND		ug/l	0.20	--
Benzo(b)fluoranthene	ND		ug/l	0.20	--
Benzo(k)fluoranthene	ND		ug/l	0.20	--
Chrysene	ND		ug/l	0.20	--
Acenaphthylene	ND		ug/l	0.20	--
Anthracene	ND		ug/l	0.20	--
Benzo(ghi)perylene	ND		ug/l	0.20	--
Fluorene	ND		ug/l	0.20	--
Phenanthrene	ND		ug/l	0.20	--
Dibenzo(a,h)anthracene	ND		ug/l	0.20	--
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	--
Pyrene	ND		ug/l	0.20	--
1-Methylnaphthalene	ND		ug/l	0.20	--
2-Methylnaphthalene	ND		ug/l	0.20	--
Pentachlorophenol	ND		ug/l	0.80	--
Hexachlorobenzene	ND		ug/l	0.80	--
Hexachloroethane	ND		ug/l	0.80	--

Project Name: 75 BRAINERD RD
Project Number: 5344

Lab Number: L1308435
Report Date: 05/16/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 05/15/13 08:56
Analyst: AS

Extraction Method: EPA 3510C
Extraction Date: 05/11/13 17:38

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG607407-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	52		21-120
Phenol-d6	37		10-120
Nitrobenzene-d5	91		23-120
2-Fluorobiphenyl	75		15-120
2,4,6-Tribromophenol	74		10-120
4-Terphenyl-d14	93		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: 75 BRAINERD RD

Lab Number: L1308435

Project Number: 5344

Report Date: 05/16/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG607406-2 WG607406-3								
Acenaphthene	98		94		37-111	4		30
Benzidine	0	Q	0	Q	10-75	NC		30
1,2,4-Trichlorobenzene	70		75		39-98	7		30
Hexachlorobenzene	108		111		40-140	3		30
Bis(2-chloroethyl)ether	86		78		40-140	10		30
2-Chloronaphthalene	100		93		40-140	7		30
1,2-Dichlorobenzene	69		69		40-140	0		30
1,3-Dichlorobenzene	66		69		40-140	4		30
1,4-Dichlorobenzene	65		68		36-97	5		30
3,3'-Dichlorobenzidine	75		80		40-140	6		30
2,4-Dinitrotoluene	109	Q	111	Q	24-96	2		30
2,6-Dinitrotoluene	126		122		40-140	3		30
Azobenzene	110		117		40-140	6		30
Fluoranthene	119		118		40-140	1		30
4-Chlorophenyl phenyl ether	103		101		40-140	2		30
4-Bromophenyl phenyl ether	112		110		40-140	2		30
Bis(2-chloroisopropyl)ether	86		78		40-140	10		30
Bis(2-chloroethoxy)methane	94		80		40-140	16		30
Hexachlorobutadiene	70		78		40-140	11		30
Hexachlorocyclopentadiene	32	Q	33	Q	40-140	3		30
Hexachloroethane	67		75		40-140	11		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 75 BRAINERD RD

Project Number: 5344

Lab Number: L1308435

Report Date: 05/16/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG607406-2 WG607406-3								
Isophorone	99		87		40-140	13		30
Naphthalene	81		80		40-140	1		30
Nitrobenzene	107		98		40-140	9		30
NitrosoDiPhenylAmine(NDPA)/DPA	105		106		40-140	1		30
n-Nitrosodi-n-propylamine	96		84		29-132	13		30
Bis(2-Ethylhexyl)phthalate	121		121		40-140	0		30
Butyl benzyl phthalate	128		128		40-140	0		30
Di-n-butylphthalate	129		129		40-140	0		30
Di-n-octylphthalate	121		123		40-140	2		30
Diethyl phthalate	118		119		40-140	1		30
Dimethyl phthalate	112		112		40-140	0		30
Benzo(a)anthracene	100		102		40-140	2		30
Benzo(a)pyrene	106		108		40-140	2		30
Benzo(b)fluoranthene	106		109		40-140	3		30
Benzo(k)fluoranthene	123		123		40-140	0		30
Chrysene	107		109		40-140	2		30
Acenaphthylene	108		103		45-123	5		30
Anthracene	110		110		40-140	0		30
Benzo(ghi)perylene	113		111		40-140	2		30
Fluorene	107		105		40-140	2		30
Phenanthrene	112		110		40-140	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 75 BRAINERD RD

Lab Number: L1308435

Project Number: 5344

Report Date: 05/16/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG607406-2 WG607406-3								
Dibenzo(a,h)anthracene	122		121		40-140	1		30
Indeno(1,2,3-cd)Pyrene	111		113		40-140	2		30
Pyrene	114		116		26-127	2		30
Biphenyl	96		90		40-140	6		30
Aniline	24	Q	22	Q	40-140	9		30
4-Chloroaniline	62		59		40-140	5		30
1-Methylnaphthalene	100		91		41-103	9		30
2-Nitroaniline	106		103		52-143	3		30
3-Nitroaniline	77		81		25-145	5		30
4-Nitroaniline	89		99		51-143	11		30
Dibenzofuran	104		101		40-140	3		30
2-Methylnaphthalene	92		85		40-140	8		30
n-Nitrosodimethylamine	52		46		22-74	12		30
2,4,6-Trichlorophenol	118		111		30-130	6		30
P-Chloro-M-Cresol	120	Q	114	Q	23-97	5		30
2-Chlorophenol	90		81		27-123	11		30
2,4-Dichlorophenol	110		95		30-130	15		30
2,4-Dimethylphenol	86		75		30-130	14		30
2-Nitrophenol	99		88		30-130	12		30
4-Nitrophenol	71		72		10-80	1		30
2,4-Dinitrophenol	110		112		20-130	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 75 BRAINERD RD

Lab Number: L1308435

Project Number: 5344

Report Date: 05/16/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG607406-2 WG607406-3								
4,6-Dinitro-o-cresol	110		112		20-164	2		30
Pentachlorophenol	116	Q	116	Q	9-103	0		30
Phenol	48		42		12-110	13		30
2-Methylphenol	81		71		30-130	13		30
3-Methylphenol/4-Methylphenol	85		73		30-130	15		30
2,4,5-Trichlorophenol	119		118		30-130	1		30
Benzoic Acid	55		57		10-164	4		30
Benzyl Alcohol	89		77		26-116	14		30
Carbazole	113		116		55-144	3		30
Pyridine	12		14		10-66	15		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	64		59		21-120
Phenol-d6	50		44		10-120
Nitrobenzene-d5	114		105		23-120
2-Fluorobiphenyl	101		90		15-120
2,4,6-Tribromophenol	117		114		10-120
4-Terphenyl-d14	112		111		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: 75 BRAINERD RD

Lab Number: L1308435

Project Number: 5344

Report Date: 05/16/13

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG607407-2 WG607407-3								
Acenaphthene	80		76		37-111	5		40
2-Chloronaphthalene	79		75		40-140	5		40
Fluoranthene	110		114		40-140	4		40
Hexachlorobutadiene	65		59		40-140	10		40
Naphthalene	75		72		40-140	4		40
Benzo(a)anthracene	112		113		40-140	1		40
Benzo(a)pyrene	100		102		40-140	2		40
Benzo(b)fluoranthene	107		107		40-140	0		40
Benzo(k)fluoranthene	107		110		40-140	3		40
Chrysene	105		106		40-140	1		40
Acenaphthylene	99		95		40-140	4		40
Anthracene	89		95		40-140	7		40
Benzo(ghi)perylene	94		110		40-140	16		40
Fluorene	97		94		40-140	3		40
Phenanthrene	99		102		40-140	3		40
Dibenzo(a,h)anthracene	100		110		40-140	10		40
Indeno(1,2,3-cd)Pyrene	99		113		40-140	13		40
Pyrene	104		107		26-127	3		40
1-Methylnaphthalene	80		75		40-140	6		40
2-Methylnaphthalene	80		73		40-140	9		40
Pentachlorophenol	106	Q	110	Q	9-103	4		40

Lab Control Sample Analysis Batch Quality Control

Project Name: 75 BRAINERD RD
Project Number: 5344

Lab Number: L1308435
Report Date: 05/16/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG607407-2 WG607407-3								
Hexachlorobenzene	98		104		40-140	6		40
Hexachloroethane	68		64		40-140	6		40

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	50		46		21-120
Phenol-d6	39		36		10-120
Nitrobenzene-d5	89		85		23-120
2-Fluorobiphenyl	81		75		15-120
2,4,6-Tribromophenol	102		97		10-120
4-Terphenyl-d14	99		104		41-149

PCBS

Project Name: 75 BRAINERD RD**Lab Number:** L1308435**Project Number:** 5344**Report Date:** 05/16/13**SAMPLE RESULTS**

Lab ID: L1308435-01
Client ID: GP-2
Sample Location: Not Specified
Matrix: Water
Analytical Method: 5,608
Analytical Date: 05/15/13 21:05
Analyst: GT

Date Collected: 05/10/13 14:00
Date Received: 05/10/13
Field Prep: Not Specified
Extraction Method: EPA 608
Extraction Date: 05/14/13 01:05
Cleanup Method1: EPA 3665A
Cleanup Date1: 05/15/13
Cleanup Method2: EPA 3660B
Cleanup Date2: 05/15/13

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	71		30-150
Decachlorobiphenyl	74		30-150

Project Name: 75 BRAINERD RD
Project Number: 5344

Lab Number: L1308435
Report Date: 05/16/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,608
Analytical Date: 05/15/13 21:57
Analyst: GT

Extraction Method: EPA 608
Extraction Date: 05/14/13 01:05
Cleanup Method1: EPA 3665A
Cleanup Date1: 05/15/13
Cleanup Method2: EPA 3660B
Cleanup Date2: 05/15/13

Parameter	Result	Qualifier	Units	RL	MDL
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG607736-1					
Aroclor 1016	ND		ug/l	0.250	--
Aroclor 1221	ND		ug/l	0.250	--
Aroclor 1232	ND		ug/l	0.250	--
Aroclor 1242	ND		ug/l	0.250	--
Aroclor 1248	ND		ug/l	0.250	--
Aroclor 1254	ND		ug/l	0.250	--
Aroclor 1260	ND		ug/l	0.250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	65		30-150
Decachlorobiphenyl	75		30-150

Matrix Spike Analysis

Batch Quality Control

Project Name: 75 BRAINERD RD

Lab Number: L1308435

Project Number: 5344

Report Date: 05/16/13

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG607736-3 QC Sample: L1308435-01 Client ID: GP-2												
Aroclor 1016	ND	2.04	1.62	79		-	-		40-140	-		50
Aroclor 1260	ND	2.04	1.42	70		-	-		40-140	-		50

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	74				30-150
Decachlorobiphenyl	76				30-150

Lab Control Sample Analysis

Batch Quality Control

Project Name: 75 BRAINERD RD

Lab Number: L1308435

Project Number: 5344

Report Date: 05/16/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG607736-2								
Aroclor 1016	70		-		40-140	-		50
Aroclor 1260	68		-		40-140	-		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	69				30-150
Decachlorobiphenyl	75				30-150

Lab Duplicate Analysis

Batch Quality Control

Project Name: 75 BRAINERD RD

Project Number: 5344

Lab Number: L1308435

Report Date: 05/16/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG607736-4 QC Sample: L1308435-01 Client ID: GP-2						
Aroclor 1016	ND	ND	ug/l	NC		50
Aroclor 1221	ND	ND	ug/l	NC		50
Aroclor 1232	ND	ND	ug/l	NC		50
Aroclor 1242	ND	ND	ug/l	NC		50
Aroclor 1248	ND	ND	ug/l	NC		50
Aroclor 1254	ND	ND	ug/l	NC		50
Aroclor 1260	ND	ND	ug/l	NC		50

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	71		72		30-150
Decachlorobiphenyl	74		76		30-150

METALS

Project Name: 75 BRAINERD RD
Project Number: 5344

Lab Number: L1308435
Report Date: 05/16/13

SAMPLE RESULTS

Lab ID: L1308435-01
Client ID: GP-2
Sample Location: Not Specified
Matrix: Water

Date Collected: 05/10/13 14:00
Date Received: 05/10/13
Field Prep: Not Specified

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	0.00050	--	1	05/11/13 08:50	05/11/13 17:46	EPA 3005A	1,6020A	AK
Arsenic, Total	ND		mg/l	0.00050	--	1	05/11/13 08:50	05/11/13 17:46	EPA 3005A	1,6020A	AK
Cadmium, Total	ND		mg/l	0.00020	--	1	05/11/13 08:50	05/11/13 17:46	EPA 3005A	1,6020A	AK
Chromium, Total	ND		mg/l	0.00100	--	1	05/11/13 08:50	05/11/13 17:46	EPA 3005A	1,6020A	AK
Copper, Total	0.00533		mg/l	0.00100	--	1	05/11/13 08:50	05/11/13 17:46	EPA 3005A	1,6020A	AK
Iron, Total	0.08		mg/l	0.05	--	1	05/11/13 08:50	05/16/13 12:09	EPA 3005A	19,200.7	TT
Lead, Total	0.00130		mg/l	0.00050	--	1	05/11/13 08:50	05/11/13 17:46	EPA 3005A	1,6020A	AK
Mercury, Total	ND		mg/l	0.0002	--	1	05/15/13 08:17	05/15/13 12:31	EPA 245.1	3,245.1	JH
Nickel, Total	0.00252		mg/l	0.00050	--	1	05/11/13 08:50	05/11/13 17:46	EPA 3005A	1,6020A	AK
Selenium, Total	ND		mg/l	0.00500	--	1	05/11/13 08:50	05/11/13 17:46	EPA 3005A	1,6020A	AK
Silver, Total	ND		mg/l	0.00040	--	1	05/11/13 08:50	05/11/13 17:46	EPA 3005A	1,6020A	AK
Zinc, Total	0.01685		mg/l	0.01000	--	1	05/11/13 08:50	05/11/13 17:46	EPA 3005A	1,6020A	AK



Project Name: 75 BRAINERD RD
Project Number: 5344

Lab Number: L1308435
Report Date: 05/16/13

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: WG607359-1									
Antimony, Total	ND	mg/l	0.00050	--	1	05/11/13 08:50	05/11/13 17:07	1,6020A	AK
Arsenic, Total	ND	mg/l	0.00050	--	1	05/11/13 08:50	05/11/13 17:07	1,6020A	AK
Cadmium, Total	ND	mg/l	0.00020	--	1	05/11/13 08:50	05/11/13 17:07	1,6020A	AK
Chromium, Total	ND	mg/l	0.00100	--	1	05/11/13 08:50	05/11/13 17:07	1,6020A	AK
Copper, Total	ND	mg/l	0.00100	--	1	05/11/13 08:50	05/11/13 17:07	1,6020A	AK
Lead, Total	ND	mg/l	0.00050	--	1	05/11/13 08:50	05/11/13 17:07	1,6020A	AK
Nickel, Total	ND	mg/l	0.00050	--	1	05/11/13 08:50	05/11/13 17:07	1,6020A	AK
Selenium, Total	ND	mg/l	0.00500	--	1	05/11/13 08:50	05/11/13 17:07	1,6020A	AK
Silver, Total	ND	mg/l	0.00040	--	1	05/11/13 08:50	05/11/13 17:07	1,6020A	AK
Zinc, Total	ND	mg/l	0.01000	--	1	05/11/13 08:50	05/11/13 17:07	1,6020A	AK

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: WG607871-1									
Mercury, Total	ND	mg/l	0.0002	--	1	05/15/13 08:17	05/15/13 12:10	3,245.1	JH

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: WG607925-1									
Iron, Total	ND	mg/l	0.05	--	1	05/11/13 08:50	05/16/13 11:42	19,200.7	TT

Prep Information

Digestion Method: EPA 3005A



Lab Control Sample Analysis

Batch Quality Control

Project Name: 75 BRAINERD RD

Project Number: 5344

Lab Number: L1308435

Report Date: 05/16/13

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG607359-2								
Antimony, Total	93		-		80-120	-		
Arsenic, Total	106		-		80-120	-		
Cadmium, Total	110		-		80-120	-		
Chromium, Total	98		-		80-120	-		
Copper, Total	103		-		80-120	-		
Lead, Total	102		-		80-120	-		
Nickel, Total	100		-		80-120	-		
Selenium, Total	109		-		80-120	-		
Silver, Total	90		-		80-120	-		
Zinc, Total	105		-		80-120	-		
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG607871-2								
Mercury, Total	104		-		85-115	-		
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG607925-2								
Iron, Total	110		-		85-115	-		

Matrix Spike Analysis Batch Quality Control

Project Name: 75 BRAINERD RD
Project Number: 5344

Lab Number: L1308435
Report Date: 05/16/13

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: WG607359-4 QC Sample: L1308337-01 Client ID: MS Sample												
Antimony, Total	ND	0.5	0.4886	98		-	-		80-120	-		20
Arsenic, Total	0.00333	0.12	0.1456	118		-	-		80-120	-		20
Cadmium, Total	ND	0.051	0.06126	120		-	-		80-120	-		20
Chromium, Total	ND	0.2	0.2110	106		-	-		80-120	-		20
Copper, Total	ND	0.25	0.2756	110		-	-		80-120	-		20
Lead, Total	ND	0.51	0.5599	110		-	-		80-120	-		20
Nickel, Total	0.00063	0.5	0.5417	108		-	-		80-120	-		20
Selenium, Total	ND	0.12	0.137	114		-	-		80-120	-		20
Silver, Total	ND	0.05	0.04962	99		-	-		80-120	-		20
Zinc, Total	0.01862	0.5	0.5891	114		-	-		80-120	-		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG607871-4 QC Sample: L1308435-01 Client ID: GP-2												
Mercury, Total	ND	0.001	0.0012	123		-	-		70-130	-		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG607925-4 QC Sample: L1307682-32 Client ID: MS Sample												
Iron, Total	0.68	1	1.7	102		-	-		75-125	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: 75 BRAINERD RD

Project Number: 5344

Lab Number: L1308435

Report Date: 05/16/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG607359-3 QC Sample: L1308337-01 Client ID: DUP Sample						
Antimony, Total	ND	ND	mg/l	NC		20
Arsenic, Total	0.00333	0.00331	mg/l	1		20
Cadmium, Total	ND	ND	mg/l	NC		20
Chromium, Total	ND	ND	mg/l	NC		20
Copper, Total	ND	ND	mg/l	NC		20
Lead, Total	ND	ND	mg/l	NC		20
Nickel, Total	0.00063	0.00075	mg/l	16		20
Selenium, Total	ND	ND	mg/l	NC		20
Silver, Total	ND	ND	mg/l	NC		20
Zinc, Total	0.01862	0.01858	mg/l	0		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG607871-3 QC Sample: L1308435-01 Client ID: GP-2						
Mercury, Total	ND	ND	mg/l	NC		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG607925-3 QC Sample: L1307682-32 Client ID: DUP Sample						
Iron, Total	0.68	0.66	mg/l	3		20

INORGANICS & MISCELLANEOUS

Project Name: 75 BRAINERD RD
Project Number: 5344

Lab Number: L1308435
Report Date: 05/16/13

SAMPLE RESULTS

Lab ID: L1308435-01
Client ID: GP-2
Sample Location: Not Specified
Matrix: Water

Date Collected: 05/10/13 14:00
Date Received: 05/10/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Suspended	27.		mg/l	5.0	NA	1	-	05/14/13 12:50	30,2540D	DW
Cyanide, Total	ND		mg/l	0.005	--	1	05/15/13 14:40	05/16/13 15:36	30,4500CN-CE	JO
pH (H)	6.6		SU	-	NA	1	-	05/10/13 23:45	30,4500H+-B	DE
TPH	ND		mg/l	4.00	--	1	05/13/13 11:00	05/15/13 09:00	74,1664A	JO
Phenolics, Total	0.030		mg/l	0.030	--	1	05/13/13 10:30	05/13/13 12:23	4,420.1	MP
Chromium, Hexavalent	ND		mg/l	0.010	--	1	05/10/13 19:00	05/10/13 19:43	30,3500CR-D	ML
Anions by Ion Chromatography - Westborough Lab										
Chloride	566.		mg/l	25.0	--	50	-	05/10/13 22:57	44,300.0	AU



Project Name: 75 BRAINERD RD
Project Number: 5344

Lab Number: L1308435
Report Date: 05/16/13

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: WG607293-1										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	05/10/13 19:00	05/10/13 19:41	30,3500CR-D	ML
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG607559-1										
Phenolics, Total	ND		mg/l	0.030	--	1	05/13/13 10:30	05/13/13 12:21	4,420.1	MP
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG607640-1										
TPH	ND		mg/l	4.00	--	1	05/13/13 11:00	05/15/13 09:00	74,1664A	JO
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG607764-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	05/14/13 12:50	30,2540D	DW
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG608205-1										
Cyanide, Total	ND		mg/l	0.005	--	1	05/15/13 14:40	05/16/13 15:23	30,4500CN-CE	JO
Anions by Ion Chromatography - Westborough Lab for sample(s): 01 Batch: WG608278-1										
Chloride	ND		mg/l	0.500	--	1	-	05/10/13 17:09	44,300.0	AU

Lab Control Sample Analysis

Batch Quality Control

Project Name: 75 BRAINERD RD

Project Number: 5344

Lab Number: L1308435

Report Date: 05/16/13

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG607293-2								
Chromium, Hexavalent	96		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG607309-1								
pH	101		-		99-101	-		5
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG607559-2								
Phenolics, Total	99		-		82-111	-		12
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG607640-2								
TPH	85		-		64-132	-		34
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG608205-2								
Cyanide, Total	104		-		90-110	-		
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 Batch: WG608278-2								
Chloride	104		-		90-110	-		

Matrix Spike Analysis Batch Quality Control

Project Name: 75 BRAINERD RD
Project Number: 5344

Lab Number: L1308435
Report Date: 05/16/13

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG607293-4 QC Sample: L1308435-01 Client ID: GP-2												
Chromium, Hexavalent	ND	0.1	0.095	95	-	-	-	-	85-115	-	-	20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG607559-4 QC Sample: L1308244-01 Client ID: MS Sample												
Phenolics, Total	0.030	0.8	0.82	99	-	-	-	-	77-124	-	-	12
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG607640-4 QC Sample: L1308435-01 Client ID: GP-2												
TPH	ND	20.4	15.2	74	-	-	-	-	64-132	-	-	34
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG608205-3 QC Sample: L1308319-02 Client ID: MS Sample												
Cyanide, Total	ND	0.2	0.198	99	-	-	-	-	90-110	-	-	30
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG608278-3 QC Sample: L1308337-03 Client ID: MS Sample												
Chloride	1.62	4	6.03	110	-	-	-	-	40-151	-	-	18

Lab Duplicate Analysis

Batch Quality Control

Project Name: 75 BRAINERD RD

Project Number: 5344

Lab Number: L1308435

Report Date: 05/16/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG607293-3 QC Sample: L1308435-01 Client ID: GP-2						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG607309-2 QC Sample: L1308435-01 Client ID: GP-2						
pH (H)	6.6	6.6	SU	0		5
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG607559-3 QC Sample: L1308452-01 Client ID: DUP Sample						
Phenolics, Total	ND	ND	mg/l	NC		12
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG607640-3 QC Sample: L1308301-01 Client ID: DUP Sample						
TPH	ND	ND	mg/l	NC		34
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG607764-2 QC Sample: L1308396-01 Client ID: DUP Sample						
Solids, Total Suspended	250	220	mg/l	13		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG608205-4 QC Sample: L1308319-02 Client ID: DUP Sample						
Cyanide, Total	ND	ND	mg/l	NC		30
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG608278-4 QC Sample: L1308337-03 Client ID: DUP Sample						
Chloride	1.62	1.69	mg/l	4		18

Project Name: 75 BRAINERD RD
Project Number: 5344

Lab Number: L1308435
Report Date: 05/16/13

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(*)
L1308435-01A	Vial HCl preserved	A	N/A	2.3	Y	Absent	8260-SIM(14),8260(14)
L1308435-01B	Vial HCl preserved	A	N/A	2.3	Y	Absent	8260-SIM(14),8260(14)
L1308435-01C	Vial HCl preserved	A	N/A	2.3	Y	Absent	8260-SIM(14),8260(14)
L1308435-01D	Amber 1000ml unpreserved	A	7	2.3	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1308435-01E	Amber 1000ml unpreserved	A	7	2.3	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1308435-01F	Amber 1000ml Na2S2O3	A	7	2.3	Y	Absent	PCB-608(7)
L1308435-01G	Amber 1000ml Na2S2O3	A	7	2.3	Y	Absent	PCB-608(7)
L1308435-01H	Amber 1000ml HCl preserved	A	<2	2.3	Y	Absent	TPH-1664(28)
L1308435-01I	Amber 1000ml HCl preserved	A	<2	2.3	Y	Absent	TPH-1664(28)
L1308435-01J	Amber 1000ml H2SO4 preserved	A	<2	2.3	Y	Absent	TPHENOL-420(28)
L1308435-01K	Plastic 1000ml unpreserved	A	7	2.3	Y	Absent	TSS-2540(7)
L1308435-01L	Plastic 500ml unpreserved	A	7	2.3	Y	Absent	CL-300(28),PH-4500(.01)
L1308435-01M	Plastic 500ml unpreserved	A	7	2.3	Y	Absent	HEXCR-3500(1)
L1308435-01N	Plastic 500ml HNO3 preserved	A	<2	2.3	Y	Absent	SE-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),FE-UI(180),PB-6020T(180),HG-U(28),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180)
L1308435-01O	Plastic 250ml NaOH preserved spl	A	>12	2.3	Y	Absent	TCN-4500(14)

*Values in parentheses indicate holding time in days



Project Name: 75 BRAINERD RD
Project Number: 5344

Lab Number: L1308435
Report Date: 05/16/13

GLOSSARY

Acronyms

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

Report Format: Data Usability Report



Project Name: 75 BRAINERD RD
Project Number: 5344

Lab Number: L1308435
Report Date: 05/16/13

Data Qualifiers

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.
- 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: 75 BRAINERD RD
Project Number: 5344

Lab Number: L1308435
Report Date: 05/16/13

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.
- 4 Methods for Chemical Analysis of Water and Wastes. EPA 600/4-79-020. Revised March 1983.
- 5 Methods for the Organic Chemical Analysis of Municipal and Industrial Wastewater. Appendix A, Part 136, 40 CFR (Code of Federal Regulations).
- 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.
- 74 Method 1664, Revision A: N-Hexane Extractable Material (HEM; Oil & Grease) and Silica Gel Treated N-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry, EPA-821-R-98-002, February 1999.

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 December 19, 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, Nickel, Selenium, Silver, Sodium, Thallium, 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) 504.1, Ethylene Dibromide (EDB) 504.1, 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223, Enumeration and P/A), E. Coli. – Colilert (SM9223, Enumeration and P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform-EC Medium (SM 9221E).

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, Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), E. Coli – Colilert (SM9223 Enumeration), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E), Enterococcus - Enterolert.

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, CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP (Silvex), Dalapon, Volatile Organics (SW 8260), Acid Extractables (Phenols) (SW 8270), Benzidines (SW 8270), Phthalates (SW 8270), Nitrosamines (SW 8270), Nitroaromatics & Cyclic Ketones (SW 8270), PAHs (SW 8270), Haloethers (SW 8270), Chlorinated Hydrocarbons (SW 8270).)

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

Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 353.2, SM2130B, 2320B, 2540C, 4500CI-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, 4500CI-D, 4500CI-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NO3-F, 4500P-B, 4500P-E, 5210B, 5220D, 5310C, 9010B, 9040B, 9030B, 7470A, 7196A, 2340B, EPA 200.7, 6010B, 6010C, 200.8, 6020, 245.1, 1311, 1312, 3005A, Enterolert, 9223B, 9222D. Organic Parameters: 608, 624, 625, 8081A, 8081B, 8082, 8082A, 8330, 8151A, 8260B, 8260C, 8270C, 8270D, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

Solid Waste/Soil (Inorganic Parameters: 9010B, 9012A, 9014, 9030B, 9040B, 9045C, 6010B, 6010C, 6020, 6020A, 7471A, 7471B, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260B, 8270C, 8270D, 8330, 8151A, 8081A, 8081B, 8082, 8082A, 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, SM4500CI-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; Colilert/QT 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, 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, SW-846 6010C, 6020A, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 426C, 1664A, SW-846 9010B, 9010C, 9030, 9040B, 9040C, SM2120B, 2310B, 2320B, 2340B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 4500SO3-B, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D, 3060A. *Organic Parameters:* SW-846 3510C, 3630C, 5030B, 8260C, 8270D, 8330, EPA 624, 625, 608, SW-846 8082A, 8081B, 8015C, 8151A, 8330, 8270D-SIM.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010C, 6020A, 7196A, 7471B, 1010, 1010A, 1030, 9010C, 9012B, 9014, 9030B, 9040C, 9045C, 9045D, 9050, 9065, 9251, 1311, 1312, 3005A, 3050B, 3060A. *Organic Parameters:* SW-846 3540C, 3546, 3050B, 3580A, 3620D, 3630C, 5030B, 5035, 8260C, 8270D, 8270D-SIM, 8330, 8151A, 8015B, 8015C, 8082A, 8081B.)

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, 245.1, 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, 2340B, SM4500F-BC, EPA 200.7, 200.8, 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, SM2520B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 7470A, 5540C, SM4500H-B, 4500SO3-B, SM3500Cr-D, 4500CN-CE, EPA 245.1, SW-846 9040B, 9040C, 3005A, 3015, EPA 6010B, 6010C, 6020, 6020A, 7196A, 3060A, SW-846 9010C, 9030B. *Organic Parameters:* SW-846 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8011, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 1,4-Dioxane by NJ Modified 8270, 8015B, NJ EPH.)

Solid & Chemical Materials (Inorganic Parameters: SW-846, 6010B, 6010C, 6020, 6020A, 7196A, 3060A, 9030B, 1010, 1010A, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9010C, 9012B, 9014, 9038, 9040B, 9040C, 9045C, 9045D, 9050A, 9065, 9251. *Organic Parameters:* SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3546, 3580A, 3620C, 3630C, 5030B, 5035L, 5035H, 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, 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, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6010C, 6020, 6020A, EPA 7196A, SM3500Cr-D, EPA 245.1, 7470A, SM2120B, LACHAT 10-204-00-1-A, 4500CN-CE, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015, 9010C, 9030B. *Organic Parameters:* EPA 624, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 625, 608, 8081A, 8081B, 8151A, 8330, 8082, 8082A, EPA 3510C, 5030B.)

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

3546, 3580A, 5030B, 5035A-H, 5035A-L.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. (Inorganic Parameters: SM2310B, 2320B, 4500CI-E, 4500Cn-E, 9014, Lachat 10-204-00-1-X, 1010A, 1030, 4500NO3-F, 353.2, 4500P-E, 4500SO4-E, 300.0, 4500S-D, 5310B, 5310C, 6010C, 6020A, 200.7, 200.8, 3500Cr-B, 7196A, 245.1, 7470A, 7471B, 1311,1312. **Organic Parameters:** 608, 8081B, 8082A, 624, 8260B, 625, 8270D, 8151A, 8015C, 504.1, MA-EPH, MA-VPH.)

Drinking Water Program Certificate/Lab ID: 25700. (**Inorganic Parameters:** Chloride EPA 300.0. **Organic Parameters:** 524.2)

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. NELAP Accredited.

Drinking Water (Inorganic Parameters: 200.7, 200.8, 300.0, 332.0, 2120B, 2320B, 2510B, 2540C, 4500-CN-CE, 4500F-C, 4500H+-B, 4500NO3-F, 5310C. **Organic Parameters:** EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1312, 3005A,3015, 3060A, 200.7, 200.8, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P,BE, 245.1, 300.0, 350.1, 350.2, 351.1, 353.2, 420.1, 6010C, 6020A, 7196A, 7470A, 9030B, 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 3500Cr-D, 426C, 4500CN-CE, 4500CI-E, 4500F-B, 4500F-C, 4500H+-B, 4500NH3-H, 4500NO2-B, 4500NO3-F, 4500S-D, 4500SO3-B, 5310BCD, 5540C, 9010C, 9040C. **Organic Parameters:** EPA 3510C, 3630C, 5030B, 625, 624, 608, 8081B, 8082A, 8151A, 8260C, 8270D, 8270D-SIM, 8330, 8015C, NJ-EPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3005A, 3050B, 3060A, 6010C, 6020A, 7196A, 7471B, 9010C, 9012B, 9014, 9040B, 9045D, 9050A, 9065, SM 4500NH3-BH, 9030B, 9038, 9251. **Organic Parameters:** 3540C, 3546, 3580A, 3620C, 3630C, 5035, 8015C, 8081B, 8082A, 8151A, 8260C, 8270D, 8270D-SIM, 8330, NJ-EPH.)

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

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. **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.**

Drinking Water (Inorganic Parameters: EPA 200.7, 200.8, 300.0, 2510B, 2120B, 2540C, 4500CN-CE, 245.2, 2320B, 4500F-C, 4500NO3-F, 5310C. **Organic Parameters:** EPA 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 200.7, 200.8, 245.1, 300.0, 3005A, 3015, 1312, 6010B, 6010C, 3060A, 353.2, 420.1, 6020, 6020A, SM4500S-D, SM4500-CN-CE, Lachat 10-204-00-1-X, 7196A, 7470A, 9010B, 9040B, 2310B, 2320B, 2510B, 2540B, 2540C, 3500Cr-D, 426C, 4500CI-E, 4500F-B, 4500F-C, 4500PE, 510AC, 5210B, 5310B 5310C, 5540C. **Organic Parameters:** EPA 3510C, 3630C, 5030B, 8260B, 608, 624, 625, 8081A, 8081B, 8082, 8082A, 8151A, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330,)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010A, 1030, 3060A, 3050B, 1311, 1312, 6010B, 6010C, 6020, , 7196A, 7471A, 7471B, 6020A, 9030B, 9010B, 9012A, 9014 9040B, 9045C, 9050A, 9065. **Organic Parameters:** EPA 5030B, 5035, 3540C, 3546, 355B0, 3580A, 3630C, 6020A, 8260B, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330.)

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, 6010C, 6020, 6020A, 245.1, 245.2, 7470A, 9040B, 9010B, 180.1. 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO3-F, 4500CL-D, 5220D, 5310C, 2130B, 2320B, 2540C, 3005A, 3015, 9010B, 9056, 7196A, 3500-Cr-D. **Organic Parameters:** EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330A, 8082, 8082A, 8081A, 8081B, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

8270D, 8270C-SIM, 8270D-SIM, 8330A/B-prep, 8082, 8082A, 8081A, 8081B, 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 Methylnaphthalenes, Total Dimethylnaphthalenes, 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. **EPA 9071:** Total Petroleum Hydrocarbons, Oil & Grease.



ATTACHMENT D

AREAS OF CRITICAL CONCERN, ENDANGERED AND THREATENED SPECIES

The 75 Brainerd Road property is located in an area of Allston, Massachusetts that is generally occupied by residential, commercial and retail properties. Based on a review of Massachusetts Geographic Information Systems DEP Priority Resources' Map, there are no drinking water supplies, no Areas of Critical Environmental Concern, no Sole Source Aquifers, no fish habitats, and no habitats of Species of Special Concern or Threatened or Endangered Species at or within 500-feet of the subject site. No Protected Open Space is indicated within 500-feet of the subject site. Wetlands and a 500-year flood zone are indicated along part of the seawall to the north of the site.

There are no surface water bodies located within the site boundaries. The Charles River, the nearest surface water body, is located approximately 0.93 miles to the northeast of the site. The Charles River is a 303(d) water quality impaired water body for pollutants such as chlorophyll-a, DDT, Escherichia Coli, non-native aquatic plants, oil and grease, dissolved oxygen, nutrients, total phosphorus, PCBs, sediment, and pH.

A review of the most recent federal listing of threatened and endangered species published by the U.S. Fish and Wildlife Service did not identify the presence of threatened and/or endangered species or critical habitats 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 did not indicate the presence of threatened or endangered species at the point of discharge and/or the discharge outfall.

Based upon the above, the site is considered criterion A pursuant to Appendix IV of the RGP.

**FEDERALLY LISTED ENDANGERED AND THREATENED SPECIES
 IN MASSACHUSETTS**

COUNTY	SPECIES	FEDERAL STATUS	GENERAL LOCATION/HABITAT	TOWNS
Barnstable	Piping Plover	Threatened	Coastal Beaches	All Towns
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	All Towns
	Northeastern beach tiger beetle	Threatened	Coastal Beaches	Chatham
	Sandplain gerardia	Endangered	Open areas with sandy soils.	Sandwich and Falmouth.
	Northern Red-bellied cooter	Endangered	Inland Ponds and Rivers	Boume (north of the Cape Cod Canal)
Berkshire	Bog Turtle	Threatened	Wetlands	Egremont and Sheffield
Bristol	Piping Plover	Threatened	Coastal Beaches	Fairhaven, Dartmouth, Westport
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	Fairhaven, New Bedford, Dartmouth, Westport
	Northern Red-bellied cooter	Endangered	Inland Ponds and Rivers	Raynham and Taunton
Dukes	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	All Towns
	Piping Plover	Threatened	Coastal Beaches	All Towns
	Northeastern beach tiger beetle	Threatened	Coastal Beaches	Aquinnah and Chilmark
	Sandplain gerardia	Endangered	Open areas with sandy soils.	West Tisbury
Essex	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Gloucester, Essex and Manchester
	Piping Plover	Threatened	Coastal Beaches	Glocester, Essex, Ipswich, Rowley, Revere, Newbury, Newburyport and Salisbury
Franklin	Northeastern bulrush	Endangered	Wetlands	Montague
	Dwarf wedgemussel	Endangered	Mill River	Whately
Hampshire	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Hadley
	Puritan tiger beetle	Threatened	Sandy beaches along the Connecticut River	Northampton and Hadley
	Dwarf wedgemussel	Endangered	Rivers and Streams.	Hadley, Hatfield, Amherst and Northampton
Hampden	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Southwick
Middlesex	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Groton
Nantucket	Piping Plover	Threatened	Coastal Beaches	Nantucket
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	Nantucket
	American burying beetle	Endangered	Upland grassy meadows	Nantucket
Plymouth	Piping Plover	Threatened	Coastal Beaches	Scituate, Marshfield, Duxbury, Plymouth, Wareham and Mattapoisett
	Northern Red-bellied cooter	Endangered	Inland Ponds and Rivers	Kingston, Middleborough, Carver, Plymouth, Bourne, and Wareham
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	Plymouth, Marion, Wareham, and Mattapoisett.
Suffolk	Piping Plover	Threatened	Coastal Beaches	Winthrop
Worcester	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Leominster

- Eastern cougar and gray wolf are considered extirpated in Massachusetts.
- Endangered gray wolves are not known to be present in Massachusetts, but dispersing individuals from source populations in Canada may occur statewide.
- Critical habitat for the Northern Red-bellied cooter is present in Plymouth County.

7/31/2008

MASSACHUSETTS AREAS OF CRITICAL ENVIRONMENTAL CONCERN

June 2009

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

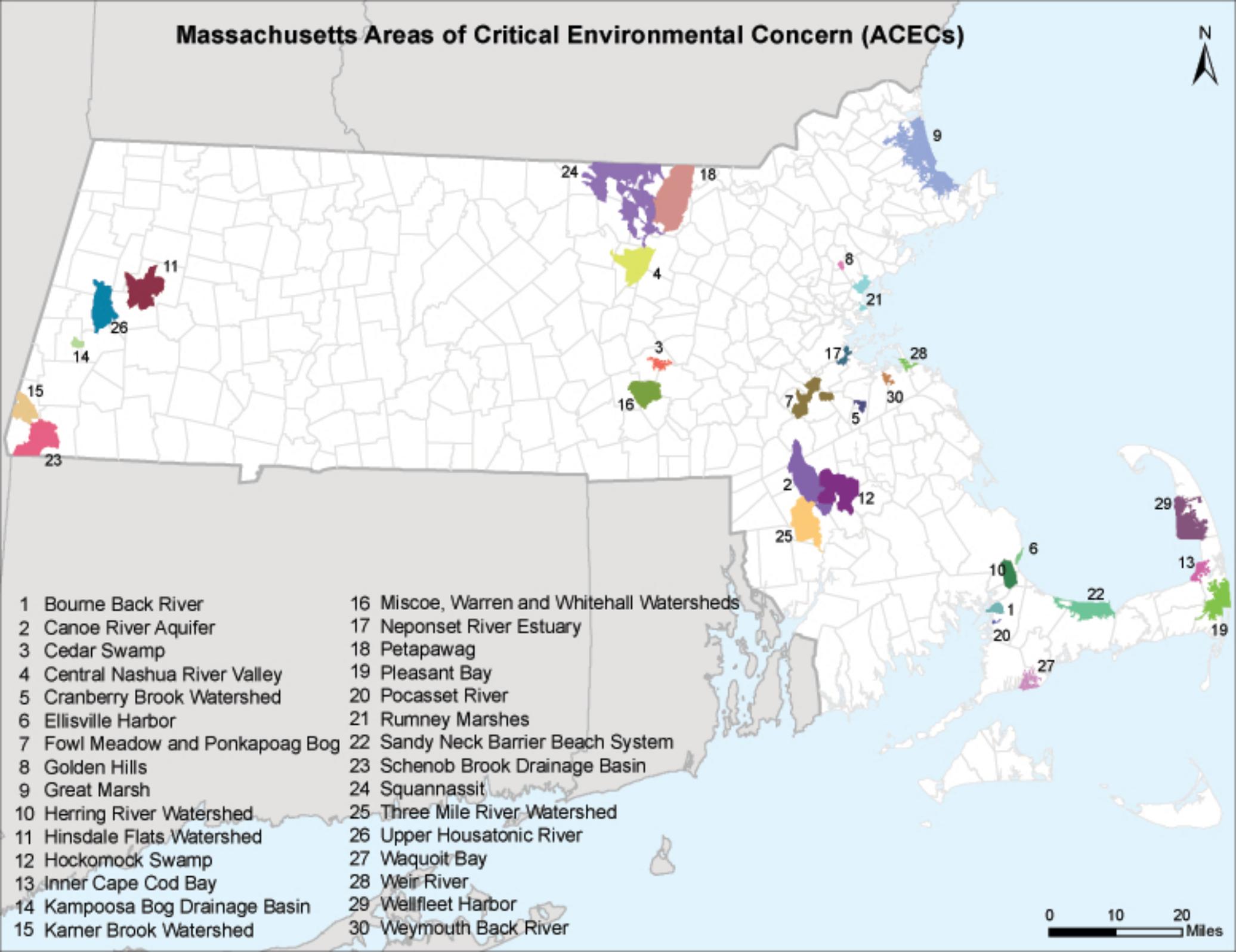
Weymouth Back River

(800 acres, 1982) Hingham and Weymouth

Towns with ACECs within their Boundaries
June 2009

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		

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 Kamposoa Bog Drainage Basin | 29 Wellfleet Harbor |
| 15 Kerner Brook Watershed | 30 Weymouth Back River |





New England Field Office

Conserving the Nature of New England

Thursday,
January 31, 2013

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



ATTACHMENT E

NATIONAL REGISTER OF HISTORIC PLACES

The National Register of Historic Places on-line database was reviewed for listings located within the immediate vicinity of the subject site in Boston, Massachusetts. A review of the most recent National Register of Historical Places for Suffolk County, Massachusetts did not identify records or addresses of Historic Places that exist in the immediate vicinity of the subject site and/or outfall location. The nearest National Historic Place to the subject site is the Allston Congregational Church which is located approximately 0.2 miles to the north of the subject site. It is not anticipated that dewatering activities at the subject site will affect the Allston Congregational Church.

Based upon the above, the site considered criterion 2 pursuant to Appendix IV of the RGP.



APPENDIX F

Best Management Practice Plan

A Notice of Intent for a Remediation General Permit (RGP) under the National Pollutant Discharge Elimination System (NPDES) has been submitted to the US Environmental Protection Agency (EPA) in anticipation of temporary construction dewatering that will occur during the Icon building project located at 75 Brainerd Road in Allston, Massachusetts. This Best Management Practices Plan (BMPP) has been prepared as an Appendix to the RGP and will be posted at the site during the time period that temporary construction dewatering is occurring at the site.

Water Treatment and Management

If groundwater is encountered during construction, dewatering effluent is anticipated to be pumped from localized sumps and trenches within the excavations directly into a settling tank. The effluent will then flow through any necessary treatment systems and discharge through hoses into a storm water catch basin located off of Brainerd Road Street. Based upon a review of the Boston Water and Sewer Commission stormwater drain GIS database, the stormwater drain beneath Brainerd Road ultimately discharges into the Charles River. Dewatering effluent treatment may consist of bag filters, GAC filtration or ion exchange, as required.

Discharge Monitoring and Compliance

Regular sampling and testing will be conducted at the influent to the system and the treated effluent as required by the RGP. This includes chemical testing required within days 1 and 3 of initial discharge and the monthly testing to be conducted through the end of the scheduled discharge.

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

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

Monthly monitoring reports will be compiled and maintained at the site



System Maintenance

A number of methods will be used to minimize the potential for violations for the term of this permit. Scheduled regular maintenance of the treatment system will be conducted to verify proper operation. Regular maintenance will include checking the condition of the treatment system equipment such as the settling tanks, bag filters, resin filter system, hoses, pumps, and flow meters. Equipment will be monitored daily for potential issues or unscheduled maintenance requirements.

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

Miscellaneous Items

It is anticipated that the erosion control measures and the nature of the site will minimize potential runoff to or from the site. The project specifications also include requirements for erosion control. Site security for the treatment system will be covered within the overall site security plan.

No adverse affects on designated uses of surrounding surface water bodies is anticipated. The nearest surface water body is the Charles River which is located 0.93 miles to the northeast of the subject site. Dewatering effluent will be pumped to a settling tank. Water within the settling tank will pumped through bag filters and a ion resin exchange system in series prior to discharge to the storm drains.

Management of Treatment System Materials

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

Sediment from the tank used in the treatment system will be characterized and removed from the site to an appropriate receiving facility, in accordance with applicable laws and regulations. If used, the ion exchange resin may be recycled and/or removed from the site to an appropriate receiving facility. Bag filters carbon filtration resin will be disposed of as necessary.