



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 1

**5 Post Office Square, Suite 100
BOSTON, MA 02109-3912**

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

July 17, 2015

Mark Coviello, P.E.
Town Engineer
Town of Natick
75 West Street
Natick, MA 01760

Re: Authorization to discharge under the Remediation General Permit (RGP) – for the Willow Street Drainage Easement site located in Natick, Massachusetts; Authorization # MAG910691

Dear Mr. Coviello:

Based on the review of a Notice of Intent (NOI) submitted on your behalf by Craig Ellis of the BETA Group, Inc. for the site referenced above, the U.S. Environmental Protection Agency (EPA) hereby authorizes you, as the named Owner and 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 parameters that were detected in your sampling and that may have exceeded Appendix III limits. Please note that the metals included on the checklist are dilution dependent pollutants and subject to limitations based on a dilution factor range (DFR). Since the discharge will be made to an unnamed brook with essentially no low flow (7Q10) value, there is no dilution available. Therefore, the limits for total copper, total lead and total iron will be based on the DFR of 1-5. (See the RGP Appendix IV for Massachusetts facilities).

Therefore, the following limits will apply to the effluent of this treatment system:
Xylenes - monitor, Total BTEX – 100 ug/l, Total Group I PAHs – 10.0 ug/l, Total Group II PAHs – 100.0 ug/l, copper – 5.2 ug/l, iron - 1,000 ug/l, lead – 1.3 ug/l, Total Suspended Solids (TSS) - 30 mg/l and a pH range of 6.5 – 8.3 standard units (s.u.). There is also a monitoring requirement for total chloride.

This EPA general permit and authorization to discharge will expire on September 9, 2015. You have reported this project will terminate on October 1, 2015. Please be aware that you are required to reapply for coverage after the EPA expired permit has been reissued, if your project is extended beyond the permit expiration date. The reissuance date as well as the reapplication submittal date will be posted on the EPA web site at that time. Also, regardless of your project termination date you are required to submit a Notice of Termination (NOT) to the attention of the contact person indicated below within thirty (30) days of the termination of the discharge.

Thank you in advance for your cooperation in this matter. Please contact George Papadopoulos at (617) 918-1579 or Papadopoulos.George@epa.gov, if you have any questions.

Sincerely,



Thelma Murphy, Chief
Storm Water and Construction
Permits Section

Enclosure

cc: Robert Kubit, MassDEP
Craig Ellis, BETA Group

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

NPDES Authorization Number:	MAG910691
Authorization Issued:	July 17, 2015
Facility/Site Name:	Willow Street Drainage Easement – Natick, MA
Facility/Site Address:	Email address of owner: mcoviello@natickma.org
Legal Name of Operator:	Town of Natick
Operator contact name, title, and Address:	Mark Coviello, Town Engineer Email: same as above
Estimated date of The Project Completion:	October 1, 2015
Category and Sub-Category:	Contaminated Construction Dewatering Category– Known Contaminated Sites Subcategory
RGP Termination Date:	September 2015
Receiving Water:	Unnamed Brook to Lake Cochituate

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) **, 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
✓	8. (m,p,o) Xylenes (X)	(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)
✓	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) Phthalate]	6.0 ug/L /Me#8270D/ML 5ug/L, Me#606/ML 10ug/L & Me#625/ML 5ug/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)
✓	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/ML 5ug/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/ML 5ug/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 Parameters	Total Recoverable Metal Limit H¹⁰ = 50 mg/l CaCO₃, Units = ug/l	Minimum level=ML¹¹
		Freshwater Limits	
	39. Antimony	5.6	10
	40. Arsenic **	10	20
	41. Cadmium **	0.2	10
	42. Chromium III (trivalent) **	17.1	15
	43. Chromium VI (hexavalent) **	11.4	10
✓	44. Copper **	5.2	15
✓	45. Lead **	1.3	20
	46. Mercury **	0.9	0.2
	47. Nickel **	2.38	20
	48. Selenium **	5	20
	49. Silver	1.1	10
	50. Zinc **	66.6	15
✓	51. Iron	1000	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 ¹²
	55. pH Range for Class SA & Class SB Waters in MA	6.5-8.5; 1/Month/Grab ¹²
	56. pH Range for Class B Waters in NH	6.5-8; 1/Month/Grab ¹²
	57. Daily maximum temperature - Warm water fisheries	83°F; 1/Month/Grab ¹³
	58. Daily maximum temperature - Cold water fisheries	68°F; 1/Month/Grab ¹³
	59. Maximum Change in Temperature in MA - Any Class A water body	1.5°F; 1/Month/Grab ¹³
	60. Maximum Change in Temperature in MA - Any Class B water body- Warm Water	5°F; 1/Month/Grab ¹³
	61. Maximum Change in Temperature in MA - Any Class B water body - Cold water and Lakes/Ponds	3°F; 1/Month/Grab ¹³
	62. Maximum Change in Temperature in MA - Any Class SA water body - Coastal	1.5°F; 1/Month/Grab ¹³
	63. Maximum Change in Temperature in MA - Any Class SB water body - July to September	1.5°F; 1/Month/Grab ¹³
	64. Maximum Change in Temperature in MA -Any Class SB water body - October to June	4°F; 1/Month/Grab ¹³

Footnotes:

¹ Although the maximum values for TRC are 11 ug/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 "Oroclor 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 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).

¹² pH sampling for compliance with permit limits may be performed using field methods as provided for in EPA test Method 150.1.

¹³ Temperature sampling per Method 170.1



July 2, 2015

Mr. Victor Alvarez
U.S. Environmental Protection Agency
EPA-Region 1
5 Post Office Square
Mail Code OEP06-4
Boston, MA 02109-3912

**RE: Notice of Intent for Remediation General Permit
17 Willow Street
Natick, Massachusetts 01020**

Dear Mr. Alvarez:

BETA Group, Inc. (BETA) herein provides supporting documentation for the Notice of Intent (NOI) for the Remediation General Permit (RGP) on behalf of the Town of Natick for the project referenced above. This NOI is being submitted in order to obtain approval for the proposed discharge of pumped groundwater via the operation of a temporary groundwater dewatering system (GWDS). The groundwater dewatering activities are required to support the excavation of soil and the installation of a storm drain system along a portion of Willow Street and at 17 Willow Street in Natick, Massachusetts, (here-in-after “the Site”).

A portion of the work associated with this drainage improvement project will be completed within the boundaries of a MassDEP listed disposal site. The MassDEP listed disposal site is on 4-6 Mechanic Street and 17-19 Willow Street, and tracked under Release Tracking Number (RTN) 3-30874. The Site has historically been used for commercial/industrial purposes and petroleum related compounds, PAHs, metals, and PCBs (below Method 1 standards) have been documented on the Site.

A MassGIS Priority Resource Map is provided as Figure 1. A Site Plan depicting the dewatering discharge location and work area is included as Figure 2 and a dewatering system schematic is included as Figure 3. A copy of the NOI Form for the RGP Application is provided as Attachment I.

System Design

The excavation for the installation of the drainage system within the work area is estimated to displace approximately 500 tons of soil that will require on- or off-Site management. This material will be handled by a combination of the following:

- On-site reuse as project backfill;
- Excavation and on-site stockpiling (or live loading, if possible) followed by transportation to a landfill for use as daily cover;
- Excavation and on-site stockpiling (or live loading, if possible) followed by transportation to an asphalt batching plant; and/or,
- Excavation and on-site stockpiling (or live loading, if possible) followed by transportation to an out-of-state licensed facility.

The depth to groundwater at the Site is approximately 4 to 8 feet bgs and the trench excavation depth is approximately 12 feet. This Remediation General Permit (RGP) application has been prepared to manage impacted groundwater, if encountered, during construction dewatering. Groundwater will be pumped into a fractionation tank through appropriately sized bag filters and liquid phase granular activated carbon (LGAC) units. Water sampling will be conducted to verify the discharge complies with the RGP permit. A flow schematic of the proposed dewatering plan is included as Figure 3.

The average discharge flow rate of treated groundwater from the system to the storm water drainage system is estimated at 50 gallons per minute (gpm). The maximum discharge flow rate is estimated to be 100 gpm. The discharge will be to an unnamed brook, which flows to Lake Cochituate, approximately 1,500 feet west of the project area.

Receiving Waters Information

The treated groundwater will be discharged into an unnamed brook along the western perimeter of the Site which ultimately flows into Lake Cochituate. According to the MassDEP Division of Water Pollution Control, Lake Cochituate is classified as Class B Surface Water and is not considered a drinking water source. For the purposes of this report, a 7-day, 10 year (7Q10) low flow rate of 0 cfs was used for the receiving water (Lake Cochituate).

Historical Groundwater Sampling Results, RTN 3-30874

A Phase I Initial Site Investigation/Tier Classification report was prepared by GZA in 2013 for this RTN. This report included a review of historical site usage, a summary of environmental assessments conducted by others, and the collection of soil and groundwater samples.

GZA had the following findings:

- Groundwater samples were collected by GZA and analyzed for extractable petroleum hydrocarbons (EPH), volatile petroleum hydrocarbons (VPH) and chlorinated volatile organic compounds (CVOCs) between 2011 and 2012. During these sampling events no CVOCs or EPH was detected at concentrations greater than method detection limits. According to the Phase I report, the groundwater sample collected from well MW-102 exceeded GW-1 reportable concentrations for VPH.
- During a groundwater sampling event in 2012 by GZA EPH concentrations were detected in the groundwater samples collected from monitoring wells MW-101 and MW-102 at concentrations below Method 1 GW-1, GW-2 and GW-3 standards. The VPH concentrations were similar to the 2011 groundwater sampling event.

A site plan and summary table from the GZA report is presented in Attachment II.

Current Groundwater Sample Analysis – June 5, 2015

On June 5, 2015, BETA collected a groundwater sample from monitoring well MW-1 in order to obtain current analytical data prior to discharge. The groundwater sample was analyzed for Total Suspended Solids (TSS), TPH by EPA Method 1664, total residual chlorine, chlorides, total cyanide, PCBs, total metals, SVOCs with phenols, and VOCs by EPA method 8260. No VOCs, SVOCs, PCBs, or TPH was detected above method detection limits. With the exception of copper, iron and lead, no metals were detected above method detection limits. Groundwater analytical results were compared to the Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) Remediation General Permit

(RGP) discharge criteria and the copper, iron and lead concentrations were below their respective EPA discharge limit.

A summary of the groundwater analytical data is presented in the contaminant information table in the NOI application provided as Attachment I. Copies of the laboratory reports and chain of custody records are provided as Attachment III.

Evaluation of Threatened or Endangered Species or Critical Habitat Located within Receiving Waters

According to Massachusetts Geographic Information Systems (MassGIS) online maps for the Natural Heritage Endangered Species Program (NHESP) (2008), no Priority Habitat of Rare Species or Estimated Habitats of Rare Wildlife are located within the proposed work zone area. On May 27, 2015, BETA requested a review of threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitats from the US Fish and Wildlife Service (<http://ecos.fws.gov/ipac/>). According to their review, the Northern long-eared bat was listed as a threatened species. On June 17, 2015 BETA contacted Ms. Maria Tur of the US Fish and Wildlife service to discuss potential effects of the project. According to the US FWS, as the drainage project is not going to impact any roost trees for the bat, the US FWS does not expect any effects from the proposed project. According to the US FWS letter, there are no critical habitats within the project area. BETA has attached the letter from the FWS as Attachment IV.

Review of National Register of Historic Places

Listings of Historic Places within the Town of Natick in the vicinity of the Site were obtained from the Massachusetts Cultural Resources Information System (MACRIS) online database at <http://mhc-macris.net/towns.aspx>. The database indicated that the Massachusetts Historical Commission (MHC) has listed the building at 19 Willow Street as a historic asset under Inventory No. Nat.293. Copies of the MACRIS report are provided as Attachment IV. Though the drainage project is in proximity of this building, this project does not involve the demolition or rehabilitation of historic properties and the discharge will be down gradient of this building and will not be affected by the discharge or discharge related activities. No other historic structures or properties are located in the immediate vicinity which would be anticipated to be impacted by this project.

If we can be of any further assistance regarding this matter, please contact us at our office.

Very truly yours,
BETA Group, Inc.



Craig Ellis, LSP
Senior Project Manager

Figures:

Figure 1	MassGIS Priority Resource Map
Figure 2	Site Plan
Figure 3	Dewatering System Schematic

Attachments:

Attachment I	NOI Form for RGP
Attachment II	GZA Groundwater Sampling Results
Attachment III	Laboratory Analytical Results
Attachment IV	FWS endangered species and critical habitat review

FIGURES

MassDEP - Bureau of Waste Site Cleanup

Site Information:

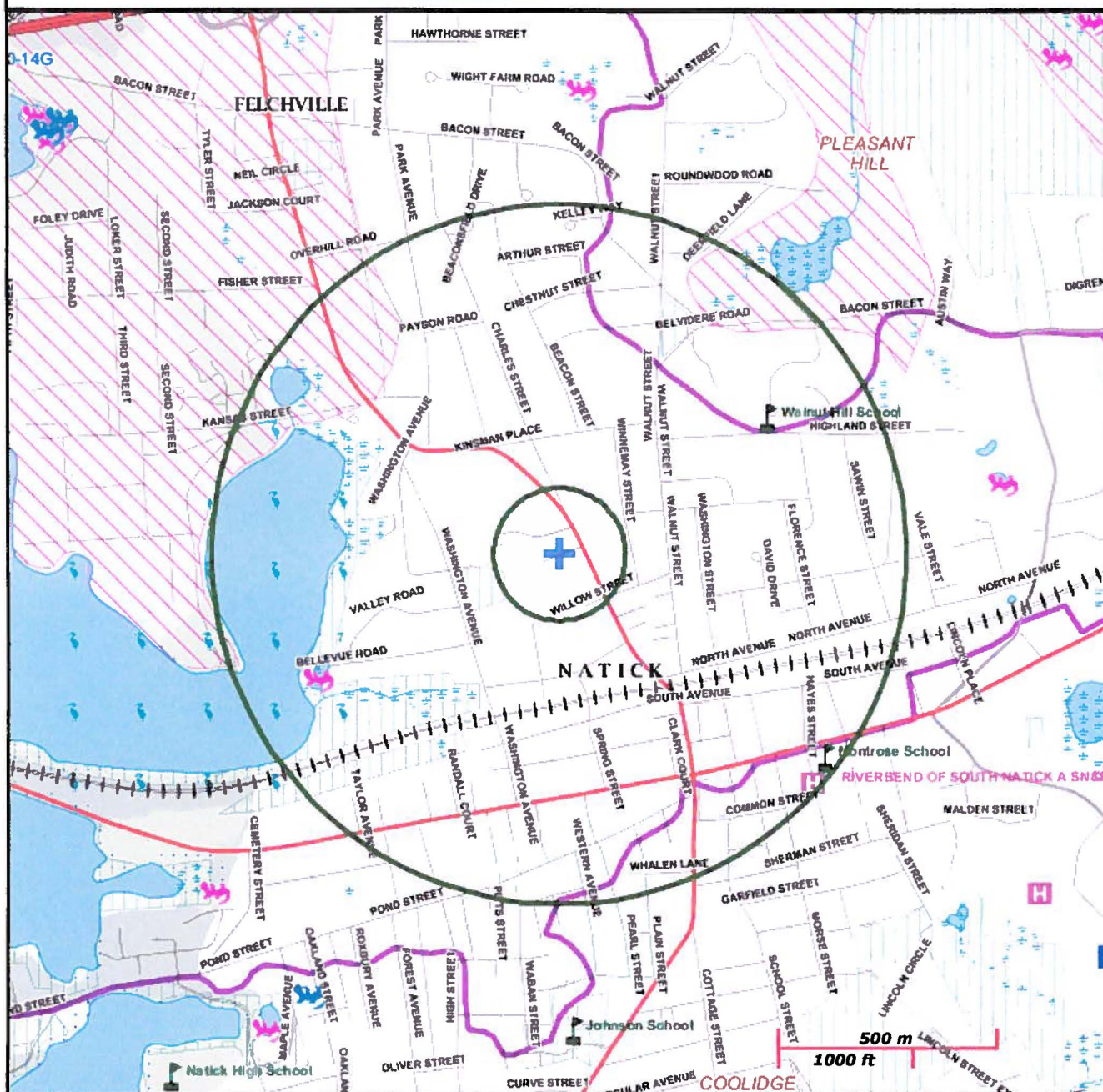
MECHANIC STREET
4 MECHANIC STREET NATICK, MA
NAD83 UTM Meters:
6204273mN, -7942769mE (Zone: 18)
May 21, 2015

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

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



MassDEP
Commonwealth of Massachusetts
Department of Environmental Protection



Roads: Limited Access, Divided, Other Hwy, Major Road, Minor Road, Track, Trail

Boundaries: Town, County, DEP Region; Train; Powerline; Pipeline; Aqueduct

Basins: Major, PWS; Streams: Perennial, Intermittent, Man Made Shore, Dam

Aquifers: Medium Yield, High Yield, EPA Sole Source

Non Potential Drinking Water Source Area: Medium, High (Yield)

PWS Protection Areas: Zone II, IWPA, Zone A

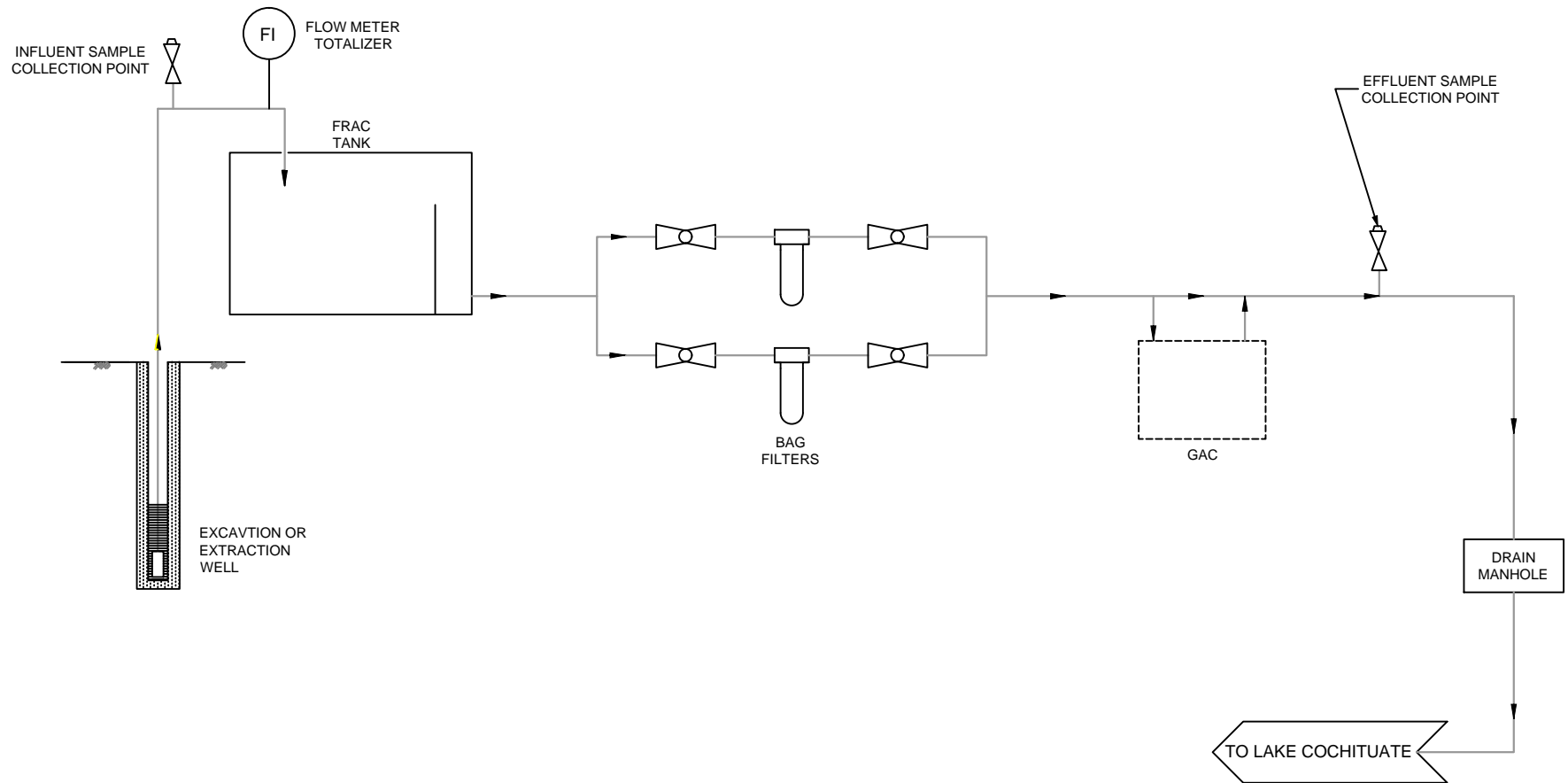
Hydrography: Open Water, PWS Reservoir, Tidal Flat

Wetlands: Freshwater, Saltwater, Cranberry Bog

FEMA 100yr Floodplain; Protected Open Space; ACEC

Est. Rare Wetland Wildlife Hab; Vernal Pool: Cert, Potential

Solid Waste Landfill; PWS: Com. GW, SW, Emerg., Non-Com.



BETA Group, Inc.

Engineers • Planners • Landscape Architects • Scientists

315 Norwood Park South
Norwood, MA 02062
781.255.1982
email: BETA@BETA-inc.com

WILLOW STREET DRAIN IMPROVEMENTS

Natick, Massachusetts

Figure No. 1

**Proposed Conceptual
Dewatering Schematic**

ATTACHMENT I
NOI RGP FORM

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 : Willow Street Drainage Easement		Facility/site mailing address:	
Location of facility/site :	Facility SIC code(s):	Street: 17-19 Willow Street	
longitude: 71.351278			
latitude: 42.287469	N/A		
b) Name of facility/site owner : Town of Natick Easement		Town: Natick	
Email address of facility/site owner: mcoviello@natickma.org		State: MA	Zip: 01760
Telephone no. of facility/site owner : (508) 647-6550		County: Middlesex	
Fax no. of facility/site owner : (508) 647-6560		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 type="radio"/> 4. Other <input checked="" type="radio"/> if so, describe: Town of Natick	
Street: 75 West Street			
Town: Natick	State: MA	Zip: 01760	County: Middlesex
c) Legal name of operator :		Operator telephone no: 508-647-6550	
Town of Natick		Operator fax no.: 508-647-6560	Operator email: mcoviello@natickma.org
Operator contact name and title: Mark Coviello, Town Engineer			
Address of operator (if different from owner):		Street:	
Town:	State:	Zip:	County:

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:

DEP

205B Lowell St, Wilmington, MA 01887

(978)694-3353

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 type="checkbox"/> C. Primarily Heavy Metal Sites <input type="checkbox"/>
III - Contaminated Construction Dewatering	A. General Urban Fill Sites <input checked="" 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"/>
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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 as part of a drainage improvement project on a MassDEP listed disposal site with petroleum contamination and urban fill.	
b) Provide the following information about each discharge:	
1) Number of discharge points: 1	2) What is the maximum and average flow rate of discharge (in cubic feet per second, ft ³ /s)? Max. flow 0.22 cu. ft/s Is maximum flow a design value ? Y <input checked="" type="radio"/> N <input type="radio"/> Average flow (include units) 0.11 cu. ft/s Is average flow a design value or estimate? Estimate
3) Latitude and longitude of each discharge within 100 feet:	
pt.1: lat 42.287456 long 71.351856	pt.2: lat. long. ;
pt.3: lat. long.	pt.4: lat. long. ;
pt.5: lat. long.	pt.6: lat. long. ;
pt.7: lat. long.	pt.8: lat. long. ; etc.
4) If hydrostatic testing, total volume of the discharge (gals):	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 07/20/15 end 10/1/15	
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).	
Flow Schematic is attached	

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	2540D	5,000 ug/l	12,000			
2. Total Residual Chlorine (TRC)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	30, 4500CL-D	20 ug/l	ND			
3. Total Petroleum Hydrocarbons (TPH)		<input type="checkbox"/>	<input checked="" type="checkbox"/>	2	GRAB	1664A	100 ug/l	ND - 126			
4. Cyanide (CN)	57125	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	9014	5 ug/l	ND			
5. Benzene (B)	71432	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2	GRAB	8260B	1.0 ug/l	ND			
6. Toluene (T)	108883	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2	GRAB	8260B	1.0 ug/l	ND			
7. Ethylbenzene (E)	100414	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2	GRAB	8260B	1.0 ug/l	ND			
8. (m,p,o) Xylenes (X)	108883; 106423; 95476; 1330207	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2	GRAB	8260B	1 ug/l	2.3			
9. Total BTEX ²	n/a	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2	GRAB	8260B		2.3			
10. Ethylene Dibromide (EDB) (1,2-Dibromoethane) ³	106934	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2	GRAB	8260B	10 ug/l	ND			
11. Methyl-tert-Butyl Ether (MtBE)	1634044	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2	GRAB	8260B	10 ug/l	ND			
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75650	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2	GRAB	8260B	100 ug/l	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"/>	2	GRAB	8260B	10 ug/l	ND			
14. Naphthalene	91203	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2	GRAB	8260B	25 ug/l	ND			
15. Carbon Tetrachloride	56235	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2	GRAB	8260B	5.0 ug/l	ND			
16. 1,2 Dichlorobenzene (o-DCB)	95501	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2	GRAB	8260B	5.0 ug/l	ND			
17. 1,3 Dichlorobenzene (m-DCB)	541731	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2	GRAB	8260B	5.0 ug/l	ND			
18. 1,4 Dichlorobenzene (p-DCB)	106467	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2	GRAB	8260B	5.0 ug/l	ND			
18a. Total dichlorobenzene		<input checked="" type="checkbox"/>	<input type="checkbox"/>	2	GRAB	8260B	5.0 ug/l	ND			
19. 1,1 Dichloroethane (DCA)	75343	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2	GRAB	8260B	5.0 ug/l	ND			
20. 1,2 Dichloroethane (DCA)	107062	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2	GRAB	8260B	5.0 ug/l	ND			
21. 1,1 Dichloroethene (DCE)	75354	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2	GRAB	8260B	5.0 ug/l	ND			
22. cis-1,2 Dichloroethene (DCE)	156592	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2	GRAB	8260B	5.0 ug/l	ND			
23. Methylene Chloride	75092	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2	GRAB	8260B	10 ug/l	ND			
24. Tetrachloroethene (PCE)	127184	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2	GRAB	8260B	5.0 ug/l	ND			
25. 1,1,1 Trichloro-ethane (TCA)	71556	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2	GRAB	8260B	5.0 ug/l	ND			
26. 1,1,2 Trichloro-ethane (TCA)	79005	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2	GRAB	8260B	5.0 ug/l	ND			
27. Trichloroethene (TCE)	79016	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2	GRAB	8260B	1.0 ug/l	ND			

<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 checked="" type="checkbox"/>	<input type="checkbox"/>	2	GRAB	8260B	5.0 ug/l	ND			
29. Acetone	67641	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2	GRAB	8260B	25 ug/l	ND			
30. 1,4 Dioxane	123911	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2	GRAB	8260B	1,200 ug/l	ND			
31. Total Phenols	108952	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	8270C	30	ND			
32. Pentachlorophenol (PCP)	87865	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	8270C	0.80	ND			
33. Total Phthalates (Phthalate esters) ⁴		<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	8270C	5	ND			
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	117817	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	8270C	5	ND			
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		<input type="checkbox"/>	<input checked="" type="checkbox"/>	2	GRAB	8270C	0.20	0.74			
a. Benzo(a) Anthracene	56553	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2	GRAB	8270C	0.05	0.16			
b. Benzo(a) Pyrene	50328	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2	GRAB	8270C	0.05	0.18			
c. Benzo(b)Fluoranthene	205992	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2	GRAB	8270C	0.20	0.21			
d. Benzo(k)Fluoranthene	207089	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2	GRAB	8270C	0.05	0.08			
e. Chrysene	21801	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2	GRAB	8270C	0.05	0.15			
f. Dibenzo(a,h)anthracene	53703	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2	GRAB	8270C	0.20	ND			
g. Indeno(1,2,3-cd) Pyrene	193395	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2	GRAB	8270C	0.05	0.12			
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		<input type="checkbox"/>	<input checked="" type="checkbox"/>	2	GRAB	8270C	0.20	4.47			

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	8270C	0.20 ug/l	ND			
i. Acenaphthylene	208968	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	8270C	0.20 ug/l	ND			
j. Anthracene	120127	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	8270C	0.20 ug/l	ND			
k. Benzo(ghi) Perylene	191242	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	8270C	0.20 ug/l	ND			
l. Fluoranthene	206440	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	GRAB	8270C	0.19 ug/l	0.37			
m. Fluorene	86737	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	GRAB	8270C	0.19 ug/l	0.33			
n. Naphthalene	91203	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	GRAB	8270C	0.19 ug/l	1.33			
o. Phenanthrene	85018	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	8270C	0.20 ug/l	ND			
p. Pyrene	129000	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	GRAB	8270C	0.19 ug/l	0.32			
37. Total Polychlorinated Biphenyls (PCBs)	85687; 84742; 117840; 84662; 131113; 117817.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	608	0.250 ug/l	ND			
38. Chloride	16887006	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	GRAB	9251	50,000 ug/l	1,000,000			
39. Antimony	7440360	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	6010	2 ug/l	ND			
40. Arsenic	7440382	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	6010	5 ug/l	ND			
41. Cadmium	7440439	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	6010	0.5 ug/l	ND			
42. Chromium III (trivalent)	16065831	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	6010	10 ug/l	ND			
43. Chromium VI (hexavalent)	18540299	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	6010	10 ug/l	ND			
44. Copper	7440508	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	GRAB	6010B	1 ug/l	4.5			
45. Lead	7439921	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	GRAB	6010B	1 ug/l	1.3			
46. Mercury	7439976	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	6010	0.2 ug/l	ND			
47. Nickel	7440020	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	6010	25 ug/l	ND			
48. Selenium	7782492	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	6010	5 ug/l	ND			
49. Silver	7440224	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	6010	0.5 ug/l	ND			
50. Zinc	7440666	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	GRAB	6010	50 ug/l	ND			
51. Iron	7439896	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	GRAB	6010B	50 ug/l	370			
Other (describe):		<input type="checkbox"/>	<input type="checkbox"/>								

<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>
		<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 type="radio"/> N <input checked="" type="radio"/></p>	<p>If yes, which metals?</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> <p>Metal: <input type="text"/> DF: <input type="text"/></p> <p>Metal: <input type="text"/> DF: <input type="text"/></p> <p>Metal: <input type="text"/> DF: <input type="text"/></p> <p>Metal: <input type="text"/> DF: <input type="text"/></p> <p>Etc.</p>	<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)?</p> <p>Y <input type="radio"/> N <input checked="" type="radio"/> If Y, list which metals:</p>

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

a) A description of the treatment system, including a schematic of the proposed or existing treatment system:

The treatment system will consist of a fractionation tank, 25 micron bag filters and a GAC unit. See attached Conceptual Dewatering Schematic.

b) Identify each applicable treatment unit (check all that apply):	Frac. tank <input checked="" type="checkbox"/>	Air stripper <input type="checkbox"/>	Oil/water separator <input type="checkbox"/>	Equalization tanks <input type="checkbox"/>	Bag filter <input checked="" type="checkbox"/>	GAC filter <input checked="" type="checkbox"/>
	Chlorination <input type="checkbox"/>	De-chlorination <input type="checkbox"/>	Other (please describe):			

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):

None

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 type="checkbox"/>	Wetlands <input checked="" type="checkbox"/>	Other (describe): <input type="text"/>
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b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters:

The treatment system effluent discharges through a bag filter to the ground adjacent to brook. Brook leads to Lake Cochituate

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)?

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.

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 ☐ B ☐ C ☐ D ☒ E ☐ F ☐

b) If you selected Criterion D or F, has consultation with the federal services been completed? Y ☒ N ☐ Underway ☐

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 ☐ N ☒

d) Attach documentation of ESA eligibility as described in the NOI instructions and required by Appendix VII, Part I.C, Step 4.

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 ☒ 2 ☐ 3 ☐

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.


7. Supplemental information.

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

6a) No endangered species were listed by US Fish and Wildlife Service (US FWS); however, according to US FWS, the northern long eared bat was listed as a threatened species. BETA contacted the US FWS to discuss potential effects of project and according to US FWS, as the drainage project is not going to impact any roost trees, the US FWS does not expect any effects from the proposed project.

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:	WILLOW STREET DRAINAGE 17-19 WILLOW ST Natick MA
Operator signature:	
Printed Name & Title:	MARK COVELLO, P.E. TOWN ENGINEER
Date:	6/23/15

ATTACHMENT II
GZA ANALYTICAL TABLES
AND SITE PLAN

TABLE 1
GROUNDWATER ELEVATIONS
 Willow Mechanic Streets
 Natick, Massachusetts

File No. 170964.30
 Page 1 of 1
 6/19/2013

Monitoring Well	Wellhead Elevation (ft.)	Date	Depth to Product (ft.)	Depth to Groundwater (ft.)	Product Thickness (ft.)	Groundwater Elevation (ft.)
MW-01	103.03	6/9/11	None encountered	8.47	0.00	94.56
	103.01	5/15/12	None encountered	8.20	0.00	94.81
MW-02	100.10	6/9/11	None encountered	5.83	0.00	94.27
	100.10	5/15/12	None encountered	5.53	0.00	94.57
MW-04	99.95	6/9/11	None encountered	6.21	0.00	93.74
	99.95	5/15/12	None encountered	5.79	0.00	94.16
MW-101	99.07	6/9/11	None encountered	5.44	0.00	93.63
	99.07	5/15/12	None encountered	5.16	0.00	93.91
MW-102	99.00	6/9/11	None encountered	4.41	0.00	94.59
	99.00	5/15/12	None encountered	4.13	0.00	94.87

Elevations are relative to ground surface adjacent to monitoring well MW-04, called 100.00 feet; survey by GZA personnel.

TABLE 2
GROUNDWATER ANALYTICAL RESULTS
Willow Mechanic Streets
Natick, Massachusetts

File No. 170964.30
Page 1 of 1
6/19/2013

Constituent	MW-01		MW-02		MW-04		MW-101		MW-102		MCP Method 1 Standards		
	6/9/2011 Result	5/15/2012 RL	6/9/2011 Result	5/15/2012 RL	6/9/2011 Result	5/15/2012 RL	6/9/2011 Result	5/15/2012 RL	6/9/2011 Result	5/15/2012 RL	GW-1	GW-2	GW-3
MADE EPH													
Unadjusted C11-C22 Aromatic	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	126	100	
C9-C18 Aliphatic Fraction	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	
C19-C36 Aliphatic Fraction	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	
C11-C22 Aromatic Fraction	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	
Naphthalene (Diesel PAH)	< 5.0	< 0.19	< 5.0	< 0.19	< 5.0	< 0.19	< 5.0	< 0.19	< 5.0	1.33	0.19	140	20,000
2-Methylnaphthalene	< 5.0	< 0.19	< 5.0	< 0.19	< 5.0	< 0.19	< 5.0	< 0.19	< 5.0	1.96	0.19	10	2,000
Acenaphthylene	< 5.0	< 0.19	< 5.0	< 0.19	< 5.0	< 0.19	< 5.0	< 0.19	< 5.0	< 0.19	< 0.19	< 0.19	
Acenaphthene (Diesel PAH)	< 5.0	< 0.19	< 5.0	< 0.19	< 5.0	< 0.19	< 5.0	< 0.19	< 5.0	< 0.19	< 0.19	< 0.19	
Fluorene	< 5.0	< 0.19	< 5.0	< 0.19	< 5.0	< 0.19	< 5.0	< 0.19	< 5.0	0.33	0.19	30	40
Phenanthrene (Diesel PAH)	< 5.0	< 0.19	< 5.0	< 0.19	< 5.0	< 0.19	< 5.0	< 0.19	< 5.0	< 0.19	< 0.19	< 0.19	
Anthracene	< 5.0	< 0.19	< 5.0	< 0.19	< 5.0	< 0.19	< 5.0	< 0.19	< 5.0	< 0.19	< 0.19	< 0.19	
Fluoranthene	< 5.0	< 0.19	< 5.0	< 0.19	< 5.0	< 0.19	< 5.0	< 0.19	< 5.0	0.37	0.19	90	200
Pyrene	< 5.0	< 0.19	< 5.0	< 0.19	< 5.0	< 0.19	< 5.0	< 0.19	< 5.0	0.32	0.19	80	20
Benzo [a] Anthracene	< 5.0	< 0.05	< 5.0	< 0.05	< 5.0	< 0.05	< 5.0	< 0.05	< 5.0	0.16	0.05	1	1,000
Chrysene	< 5.0	< 0.05	< 5.0	< 0.05	< 5.0	< 0.05	< 5.0	< 0.05	< 5.0	0.15	0.05	2	70
Benzo [b] Fluoranthene	< 5.0	< 0.05	< 5.0	< 0.05	< 5.0	< 0.05	< 5.0	< 0.05	< 5.0	0.21	0.05	1	400
Benzo [k] Fluoranthene	< 5.0	< 0.05	< 5.0	< 0.05	< 5.0	< 0.05	< 5.0	< 0.05	< 5.0	0.08	0.05	1	100
Benzo [a] Pyrene	< 5.0	< 0.05	< 5.0	< 0.05	< 5.0	< 0.05	< 5.0	< 0.05	< 5.0	0.18	0.05	0.2	500
Indeno [1,2,3-cd] Pyrene	< 5.0	< 0.05	< 5.0	< 0.05	< 5.0	< 0.05	< 5.0	< 0.05	< 5.0	0.12	0.05	1	100
Dibenzo [a,h] Anthracene	< 5.0	< 0.05	< 5.0	< 0.05	< 5.0	< 0.05	< 5.0	< 0.05	< 5.0	< 0.05	< 0.05	< 0.05	
Benzo [g,h,i] Perylene	< 5.0	< 0.19	< 5.0	< 0.19	< 5.0	< 0.19	< 5.0	< 0.19	< 5.0	< 0.19	< 0.19	< 0.19	
EPA 8 VOLATILE ORGANICS 8010 LIST													
Dichlorodifluoromethane	< 2.0	-	< 2.0	-	< 2.0	-	< 2.0	-	< 2.0	-	-	-	
Chloromethane	< 2.0	-	< 2.0	-	< 2.0	-	< 2.0	-	< 2.0	-	-	-	
Vinyl chloride	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	-	-	
Bromomethane	< 2.0	-	< 2.0	-	< 2.0	-	< 2.0	-	< 2.0	-	-	-	
Chloroethane	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	-	-	
Trichlorofluoromethane	< 2.0	-	< 2.0	-	< 2.0	-	< 2.0	-	< 2.0	-	-	-	
1,1-Dichloroethene	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	-	-	
Dichloromethane	< 2.0	-	< 2.0	-	< 2.0	-	< 2.0	-	< 2.0	-	-	-	
trans-1,2-Dichloroethene	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	-	-	
1,1-Dichloroethane	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	-	-	
cis-1,2-Dichloroethene	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	-	-	
Chloroform	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	-	-	
1,1,1-Trichloroethane	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	-	-	
Carbon tetrachloride	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	-	-	
1,2-Dichloroethane	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	-	-	
Trichloroethene	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	-	-	
1,2-Dichloropropane	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	-	-	
Bromodichloromethane	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	-	-	
cis-1,3-Dichloropropene	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	-	-	
trans-1,3-Dichloropropene	< 2.0	-	< 2.0	-	< 2.0	-	< 2.0	-	< 2.0	-	-	-	
1,1,2-Trichloroethane	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	-	-	
Tetrachloroethene	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	-	-	
Dibromochloromethane	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	-	-	
Chlorobenzene	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	-	-	
1,1,2,2-Tetrachloroethane	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	-	-	
Bromoform	< 2.0	-	< 2.0	-	< 2.0	-	< 2.0	-	< 2.0	-	-	-	
1,3-Dichlorobenzene	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	-	-	
1,4-Dichlorobenzene	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	-	-	
1,2-Dichlorobenzene	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	< 1.0	-	-	-	
MADE VPH													
C5-C8 Aliphatics	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	790	250	865.0	50	300
C9-C12 Aliphatics	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 250	57.5	50	700	5,000
C9-C10 Aromatics	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	290	250	362.0	50	7,000
Methyl-Tert-Butyl-Ether	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Benzene	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Toluene	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Ethylbenzene	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
m&p-Xylene	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	
o-Xylene	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	2.3	1.0	10,000
Naphthalene	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	9,000

Notes:

1. Samples collected by GZA personnel on June 9, 2011 analyzed by GZA's Environmental Chemistry Laboratory of Hopkinton, Massachusetts.
2. Samples collected by GZA personnel on May 15, 2012 analyzed by ESS Laboratory, Inc. PAHs from MW-01 re-sampled May 21, 2012 to replace broken sample container.
3. All results in µg/L (parts per billion).
4. EPH and VPH analyzed by Massachusetts Department of Environmental Protection methods.
5. VOCs analyzed by EPA Method 8260 - 8010 List VOCs.
6. "<" indicates concentration less than reporting limit (RL).
7. "-" indicates not analyzed.
8. MCP Method 1 Groundwater Standards from 310 CMR 40.0974(2). Standards listed only for detected compounds. NA indicates not applicable.



LEGEND:

- ▲ SS-1 SOIL SAMPLE COLLECTION POINT BY GZA
- ⊕ MW-03 MONITORING WELL BY NORTH COUNTRY ENVIRONMENTAL
- ⊕ MW-01 MONITORING WELL BY NORTH COUNTRY ENVIRONMENTAL SERVICES, INC, NOVEMBER 1997 (NOTE: MW-05 SHOWN AS DESTROYED)
- ⊙ B-1 SOIL BORING BY ENSTRAT, INC, DECEMBER 2004
- ⊕ EN-1 MONITORING WELL BY ENSTRAT, INC, DECEMBER 2004 (NOTE: WELLS ARE EITHER ABANDONED OR DESTROYED)
- ⊕ MW-101 83.23 MONITORING WELL BY LOITHESTEIN ENVIRONMENTAL, INC, INC DECEMBER 2004
- 94.0 GROUND WATER ELEVATION MEASURED ON JUNE 9, 2011
- 94.0 GROUND WATER CONTOUR MEASURED ON JUNE 9, 2011
- ← INFERRED DIRECTION OF GROUNDWATER FLOW

1) THIS MAP CONTAINS THE ESRI ARCGIS ONLINE WORLD TOPOGRAPHIC MAP SERVICE, PUBLISHED FEBRUARY 2011 BY ESRI ARCGIS SERVICES. THE SERVICE WAS COMPILED TO UNIFORM CARTOGRAPHY USING A VARIETY OF BEST AVAILABLE SOURCES FROM SEVERAL DATA PROVIDERS.

2) SOIL SAMPLES (SS-1 THROUGH SS-8) TAKEN ON 06/20/2011 BY GZA PERSONNEL

3) EXPLORATION LOCATIONS BY OTHERS ARE BASED UPON THE DRAWING FROM LOITHESTEIN ENVIRONMENTAL ENTITLED "FIGURE 2 AERIAL SITE PLAN" DATED 12/15/10 AND THE DRAWING FROM ENSTRAT, INC, ENTITLED "FIGURE 2, SITEPLAN AND SURROUNDING PROPERTIES" DATED 11/19/04.

4) ALL EXPLORATION LOCATIONS ARE APPROXIMATE



NO.	REVISION/DESCRIPTION	BY	DATE

UNLESS SPECIFICALLY STATED BY WRITTEN AGREEMENT, THIS DRAWING IS THE SOLE PROPERTY OF GZA GEOENVIRONMENTAL, INC. (GZA). THE INFORMATION SHOWN ON THE DRAWING IS SOLELY FOR USE BY GZA'S CLIENT OR THE CLIENT'S DESIGNATED REPRESENTATIVE FOR THE SPECIFIC PROJECT AND LOCATION IDENTIFIED ON THE DRAWING. THE DRAWING SHALL NOT BE TRANSFERRED, REUSED, COPIED, OR ALTERED IN ANY MANNER FOR USE AT ANY OTHER LOCATION OR FOR ANY OTHER PURPOSE WITHOUT THE PRIOR WRITTEN CONSENT OF GZA. ANY TRANSFER, REUSE, OR MODIFICATION TO THE DRAWING BY THE CLIENT OR OTHERS, WITHOUT THE PRIOR WRITTEN EXPRESS CONSENT OF GZA, WILL BE AT THE USER'S SOLE RISK AND WITHOUT ANY RISK OR LIABILITY TO GZA.

4-6 MECHANIC STREET AND 17-19 WILLOW STREET
NATICK, MASSACHUSETTS

EXPLORATION LOCATION MAP

PREPARED BY: GZA GeoEnvironmental, Inc. Engineers and Scientists www.gza.com		PREPARED FOR:	
PROJECT NO. SH	REVIEWED BY: SH	CHECKED BY: SH	FIGURE
DESIGNED BY: SH	DRAWN BY: JHC	SCALE: SCALE	2
DATE: 06-14-2011	PROJECT NO. 170964.00	REVISION NO.	SHEET NO. XX OF XX

ATTACHMENT III
LABORATORY CERTIFICATES – 2015



ANALYTICAL REPORT

Lab Number:	L1512610
Client:	Beta Group, Inc. 315 Norwood Park South Norwood, MA 02062
ATTN:	Craig Ellis
Phone:	(781) 255-1982
Project Name:	WILLOW ST.
Project Number:	3636
Report Date:	06/25/15

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), VA (460195), MD (348), IL (200077), NC (666), TX (T104704476), DOD (L2217), USDA (Permit #P-330-11-00240).

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



Project Name: WILLOW ST.
Project Number: 3636

Lab Number: L1512610
Report Date: 06/25/15

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1512610-01	MW-1	WATER	NATICK, MA	06/05/15 14:00	06/05/15
L1512610-02	TRIP BLANK	WATER	NATICK, MA	06/05/15 00:00	06/05/15

Project Name: WILLOW ST.

Lab Number: L1512610

Project Number: 3636

Report Date: 06/25/15

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: WILLOW ST.
Project Number: 3636

Lab Number: L1512610
Report Date: 06/25/15

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. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC 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. 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 (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

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

Project Name: WILLOW ST.
Project Number: 3636

Lab Number: L1512610
Report Date: 06/25/15

Case Narrative (continued)

Report Submission

This report replaces the report issued June 12, 2015. Antimony, Cadmium, Copper, Lead, Selenium, and Silver were analyzed by method 6020, to achieve the project requested reporting limits.

MCP Related Narratives

Volatile Organics

In reference to question H:

The initial calibration, associated with L1512610-01, did not meet the method required minimum response factor on the lowest calibration standard for 1,4-dioxane (0.00535), as well as the average response factor for 1,4-dioxane.

The continuing calibration standard, associated with L1512610-01, is outside the acceptance criteria for several compounds; however, it is within overall method allowances. A copy of the continuing calibration standard is included as an addendum to this report.

Volatile Organics by SIM

In reference to question H:

The initial calibration, associated with L1512610-01, did not meet the method required minimum response factor on the lowest calibration standard for 1,4-dioxane (0.00433), as well as the average response factor for 1,4-dioxane.

The continuing calibration standard, associated with L1512610-01, is outside the acceptance criteria. A copy of the continuing calibration standard is included as an addendum to this report.

Total Metals

In reference to question H:

The WG791466-3 LCSD recovery, associated with L1512610-01, is outside the acceptance criteria for lead (222%). Re-analysis of the LCSD yielded an unacceptable recovery (224%). The LCS recovery was within acceptance criteria for this analyte; therefore, no further action was taken.

In reference to question I:


Project Name: WILLOW ST.
Project Number: 3636

Lab Number: L1512610
Report Date: 06/25/15

Case Narrative (continued)

All samples were analyzed for a subset of MCP elements per the Chain of Custody.

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:  Lisa Westerlind

Title: Technical Director/Representative

Date: 06/25/15

ORGANICS

VOLATILES

Project Name: WILLOW ST.

Lab Number: L1512610

Project Number: 3636

Report Date: 06/25/15

SAMPLE RESULTS

Lab ID: L1512610-01
 Client ID: MW-1
 Sample Location: NATICK, MA
 Matrix: Water
 Analytical Method: 97,8260C
 Analytical Date: 06/12/15 10:26
 Analyst: MM

Date Collected: 06/05/15 14:00
 Date Received: 06/05/15
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1

Project Name: WILLOW ST.

Lab Number: L1512610

Project Number: 3636

Report Date: 06/25/15

SAMPLE RESULTS

Lab ID: L1512610-01

Date Collected: 06/05/15 14:00

Client ID: MW-1

Date Received: 06/05/15

Sample Location: NATICK, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylene (Total)	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene (total)	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
2-Butanone	ND		ug/l	5.0	--	1
4-Methyl-2-pentanone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	2.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Butylbenzene	ND		ug/l	2.0	--	1
sec-Butylbenzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propylbenzene	ND		ug/l	2.0	--	1
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1

Project Name: WILLOW ST.

Lab Number: L1512610

Project Number: 3636

Report Date: 06/25/15

SAMPLE RESULTS

Lab ID: L1512610-01

Date Collected: 06/05/15 14:00

Client ID: MW-1

Date Received: 06/05/15

Sample Location: NATICK, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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MCP Volatile Organics - Westborough Lab

Ethyl ether	ND		ug/l	2.0	--	1
Isopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	120		70-130

Project Name: WILLOW ST.**Project Number:** 3636**Lab Number:** L1512610**Report Date:** 06/25/15**SAMPLE RESULTS**

Lab ID: L1512610-01
Client ID: MW-1
Sample Location: NATICK, MA
Matrix: Water
Analytical Method: 97,8260C-SIM
Analytical Date: 06/12/15 10:26
Analyst: MM

Date Collected: 06/05/15 14:00
Date Received: 06/05/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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MCP Volatile Organics by SIM - Westborough Lab

1,4-Dioxane	ND		ug/l	3.0	--	1
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Project Name: WILLOW ST.**Lab Number:** L1512610**Project Number:** 3636**Report Date:** 06/25/15**Method Blank Analysis**
Batch Quality Control

Analytical Method: 97,8260C-SIM

Analytical Date: 06/12/15 07:42

Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics by SIM - Westborough Lab for sample(s): 01 Batch: WG793053-3					
1,4-Dioxane	ND		ug/l	3.0	--

Project Name: WILLOW ST.

Lab Number: L1512610

Project Number: 3636

Report Date: 06/25/15

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8260C
 Analytical Date: 06/12/15 07:42
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01 Batch: WG793055-3					
Methylene chloride	ND		ug/l	2.0	--
1,1-Dichloroethane	ND		ug/l	1.0	--
Chloroform	ND		ug/l	1.0	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	1.0	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.0	--
Tetrachloroethene	ND		ug/l	1.0	--
Chlorobenzene	ND		ug/l	1.0	--
Trichlorofluoromethane	ND		ug/l	2.0	--
1,2-Dichloroethane	ND		ug/l	1.0	--
1,1,1-Trichloroethane	ND		ug/l	1.0	--
Bromodichloromethane	ND		ug/l	1.0	--
trans-1,3-Dichloropropene	ND		ug/l	0.50	--
cis-1,3-Dichloropropene	ND		ug/l	0.50	--
1,3-Dichloropropene, Total	ND		ug/l	0.50	--
1,1-Dichloropropene	ND		ug/l	2.0	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	1.0	--
Ethylbenzene	ND		ug/l	1.0	--
Chloromethane	ND		ug/l	2.0	--
Bromomethane	ND		ug/l	2.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--

Project Name: WILLOW ST.

Lab Number: L1512610

Project Number: 3636

Report Date: 06/25/15

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8260C
 Analytical Date: 06/12/15 07:42
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01 Batch: WG793055-3					
1,2-Dichlorobenzene	ND		ug/l	1.0	--
1,3-Dichlorobenzene	ND		ug/l	1.0	--
1,4-Dichlorobenzene	ND		ug/l	1.0	--
Methyl tert butyl ether	ND		ug/l	2.0	--
p/m-Xylene	ND		ug/l	2.0	--
o-Xylene	ND		ug/l	1.0	--
Xylene (Total)	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	1.0	--
1,2-Dichloroethene (total)	ND		ug/l	1.0	--
Dibromomethane	ND		ug/l	2.0	--
1,2,3-Trichloropropane	ND		ug/l	2.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	2.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	2.0	--
2-Butanone	ND		ug/l	5.0	--
4-Methyl-2-pentanone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.0	--
Tetrahydrofuran	ND		ug/l	2.0	--
2,2-Dichloropropane	ND		ug/l	2.0	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.0	--
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--
Bromobenzene	ND		ug/l	2.0	--
n-Butylbenzene	ND		ug/l	2.0	--
sec-Butylbenzene	ND		ug/l	2.0	--
tert-Butylbenzene	ND		ug/l	2.0	--
o-Chlorotoluene	ND		ug/l	2.0	--

Project Name: WILLOW ST.

Lab Number: L1512610

Project Number: 3636

Report Date: 06/25/15

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8260C
 Analytical Date: 06/12/15 07:42
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01 Batch: WG793055-3					
p-Chlorotoluene	ND		ug/l	2.0	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--
Hexachlorobutadiene	ND		ug/l	0.60	--
Isopropylbenzene	ND		ug/l	2.0	--
p-Isopropyltoluene	ND		ug/l	2.0	--
Naphthalene	ND		ug/l	2.0	--
n-Propylbenzene	ND		ug/l	2.0	--
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--
Ethyl ether	ND		ug/l	2.0	--
Isopropyl Ether	ND		ug/l	2.0	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	120		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	124		70-130
Dibromofluoromethane	126		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: WILLOW ST.

Project Number: 3636

Lab Number: L1512610

Report Date: 06/25/15

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
MCP Volatile Organics by SIM - Westborough Lab Associated sample(s): 01 Batch: WG793053-1 WG793053-2								
1,4-Dioxane	114		104		70-130	9		20

Lab Control Sample Analysis Batch Quality Control

Project Name: WILLOW ST.
Project Number: 3636

Lab Number: L1512610
Report Date: 06/25/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG793055-1 WG793055-2								
Methylene chloride	82		76		70-130	8		20
1,1-Dichloroethane	100		102		70-130	2		20
Chloroform	101		105		70-130	4		20
Carbon tetrachloride	107		113		70-130	5		20
1,2-Dichloropropane	98		99		70-130	1		20
Dibromochloromethane	94		94		70-130	0		20
1,1,2-Trichloroethane	100		96		70-130	4		20
Tetrachloroethene	98		98		70-130	0		20
Chlorobenzene	93		99		70-130	6		20
Trichlorofluoromethane	103		103		70-130	0		20
1,2-Dichloroethane	109		113		70-130	4		20
1,1,1-Trichloroethane	107		109		70-130	2		20
Bromodichloromethane	106		103		70-130	3		20
trans-1,3-Dichloropropene	86		86		70-130	0		20
cis-1,3-Dichloropropene	95		95		70-130	0		20
1,1-Dichloropropene	103		105		70-130	2		20
Bromoform	90		90		70-130	0		20
1,1,2,2-Tetrachloroethane	87		89		70-130	2		20
Benzene	98		100		70-130	2		20
Toluene	96		96		70-130	0		20
Ethylbenzene	97		97		70-130	0		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: WILLOW ST.

Project Number: 3636

Lab Number: L1512610

Report Date: 06/25/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG793055-1 WG793055-2								
Chloromethane	115		86		70-130	29	Q	20
Bromomethane	88		93		70-130	6		20
Vinyl chloride	77		82		70-130	6		20
Chloroethane	96		90		70-130	6		20
1,1-Dichloroethene	83		84		70-130	1		20
trans-1,2-Dichloroethene	82		75		70-130	9		20
Trichloroethene	103		106		70-130	3		20
1,2-Dichlorobenzene	94		95		70-130	1		20
1,3-Dichlorobenzene	87		96		70-130	10		20
1,4-Dichlorobenzene	89		92		70-130	3		20
Methyl tert butyl ether	71		83		70-130	16		20
p/m-Xylene	98		99		70-130	1		20
o-Xylene	96		98		70-130	2		20
cis-1,2-Dichloroethene	102		102		70-130	0		20
Dibromomethane	107		106		70-130	1		20
1,2,3-Trichloropropane	88		91		70-130	3		20
Styrene	96		96		70-130	0		20
Dichlorodifluoromethane	96		98		70-130	2		20
Acetone	96		74		70-130	26	Q	20
Carbon disulfide	73		72		70-130	1		20
2-Butanone	97		92		70-130	5		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: WILLOW ST.

Project Number: 3636

Lab Number: L1512610

Report Date: 06/25/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG793055-1 WG793055-2								
4-Methyl-2-pentanone	92		93		70-130	1		20
2-Hexanone	98		95		70-130	3		20
Bromochloromethane	106		107		70-130	1		20
Tetrahydrofuran	94		101		70-130	7		20
2,2-Dichloropropane	110		109		70-130	1		20
1,2-Dibromoethane	96		96		70-130	0		20
1,3-Dichloropropane	97		98		70-130	1		20
1,1,1,2-Tetrachloroethane	94		97		70-130	3		20
Bromobenzene	96		88		70-130	9		20
n-Butylbenzene	91		92		70-130	1		20
sec-Butylbenzene	89		93		70-130	4		20
tert-Butylbenzene	89		93		70-130	4		20
o-Chlorotoluene	92		94		70-130	2		20
p-Chlorotoluene	86		92		70-130	7		20
1,2-Dibromo-3-chloropropane	85		90		70-130	6		20
Hexachlorobutadiene	96		93		70-130	3		20
Isopropylbenzene	96		93		70-130	3		20
p-Isopropyltoluene	82		90		70-130	9		20
Naphthalene	71		70		70-130	1		20
n-Propylbenzene	90		90		70-130	0		20
1,2,3-Trichlorobenzene	80		83		70-130	4		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: WILLOW ST.

Project Number: 3636

Lab Number: L1512610

Report Date: 06/25/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG793055-1 WG793055-2								
1,2,4-Trichlorobenzene	82		82		70-130	0		20
1,3,5-Trimethylbenzene	86		89		70-130	3		20
1,2,4-Trimethylbenzene	89		90		70-130	1		20
Ethyl ether	83		78		70-130	6		20
Isopropyl Ether	98		101		70-130	3		20
Ethyl-Tert-Butyl-Ether	94		96		70-130	2		20
Tertiary-Amyl Methyl Ether	88		89		70-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	107		104		70-130
Toluene-d8	98		98		70-130
4-Bromofluorobenzene	93		85		70-130
Dibromofluoromethane	105		107		70-130

SEMIVOLATILES

Project Name: WILLOW ST.

Lab Number: L1512610

Project Number: 3636

Report Date: 06/25/15

SAMPLE RESULTS

Lab ID: L1512610-01
 Client ID: MW-1
 Sample Location: NATICK, MA
 Matrix: Water
 Analytical Method: 97,8270D
 Analytical Date: 06/10/15 19:15
 Analyst: HL

Date Collected: 06/05/15 14:00
 Date Received: 06/05/15
 Field Prep: Not Specified
 Extraction Method: EPA 3510C
 Extraction Date: 06/10/15 11:22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Semivolatile Organics - Westborough Lab						
Acenaphthene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	--	1
Hexachlorobenzene	ND		ug/l	2.0	--	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	--	1
2-Chloronaphthalene	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
Fluoranthene	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
Hexachlorobutadiene	ND		ug/l	2.0	--	1
Hexachloroethane	ND		ug/l	2.0	--	1
Isophorone	ND		ug/l	5.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
Nitrobenzene	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
Benzo(a)anthracene	ND		ug/l	2.0	--	1
Benzo(a)pyrene	ND		ug/l	2.0	--	1
Benzo(b)fluoranthene	ND		ug/l	2.0	--	1

Project Name: WILLOW ST.

Lab Number: L1512610

Project Number: 3636

Report Date: 06/25/15

SAMPLE RESULTS

Lab ID: L1512610-01

Date Collected: 06/05/15 14:00

Client ID: MW-1

Date Received: 06/05/15

Sample Location: NATICK, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Semivolatile Organics - Westborough Lab						
Benzo(k)fluoranthene	ND		ug/l	2.0	--	1
Chrysene	ND		ug/l	2.0	--	1
Acenaphthylene	ND		ug/l	2.0	--	1
Anthracene	ND		ug/l	2.0	--	1
Benzo(ghi)perylene	ND		ug/l	2.0	--	1
Fluorene	ND		ug/l	2.0	--	1
Phenanthrene	ND		ug/l	2.0	--	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	2.0	--	1
Pyrene	ND		ug/l	2.0	--	1
Aniline	ND		ug/l	2.0	--	1
4-Chloroaniline	ND		ug/l	5.0	--	1
Dibenzofuran	ND		ug/l	2.0	--	1
2-Methylnaphthalene	ND		ug/l	2.0	--	1
Acetophenone	ND		ug/l	5.0	--	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	--	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
Pentachlorophenol	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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	39		15-110
Phenol-d6	28		15-110
Nitrobenzene-d5	58		30-130
2-Fluorobiphenyl	67		30-130
2,4,6-Tribromophenol	69		15-110
4-Terphenyl-d14	75		30-130

Project Name: WILLOW ST.

Lab Number: L1512610

Project Number: 3636

Report Date: 06/25/15

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8270D
 Analytical Date: 06/10/15 17:08
 Analyst: HL

Extraction Method: EPA 3510C
 Extraction Date: 06/10/15 11:22

Parameter	Result	Qualifier	Units	RL	MDL
MCP Semivolatile Organics - Westborough Lab for sample(s): 01 Batch: WG792275-1					
Acenaphthene	ND		ug/l	2.0	--
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-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	--
Hexachloroethane	ND		ug/l	2.0	--
Isophorone	ND		ug/l	5.0	--
Naphthalene	ND		ug/l	2.0	--
Nitrobenzene	ND		ug/l	2.0	--
Bis(2-Ethylhexyl)phthalate	ND		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	--
Dimethyl phthalate	ND		ug/l	5.0	--
Benzo(a)anthracene	ND		ug/l	2.0	--
Benzo(a)pyrene	ND		ug/l	2.0	--

Project Name: WILLOW ST.

Lab Number: L1512610

Project Number: 3636

Report Date: 06/25/15

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8270D
 Analytical Date: 06/10/15 17:08
 Analyst: HL

Extraction Method: EPA 3510C
 Extraction Date: 06/10/15 11:22

Parameter	Result	Qualifier	Units	RL	MDL
MCP Semivolatile Organics - Westborough Lab for sample(s): 01 Batch: WG792275-1					
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	--
Aniline	ND		ug/l	2.0	--
4-Chloroaniline	ND		ug/l	5.0	--
Dibenzofuran	ND		ug/l	2.0	--
2-Methylnaphthalene	ND		ug/l	2.0	--
Acetophenone	ND		ug/l	5.0	--
2,4,6-Trichlorophenol	ND		ug/l	5.0	--
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	--
2,4-Dinitrophenol	ND		ug/l	20	--
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	--

Project Name: WILLOW ST.

Lab Number: L1512610

Project Number: 3636

Report Date: 06/25/15

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8270D
 Analytical Date: 06/10/15 17:08
 Analyst: HL

Extraction Method: EPA 3510C
 Extraction Date: 06/10/15 11:22

Parameter	Result	Qualifier	Units	RL	MDL
MCP Semivolatile Organics - Westborough Lab for sample(s): 01 Batch: WG792275-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	24		15-110
Phenol-d6	17		15-110
Nitrobenzene-d5	40		30-130
2-Fluorobiphenyl	54		30-130
2,4,6-Tribromophenol	64		15-110
4-Terphenyl-d14	79		30-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: WILLOW ST.
Project Number: 3636

Lab Number: L1512610
Report Date: 06/25/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Semivolatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG792275-2 WG792275-3								
Acenaphthene	63		74		40-140	16		20
1,2,4-Trichlorobenzene	38	Q	44		40-140	15		20
Hexachlorobenzene	70		78		40-140	11		20
Bis(2-chloroethyl)ether	58		65		40-140	11		20
2-Chloronaphthalene	58		69		40-140	17		20
1,2-Dichlorobenzene	33	Q	35	Q	40-140	6		20
1,3-Dichlorobenzene	30	Q	31	Q	40-140	3		20
1,4-Dichlorobenzene	31	Q	32	Q	40-140	3		20
3,3'-Dichlorobenzidine	73		80		40-140	9		20
2,4-Dinitrotoluene	79		86		40-140	8		20
2,6-Dinitrotoluene	78		88		40-140	12		20
Azobenzene	77		86		40-140	11		20
Fluoranthene	81		86		40-140	6		20
4-Bromophenyl phenyl ether	72		82		40-140	13		20
Bis(2-chloroisopropyl)ether	60		69		40-140	14		20
Bis(2-chloroethoxy)methane	65		76		40-140	16		20
Hexachlorobutadiene	34	Q	38	Q	40-140	11		20
Hexachloroethane	27	Q	28	Q	40-140	4		20
Isophorone	65		76		40-140	16		20
Naphthalene	48		54		40-140	12		20
Nitrobenzene	60		69		40-140	14		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: WILLOW ST.

Project Number: 3636

Lab Number: L1512610

Report Date: 06/25/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Semivolatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG792275-2 WG792275-3								
Bis(2-Ethylhexyl)phthalate	85		91		40-140	7		20
Butyl benzyl phthalate	81		85		40-140	5		20
Di-n-butylphthalate	81		87		40-140	7		20
Di-n-octylphthalate	80		85		40-140	6		20
Diethyl phthalate	75		84		40-140	11		20
Dimethyl phthalate	73		82		40-140	12		20
Benzo(a)anthracene	82		87		40-140	6		20
Benzo(a)pyrene	81		83		40-140	2		20
Benzo(b)fluoranthene	89		92		40-140	3		20
Benzo(k)fluoranthene	87		90		40-140	3		20
Chrysene	86		91		40-140	6		20
Acenaphthylene	66		77		40-140	15		20
Anthracene	78		85		40-140	9		20
Benzo(ghi)perylene	85		90		40-140	6		20
Fluorene	70		80		40-140	13		20
Phenanthrene	76		84		40-140	10		20
Dibenzo(a,h)anthracene	83		88		40-140	6		20
Indeno(1,2,3-cd)Pyrene	85		90		40-140	6		20
Pyrene	81		86		40-140	6		20
Aniline	45		43		40-140	5		20
4-Chloroaniline	63		76		40-140	19		20

Lab Control Sample Analysis Batch Quality Control

Project Name: WILLOW ST.
Project Number: 3636

Lab Number: L1512610
Report Date: 06/25/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Semivolatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG792275-2 WG792275-3								
Dibenzofuran	67		78		40-140	15		20
2-Methylnaphthalene	52		62		40-140	18		20
Acetophenone	59		69		40-140	16		20
2,4,6-Trichlorophenol	67		77		30-130	14		20
2-Chlorophenol	57		64		30-130	12		20
2,4-Dichlorophenol	62		74		30-130	18		20
2,4-Dimethylphenol	67		72		30-130	7		20
2-Nitrophenol	57		66		30-130	15		20
4-Nitrophenol	48		52		30-130	8		20
2,4-Dinitrophenol	55		76		30-130	32	Q	20
Pentachlorophenol	77		81		30-130	5		20
Phenol	32		36		30-130	12		20
2-Methylphenol	57		65		30-130	13		20
3-Methylphenol/4-Methylphenol	55		62		30-130	12		20
2,4,5-Trichlorophenol	70		80		30-130	13		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: WILLOW ST.
Project Number: 3636

Lab Number: L1512610
Report Date: 06/25/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Semivolatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG792275-2 WG792275-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	36		39		15-110
Phenol-d6	28		31		15-110
Nitrobenzene-d5	58		67		30-130
2-Fluorobiphenyl	65		75		30-130
2,4,6-Tribromophenol	74		81		15-110
4-Terphenyl-d14	78		80		30-130

PCBS

Project Name: WILLOW ST.

Lab Number: L1512610

Project Number: 3636

Report Date: 06/25/15

SAMPLE RESULTS

Lab ID: L1512610-01
 Client ID: MW-1
 Sample Location: NATICK, MA
 Matrix: Water
 Analytical Method: 97,8082
 Analytical Date: 06/11/15 00:13
 Analyst: JT

Date Collected: 06/05/15 14:00
 Date Received: 06/05/15
 Field Prep: Not Specified
 Extraction Method: EPA 3510C
 Extraction Date: 06/10/15 13:51
 Cleanup Method: EPA 3665A
 Cleanup Date: 06/10/15
 Cleanup Method: EPA 3660B
 Cleanup Date: 06/10/15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Polychlorinated Biphenyls - Westborough Lab							
Aroclor 1016	ND		ug/l	0.250	--	1	A
Aroclor 1221	ND		ug/l	0.250	--	1	A
Aroclor 1232	ND		ug/l	0.250	--	1	A
Aroclor 1242	ND		ug/l	0.250	--	1	A
Aroclor 1248	ND		ug/l	0.250	--	1	A
Aroclor 1254	ND		ug/l	0.250	--	1	A
Aroclor 1260	ND		ug/l	0.250	--	1	A
Aroclor 1262	ND		ug/l	0.250	--	1	A
Aroclor 1268	ND		ug/l	0.250	--	1	A
PCBs, Total	ND		ug/l	0.250	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	74		30-150	A
Decachlorobiphenyl	69		30-150	A
2,4,5,6-Tetrachloro-m-xylene	79		30-150	B
Decachlorobiphenyl	72		30-150	B

Project Name: WILLOW ST.

Lab Number: L1512610

Project Number: 3636

Report Date: 06/25/15

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8082A
 Analytical Date: 06/11/15 00:33
 Analyst: JT

Extraction Method: EPA 3510C
 Extraction Date: 06/10/15 13:51
 Cleanup Method: EPA 3665A
 Cleanup Date: 06/10/15
 Cleanup Method: EPA 3660B
 Cleanup Date: 06/10/15

Parameter	Result	Qualifier	Units	RL	MDL	Column
MCP Polychlorinated Biphenyls - Westborough Lab for sample(s): 01 Batch: WG792344-1						
Aroclor 1016	ND		ug/l	0.250	--	A
Aroclor 1221	ND		ug/l	0.250	--	A
Aroclor 1232	ND		ug/l	0.250	--	A
Aroclor 1242	ND		ug/l	0.250	--	A
Aroclor 1248	ND		ug/l	0.250	--	A
Aroclor 1254	ND		ug/l	0.250	--	A
Aroclor 1260	ND		ug/l	0.250	--	A
Aroclor 1262	ND		ug/l	0.250	--	A
Aroclor 1268	ND		ug/l	0.250	--	A
PCBs, Total	ND		ug/l	0.250	--	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	58		30-150	A
Decachlorobiphenyl	64		30-150	A
2,4,5,6-Tetrachloro-m-xylene	60		30-150	B
Decachlorobiphenyl	66		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: WILLOW ST.
Project Number: 3636

Lab Number: L1512610
Report Date: 06/25/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
MCP Polychlorinated Biphenyls - Westborough Lab Associated sample(s): 01 Batch: WG792344-2 WG792344-3									
Aroclor 1016	78		65		40-140	19		20	A
Aroclor 1260	71		61		40-140	15		20	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	67		55		30-150	A
Decachlorobiphenyl	76		66		30-150	A
2,4,5,6-Tetrachloro-m-xylene	70		56		30-150	B
Decachlorobiphenyl	79		66		30-150	B

METALS

Project Name: WILLOW ST.
Project Number: 3636

Lab Number: L1512610
Report Date: 06/25/15

SAMPLE RESULTS

Lab ID: L1512610-01
Client ID: MW-1
Sample Location: NATICK, MA
Matrix: Water

Date Collected: 06/05/15 14:00
Date Received: 06/05/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Total Metals - Westborough Lab											
Antimony, Total	ND		mg/l	0.0020	--	1	06/23/15 10:32	06/23/15 11:51	EPA 3005A	97,6020A	KL
Arsenic, Total	ND		mg/l	0.005	--	1	06/08/15 12:09	06/08/15 14:45	EPA 3005A	97,6010C	JH
Cadmium, Total	ND		mg/l	0.0005	--	1	06/23/15 10:32	06/23/15 11:51	EPA 3005A	97,6020A	KL
Chromium, Total	ND		mg/l	0.01	--	1	06/08/15 12:09	06/08/15 14:45	EPA 3005A	97,6010C	JH
Copper, Total	0.0045		mg/l	0.0010	--	1	06/23/15 10:32	06/23/15 11:51	EPA 3005A	97,6020A	KL
Iron, Total	0.37		mg/l	0.05	--	1	06/08/15 12:09	06/08/15 14:45	EPA 3005A	97,6010C	JH
Lead, Total	0.0013		mg/l	0.0010	--	1	06/23/15 10:32	06/23/15 11:51	EPA 3005A	97,6020A	KL
Mercury, Total	ND		mg/l	0.0002	--	1	06/09/15 11:46	06/10/15 00:02	EPA 7470A	97,7470A	EA
Nickel, Total	ND		mg/l	0.025	--	1	06/08/15 12:09	06/08/15 14:45	EPA 3005A	97,6010C	JH
Selenium, Total	ND		mg/l	0.005	--	1	06/23/15 10:32	06/23/15 11:51	EPA 3005A	97,6020A	KL
Silver, Total	ND		mg/l	0.0005	--	1	06/23/15 10:32	06/23/15 11:51	EPA 3005A	97,6020A	KL
Zinc, Total	ND		mg/l	0.050	--	1	06/08/15 12:09	06/08/15 14:45	EPA 3005A	97,6010C	JH



Project Name: WILLOW ST.
Project Number: 3636

Lab Number: L1512610
Report Date: 06/25/15

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Total Metals - Westborough Lab for sample(s): 01 Batch: WG791466-1										
Arsenic, Total	ND		mg/l	0.005	--	1	06/08/15 12:09	06/08/15 13:28	97,6010C	JH
Chromium, Total	ND		mg/l	0.01	--	1	06/08/15 12:09	06/08/15 13:28	97,6010C	JH
Iron, Total	ND		mg/l	0.05	--	1	06/08/15 12:09	06/08/15 13:28	97,6010C	JH
Nickel, Total	ND		mg/l	0.025	--	1	06/08/15 12:09	06/08/15 13:28	97,6010C	JH
Zinc, Total	ND		mg/l	0.050	--	1	06/08/15 12:09	06/08/15 13:28	97,6010C	JH

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Total Metals - Westborough Lab for sample(s): 01 Batch: WG791883-1										
Mercury, Total	ND		mg/l	0.0002	--	1	06/09/15 11:46	06/09/15 23:57	97,7470A	EA

Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Total Metals - Westborough Lab for sample(s): 01 Batch: WG796088-1										
Antimony, Total	ND		mg/l	0.0020	--	1	06/23/15 10:32	06/23/15 11:48	97,6020A	KL
Cadmium, Total	ND		mg/l	0.0005	--	1	06/23/15 10:32	06/23/15 11:48	97,6020A	KL
Copper, Total	ND		mg/l	0.0010	--	1	06/23/15 10:32	06/23/15 11:48	97,6020A	KL
Lead, Total	ND		mg/l	0.0010	--	1	06/23/15 10:32	06/23/15 11:48	97,6020A	KL
Selenium, Total	ND		mg/l	0.005	--	1	06/23/15 10:32	06/23/15 11:48	97,6020A	KL
Silver, Total	ND		mg/l	0.0005	--	1	06/23/15 10:32	06/23/15 11:48	97,6020A	KL

Prep Information

Digestion Method: EPA 3005A



Lab Control Sample Analysis

Batch Quality Control

Project Name: WILLOW ST.

Project Number: 3636

Lab Number: L1512610

Report Date: 06/25/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG791466-2 WG791466-3								
Arsenic, Total	110		225	Q	80-120	69	Q	20
Chromium, Total	100		100		80-120	0		20
Iron, Total	100		100		80-120	0		20
Nickel, Total	105		103		80-120	2		20
Zinc, Total	105		103		80-120	2		20
MCP Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG791883-2 WG791883-3								
Mercury, Total	104		104		80-120	0		20
MCP Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG796088-2 WG796088-3								
Antimony, Total	102		105		80-120	3		20
Cadmium, Total	112		116		80-120	4		20
Copper, Total	105		114		80-120	8		20
Lead, Total	97		103		80-120	6		20
Selenium, Total	112		113		80-120	1		20
Silver, Total	102		106		80-120	4		20

INORGANICS & MISCELLANEOUS

Project Name: WILLOW ST.

Project Number: 3636

Lab Number: L1512610

Report Date: 06/25/15

SAMPLE RESULTS

Lab ID: L1512610-01

Client ID: MW-1

Sample Location: NATICK, MA

Matrix: Water

Date Collected: 06/05/15 14:00

Date Received: 06/05/15

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	--	1	06/09/15 10:30	06/09/15 14:42	97,9014	JO
Chromium, Hexavalent	ND		mg/l	0.010	--	1	06/05/15 21:30	06/05/15 21:55	97,7196A	DE
General Chemistry - Westborough Lab										
Chromium, Trivalent	ND		mg/l	0.010	--	1	-	06/08/15 14:45	107,-	
Solids, Total Suspended	12.		mg/l	5.0	NA	1	-	06/08/15 19:40	30,2540D	RP
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	06/05/15 21:03	30,4500CL-D	AS
Chloride	1000		mg/l	50	--	50	-	06/09/15 11:26	1,9251	LA
TPH	ND		mg/l	4.00	--	1	06/08/15 08:30	06/09/15 11:00	74,1664A	ML



Project Name: WILLOW ST.

Lab Number: L1512610

Project Number: 3636

Report Date: 06/25/15

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: WG791193-1										
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	06/05/15 21:03	30,4500CL-D	AS
MCP General Chemistry - Westborough Lab for sample(s): 01 Batch: WG791205-1										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	06/05/15 21:30	06/05/15 21:54	97,7196A	DE
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG791478-1										
TPH	ND		mg/l	4.00	--	1	06/08/15 08:30	06/09/15 11:00	74,1664A	ML
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG791712-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	06/08/15 19:40	30,2540D	RP
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG791801-1										
Chloride	ND		mg/l	1.0	--	1	-	06/09/15 09:58	1,9251	LA
MCP General Chemistry - Westborough Lab for sample(s): 01 Batch: WG791854-1										
Cyanide, Total	ND		mg/l	0.005	--	1	06/09/15 10:30	06/09/15 14:32	97,9014	JO

Lab Control Sample Analysis

Batch Quality Control

Project Name: WILLOW ST.
Project Number: 3636

Lab Number: L1512610
Report Date: 06/25/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG791193-2								
Chlorine, Total Residual	109		-		90-110	-		
MCP General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG791205-2 WG791205-3								
Chromium, Hexavalent	92		94		80-120	2		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG791478-2								
TPH	90		-		64-132	-		34
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG791801-2								
Chloride	100		-		90-110	-		
MCP General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG791854-2 WG791854-3								
Cyanide, Total	113		105		80-120	7		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: WILLOW ST.
Project Number: 3636

Lab Number: L1512610
Report Date: 06/25/15

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG791193-3 QC Sample: L1512610-01 Client ID: MW-1						
Chlorine, Total Residual	ND	ND	mg/l	NC		20

Project Name: WILLOW ST.

Project Number: 3636

Lab Number: L1512610

Report Date: 06/25/15

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(*)
L1512610-01A	Vial HCl preserved	A	N/A	5.2	Y	Absent	MCP-8260SIM-10(14),MCP-8260-10(14)
L1512610-01B	Vial HCl preserved	A	N/A	5.2	Y	Absent	MCP-8260SIM-10(14),MCP-8260-10(14)
L1512610-01C	Vial HCl preserved	A	N/A	5.2	Y	Absent	MCP-8260SIM-10(14),MCP-8260-10(14)
L1512610-01D	Amber 1000ml unpreserved	A	7	5.2	Y	Absent	MCP-8270-10(7)
L1512610-01E	Amber 1000ml unpreserved	A	7	5.2	Y	Absent	MCP-8270-10(7)
L1512610-01F	Amber 1000ml HCl preserved	A	N/A	5.2	Y	Absent	TPH-1664(28)
L1512610-01G	Amber 1000ml HCl preserved	A	N/A	5.2	Y	Absent	TPH-1664(28)
L1512610-01H	Amber 1000ml unpreserved	A	7	5.2	Y	Absent	MCP-8082-10(365)
L1512610-01I	Amber 1000ml unpreserved	A	7	5.2	Y	Absent	MCP-8082-10(365)
L1512610-01J	Plastic 950ml unpreserved	A	7	5.2	Y	Absent	CL-9251(28),TRC-4500(1),MCP-HEXCR7196-10(1)
L1512610-01K	Plastic 950ml unpreserved	A	7	5.2	Y	Absent	TSS-2540(7)
L1512610-01L	Plastic 250ml NaOH preserved	A	>12	5.2	Y	Absent	MCP-TCN9014-10(14)
L1512610-01M	Plastic 250ml HNO3 preserved	A	<2	5.2	Y	Absent	MCP-CR-6010T-10(180),MCP-FE-6010T-10(180),MCP-7470T-10(28),MCP-AS-6010T-10(180),MCP-CU-6020T-10(180),MCP-ZN-6010T-10(180),MCP-AG-6020T-10(180),MCP-CD-6020T-10(180),MCP-SE-6020T-10(180),MCP-PB-6020T-10(180),MCP-SB-6020T-10(180),MCP-NI-6010T-10(180)
L1512610-02A	Vial HCl preserved	A	N/A	5.2	Y	Absent	HOLD-8260(14)
L1512610-02B	Vial HCl preserved	A	N/A	5.2	Y	Absent	HOLD-8260(14)

*Values in parentheses indicate holding time in days



Project Name: WILLOW ST.

Lab Number: L1512610

Project Number: 3636

Report Date: 06/25/15

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

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

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

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 ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

Report Format: Data Usability Report



Project Name: WILLOW ST.**Lab Number:** L1512610**Project Number:** 3636**Report Date:** 06/25/15**Data Qualifiers**

- 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 lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- 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: WILLOW ST.**Lab Number:** L1512610**Project Number:** 3636**Report Date:** 06/25/15

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.
- 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.
- 97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.
- 107 Alpha Analytical - In-house calculation method.

LIMITATION OF LIABILITIES

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

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



Certification Information

Last revised December 16, 2014

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

Westborough Facility

EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.

EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.

EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene, 1,4-Diphenylhydrazine.

EPA 625: 4-Chloroaniline, 4-Methylphenol.

SM4500: Soil: Total Phosphorus, TKN, NO₂, NO₃.

EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility

EPA 8270D: Biphenyl.

EPA 2540D: TSS

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:

Drinking Water

EPA 200.8: Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, Tl; **EPA 200.7:** Ba, Be, Ca, Cd, Cr, Cu, Na; **EPA 245.1:** Mercury;

EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO₃-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B**

EPA 332: Perchlorate.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.

Non-Potable Water

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, Tl, Zn;

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, Ti, Tl, V, Zn;

EPA 245.1, SM4500H-B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH₃-BH, EPA 350.1: Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **SM4500NO₃-F, EPA 353.2:** Nitrate-N, **SM4500NH₃-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**

EPA 624: Volatile Halocarbons & Aromatics,

EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF.

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



CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab:

ALPHA Job #:

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

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

Client Information

Client:	BETA Group
Address:	315 Norwood Park S Norwood, MA 02062
Phone:	781-255-1982
Fax:	781-255-1974
Email:	JBoudreau@beta-in

☐ These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits:

If MS is required , indicate in Sample Specific Comments which samples and what tests MS to be performed.

(Note: All **CAM** methods for inorganic analyses require MS every 20 soil samples)

1) Antimony, Arsenic, Cadmium, Tri Chromium, Hex Chromium, copper
Iron, Lead, Mercury, Nickel, Selenium, Silver, Zinc

Project Information

Project Name:	Willow St.
Project Location:	Natick, MA

Project #: 3636
Project Manager: Craig Ellis

ALPHA Quote #:

Turn-Around Time

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

Date Due: _____ Time: _____

Report Information - Data Deliverables

☐ FAX ☒ EMAIL

☒ ADEx ☐ Add'l Deliverables

Regulatory Requirements/Report Limits

State /Fed Program	Criteria
--------------------	----------

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTO

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

SAMPLE HANDLING

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

	TOTAL # BOTTLES
1	1
2	1
3	1
4	1
5	1
6	1
7	1
8	1
9	1
10	1
11	1
12	1
13	1
14	1
15	1
16	1
17	1
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90	1
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93	1
94	1
95	1
96	1
97	1
98	1
99	1
100	1

[illegible]

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP *or* CT RCP?

Container Type

Preservative

Relinquished By:

Date/Time

Received By:

Date/Time

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

7A
Volatile Organics CONTINUING CALIBRATION CHECK

7A
Volatile Organics CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1512610

Instrument ID: Jack.i Calibration Date: 12-JUN-2015 Time: 05:31

Lab File ID: 0611A06 Init. Calib. Date(s): 11-MAY-2 12-MAY-2

Sample No: 8260 CCAL Init. Calib. Times : 21:13 00:32

Compound	RRF	RRF	MIN RRF	%D	MAX %D	
=====	=====	=====	=====	=====	=====	
dichlorodifluoromethane	.59833	.57275	.1	-4	20	
chloromethane	.32679	.37668	.1	15	20	
vinyl chloride	.92976	.71762	.1	-23	20	F
bromomethane	.28672	.25204	.1	-12	20	
chloroethane	.41399	.39614	.1	-4	20	
trichlorofluoromethane	.86204	.88866	.1	3	20	
ethyl ether	.31492	.2605	.05	-17	20	
1,1,-dichloroethene	.59295	.49131	.1	-17	20	
carbon disulfide	1.6706	1.2183	.1	-27	20	F
methylene chloride	.646	.52919	.1	-18	20	
acetone	100	96.230	.1	-4	20	
trans-1,2-dichloroethene	.67558	.5569	.1	-18	20	
methyl tert butyl ether	1.5136	1.0695	.1	-29	20	F
Diisopropyl Ether	2.8034	2.7465	.01	-2	20	
1,1-dichloroethane	1.4573	1.4531	.2	0	20	
Ethyl-Tert-Butyl-Ether	2.1194	1.9945	.05	-6	20	
cis-1,2-dichloroethene	.80728	.82129	.1	2	20	
2,2-dichloropropane	1.0279	1.1281	.05	10	20	
bromochloromethane	.34637	.36768	.05	6	20	
chloroform	1.2942	1.3058	.2	1	20	
carbontetrachloride	.95543	1.0225	.1	7	20	
tetrahydrofuran	.20503	.19322	.05	-6	20	
1,1,1-trichloroethane	1.1444	1.2287	.1	7	20	
1,1-dichloropropene	.98786	1.018	.05	3	20	
2-butanone	100	97.051	.1	-3	20	
benzene	2.8614	2.8104	.5	-2	20	
Tertiary-Amyl Methyl Ether	1.5897	1.4038	.05	-12	20	
1,2-dichloroethane	.93434	1.0167	.1	9	20	
trichloroethene	.73217	.75522	.2	3	20	
dibromomethane	.34928	.37537	.05	7	20	
1,2-dichloropropane	.78185	.76911	.1	-2	20	
bromodichloromethane	1.0319	1.0926	.2	6	20	
cis-1,3-dichloropropene	1.0403	.99055	.2	-5	20	
toluene	2.3442	2.2394	.4	-4	20	
tetrachloroethene	1.0013	.98542	.2	-2	20	
4-methyl-2-pentanone	.18052	.16701	.1	-7	20	
trans-1,3-dichloropropene	1.0629	.91229	.1	-14	20	
1,1,2-trichloroethane	.49576	.4937	.1	0	20	

FORM VII MCP-8260-10

7A
CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1512610

Instrument ID: Jack.i Calibration Date: 12-JUN-2015 Time: 05:31

Lab File ID: 0611A06 Init. Calib. Date(s): 11-MAY-2 12-MAY-2

Sample No: 8260 CCAL Init. Calib. Times : 21:13 00:32

Compound	RRF	RRF	MIN RRF	%D	MAX %D
=====	=====	=====	=====	=====	=====
chlorodibromomethane	.70815	.66601	.1	-6	20
1,3-dichloropropane	1.0686	1.0336	.05	-3	20
1,2-dibromoethane	.58737	.56195	.1	-4	20
2-hexanone	.42096	.4103	.1	-3	20
chlorobenzene	2.5712	2.4011	.5	-7	20
ethyl benzene	4.5907	4.4465	.1	-3	20
1,1,1,2-tetrachloroethane	.86528	.8094	.05	-6	20
p/m xylene	1.7772	1.7467	.1	-2	20
o xylene	1.6763	1.6010	.3	-4	20
styrene	2.7662	2.6616	.3	-4	20
bromoform	.70498	.63315	.1	-10	20
isopropylbenzene	10.069	9.6389	.1	-4	20
bromobenzene	1.8954	1.8193	.05	-4	20
n-propylbenzene	10.358	9.3149	.05	-10	20
1,1,2,2,-tetrachloroethane	1.3501	1.1686	.3	-13	20
2-chlorotoluene	6.7206	6.2060	.05	-8	20
1,2,3-trichloropropane	1.0613	.93327	.05	-12	20
1,3,5-trimethylbenzene	7.3764	6.3507	.05	-14	20
4-chlorotoluene	5.9890	5.1832	.05	-13	20
tert-butylbenzene	6.2650	5.5836	.05	-11	20
1,2,4-trimethylbenzene	6.9964	6.253	.05	-11	20
sec-butylbenzene	9.3942	8.3967	.01	-11	20
p-isopropyltoluene	7.8076	6.3636	.05	-18	20
1,3-dichlorobenzene	3.8726	3.3847	.6	-13	20
1,4-dichlorobenzene	3.9523	3.5182	.5	-11	20
n-butylbenzene	6.5674	5.9639	.05	-9	20
1,2-dichlorobenzene	3.4871	3.2902	.4	-6	20
1,2-dibromo-3-chloropropane	.20834	.17758	.05	-15	20
1,2,4-trichlorobenzene	1.9412	1.5998	.2	-18	20
hexachlorobutadiene	.76261	.72971	.05	-4	20
naphthalene	3.9542	2.7945	.05	-29	20
1,2,3-trichlorobenzene	1.6501	1.3120	.05	-20	20
=====	=====	=====	=====	=====	=====
dibromofluoromethane	.26039	.27417	.05	5	20
1,2-dichloroethane-d4	.30881	.33074	.05	7	20
toluene-d8	1.2029	1.1818	.01	-2	20
4-bromofluorobenzene	.87845	.81964	.05	-7	20

F
F

FORM VII MCP-8260-10

ATTACHMENT IV
FWS LETTER AND MACRIS DATABASE REVIEW



United States Department of the Interior



FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 COMMERCIAL STREET, SUITE 300
CONCORD, NH 3301
PHONE: (603)223-2541 FAX: (603)223-0104
URL: www.fws.gov/newengland

Consultation Code: 05E1NE00-2015-SLI-0475

May 27, 2015

Event Code: 05E1NE00-2015-E-00786

Project Name: Willow Street Drainage Improvements

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

To Whom It May Concern:

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

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

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

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment



United States Department of Interior
Fish and Wildlife Service

Project name: Willow Street Drainage Improvements

Official Species List

Provided by:

New England Ecological Services Field Office

70 COMMERCIAL STREET, SUITE 300

CONCORD, NH 3301

(603) 223-2541

<http://www.fws.gov/newengland>

Consultation Code: 05E1NE00-2015-SLI-0475

Event Code: 05E1NE00-2015-E-00786

Project Type: LAND - DRAINAGE

Project Name: Willow Street Drainage Improvements

Project Description: Drainage improvements to occur along Mechanic Street in Natick, Massachusetts within the next two weeks

Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



United States Department of Interior
Fish and Wildlife Service

Project name: Willow Street Drainage Improvements

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-71.35044515132904 42.28858800335625, -71.35017693042754 42.288107823989314, -71.3503646850586 42.288024486701644, -71.35102450847626 42.287909401694534, -71.351518034935 42.28774272648392, -71.35173797607422 42.28772685263135, -71.3521510362625 42.288385614152, -71.35058462619781 42.288718960730186, -71.35044515132904 42.28858800335625)))

Project Counties: Middlesex, MA



United States Department of Interior
Fish and Wildlife Service

Project name: Willow Street Drainage Improvements

Endangered Species Act Species List

There are a total of 1 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Mammals	Status	Has Critical Habitat	Condition(s)
Northern long-eared Bat (<i>Myotis septentrionalis</i>)	Threatened		



United States Department of Interior
Fish and Wildlife Service

Project name: Willow Street Drainage Improvements

Critical habitats that lie within your project area

There are no critical habitats within your project area.

Massachusetts Cultural Resource Information System

Scanned Record Cover Page

Inventory No:	NAT.393
Historic Name:	Bird, Warren A. Coal and Wood Company Warehouse
Common Name:	
Address:	19 Willow St
City/Town:	Natick
Village/Neighborhood:	Natick
Local No:	35-43
Year Constructed:	c 1899
Architect(s):	
Architectural Style(s):	No style
Use(s):	Other Commercial; Warehouse
Significance:	Architecture; Commerce
Area(s):	
Designation(s):	
Building Materials(s):	Roof: Asphalt Shingle Wall: Vinyl Siding; Brick Foundation: Brick



The Massachusetts Historical Commission (MHC) has converted this paper record to digital format as part of ongoing projects to scan records of the Inventory of Historic Assets of the Commonwealth and National Register of Historic Places nominations for Massachusetts. Efforts are ongoing and not all inventory or National Register records related to this resource may be available in digital format at this time.

The MACRIS database and scanned files are highly dynamic; new information is added daily and both database records and related scanned files may be updated as new information is incorporated into MHC files. Users should note that there may be a considerable lag time between the receipt of new or updated records by MHC and the appearance of related information in MACRIS. Users should also note that not all source materials for the MACRIS database are made available as scanned images. Users may consult the records, files and maps available in MHC's public research area at its offices at the State Archives Building, 220 Morrissey Boulevard, Boston, open M-F, 9-5.

Users of this digital material acknowledge that they have read and understood the MACRIS Information and Disclaimer (<http://mhc-macris.net/macrisdisclaimer.htm>)

Data available via the MACRIS web interface, and associated scanned files are for information purposes only. THE ACT OF CHECKING THIS DATABASE AND ASSOCIATED SCANNED FILES DOES NOT SUBSTITUTE FOR COMPLIANCE WITH APPLICABLE LOCAL, STATE OR FEDERAL LAWS AND REGULATIONS. IF YOU ARE REPRESENTING A DEVELOPER AND/OR A PROPOSED PROJECT THAT WILL REQUIRE A PERMIT, LICENSE OR FUNDING FROM ANY STATE OR FEDERAL AGENCY YOU MUST SUBMIT A PROJECT NOTIFICATION FORM TO MHC FOR MHC'S REVIEW AND COMMENT. You can obtain a copy of a PNF through the MHC web site (www.sec.state.ma.us/mhc) under the subject heading "MHC Forms."

Commonwealth of Massachusetts
Massachusetts Historical Commission
220 Morrissey Boulevard, Boston, Massachusetts 02125
www.sec.state.ma.us/mhc

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Wednesday, July 01, 2015 at 11:47 AM

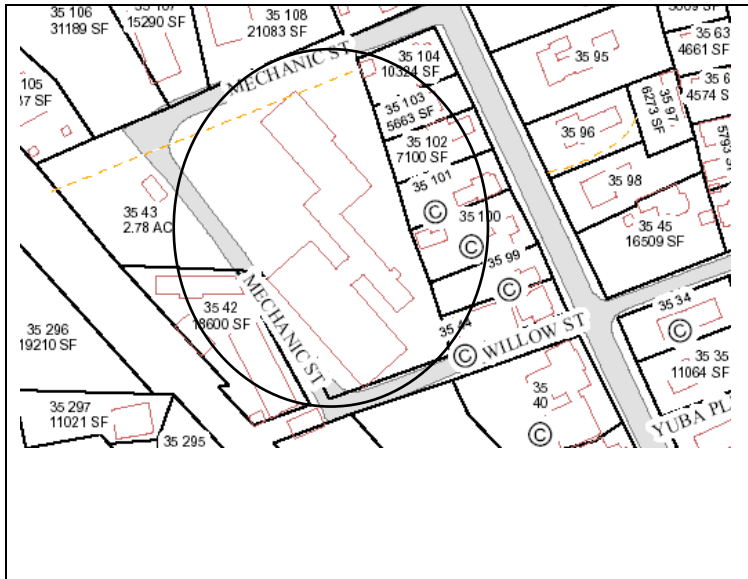
FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Photograph



Topographic or Assessor's Map



Recorded by: Julie Ann Larry & Geoffrey E. Melhuish
Turk, Tracey, and Larry Architects, LLC

Organization: Town of Natick

Date (month / year): June 2008

Assessor's Number USGS Quad Area(s) Form Number

35-43

393

Town: Natick

Place: (*neighborhood or village*) Natick

Address: 19 Willow Street

Historic Name: W.A. Bird Coal and Wood Company

Uses: Present: Commercial Specialty Shops

Original: Commercial Warehouse

Date of Construction: c 1899

Source: Sanborn Maps and Directories

Style/Form: No Style

Architect/Builder:

Exterior Material:

Foundation: Brick

Wall/Trim: Vinyl and Brick

Roof: Asphalt

Outbuildings/Secondary Structures:

Major Alterations (*with dates*):

A late twentieth century two-story brick addition is located at the north end.

Condition: Fair

Moved: no || yes || **Date** _____

Acreage: 2.78 acres

Setting: Located west of North Main Street between Willow Street to the south and Mechanic Street to the north.

RECEIVED

AUG 28 2008

MASS. HIST. COMM.

INVENTORY FORM B CONTINUATION SHEET

MASSACHUSETTS HISTORICAL COMMISSION

220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

NATICK

19 Willow Street

Area(s) Form No.

	393
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___ Recommended for listing in the National Register of Historic Places.

If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

19 Willow Street (MHC # 393) is comprised of three blocks; a long two-story block that terminates in a clerestory and a long one-story gable block to the east connected to the clerestory block by a three-bay, one-story block. The complex adopts an h-shaped plan. The five bay wide two-story clerestory block is twelve bays deep. The building is clad with vinyl siding. The south façade features a centrally located access door (replacement) flanked to each side by replacement windows. Numerous door openings; both overhead and entry door, and window openings are located on the west elevation. A one-story gable block is located about halfway down the east elevation. The three-bay block connects the clerestory to the long one-story block. Two overhead track doors and a single entry door are located on the south elevation. The long one-story gable block is seven bays wide and two-bays deep. The block is constructed of brick and terminates in a side gable roof. A brick dentil course is featured at the eave; brick pilasters at each end. A single interior brick chimney pierces the ridge of the roof near the south end of the roof. Window openings are recessed slightly from the face of each wall and feature a brick segmental arch. A late twentieth century two-story brick addition is located at the north end of this block. Although modified, 19 Willow Street is a commercial building with ties to the economic development in Natick during the late nineteenth and early twentieth century.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

19 Willow Street (MHC #393) first appears on the 1899 Sanborn Map as the W.A. Bird Coal and Wood Company, owned and operated by Warren A. Bird (1837-1908). Warren and his wife, Mary Kingsbury Bird, who married in 1890, resided at 53 North Main Street, currently numbered 39 North Main Street (MHC # 300). Sanborn maps identify rail lines, which previously had not existed in the area, running through both of the buildings and continuing to the south, across Willow, where the Union Coal and Lumber Company and later Robinson Jones Coal and Wood (1908) stood. In 1904, 19 Willow Street is shown on the map as part of the Peoples Coal Co and in 1915-1943 as the Robinson & Jones Coal Shed and the B & R Freight House. The two buildings were connected and the addition built sometime after 1948. The building which currently stands to the northwest of the complex on the assessors maps appears to have been moved or constructed after 1948.

BIBLIOGRAPHY and/or REFERENCES

Crawford, Michael J. *History of Natick, Massachusetts, 1650-1976*. [Natick]: Natick Historical Commission, 1978.

Family Search

Map of Natick, 1908.

Map of Natick, Mass. Boston: A.E. Downs, 1887.

Middlesex County Atlas 1889 by George H. Walker & Co.

Natick City Directory 1882/83; 1884/85; 1886/87; 1889; 1897/98; 1900; 1905/06; 19808/09; 1911; 1913; 1915; 1917; 1920; 1923; 1931; 1935; 1943 and 1946.

Sanborn Fire Insurance Maps: March 1888; March 1894; May 1899; March 1904; March 1909; December 1915; July 1926; June 1948; 1968.

The Natick Bulletin & Tab. Natick, MA: Press of Natick Bulletin, 1880s.

Town of Natick Board of Assessors. *Town of Natick List of Residents: Over Twenty Years of Age*. 1937.

U.S. Commerce Dept. Census Bureau, 1840-1930.

Water Records of Natick.

