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April 26, 2017

US Environmental Protection Agency
Office of Ecosystem Protection
EPA/OEP RGP Applications Coordinator
5 Post Office Square – Suite 100 (OEP06-01)
Boston, Massachusetts 02109-3912
Attn: Ms. Shelley Puleo

RE: Notice of Intent (NOI)
Temporary Construction Dewatering
25 Fid Kennedy Avenue
Boston, MA 02210
VERTEX Project No. 40717

Dear Ms. Puleo:

On behalf of our client, 25 Fid Kennedy, LLC, and in accordance with the National Pollutant Discharge Elimination System (NPDES) Remediation General Permit for Dewatering Activities – Massachusetts General Permit, MAG910000, included herewith are the Notice of Intent (NOI) and applicable documentation as required by the US Environmental Protection Agency (USEPA) and Massachusetts Department of Environmental protection (MassDEP) for construction site dewatering under the Remediation General Permit.

Temporary dewatering is planned in support of excavation for the installation of subsurface utilities associated with renovations to the property located at 25 Fid Kennedy Avenue in Boston, Massachusetts, as shown on Figure 1, Site Locus. We anticipate dewatering will be conducted, as necessary, during the proposed renovations.

SITE DESCRIPTION

The site, also referenced as Parcel N of the Boston Marine Industrial Park (BMIP), is located at 25 Fid Kennedy Avenue in Boston, Massachusetts. According to the City of Boston Assessing Department, the site is a portion of the parcel designated as 600 Summer Street, identified as Parcel ID #0602674000. The site occupies 3.25 acres of the 165-acre BMIP parcel. The site is improved with a one to two-story industrial building and associated asphalt paved driveway areas. The site building, constructed in 1941, occupies an approximately 85,600-square foot (sf) footprint. The first level, which occupies the entire building footprint is the former main industrial area with a second story in the central portion of the building. The site building is constructed of steel on a concrete slab-on-grade foundation with a flat roof. The site building is currently undergoing renovation for the proposed use as a warehouse/office building for heating ventilation and air

conditioning (HVAC) component assembly operations. The site location is shown on Figure 1 - Site Locus Map.

RELASE HISTORY

There is one documented release for the site, which is listed by the Massachusetts Department of Environmental Protection (MassDEP) under release tracking number (RTN) 3-33588. Notification of the release was made after site investigations associated with due diligence activities determined that impacts to site soil and groundwater exist. These include the detection of volatile organic compounds (VOCs), extractable petroleum hydrocarbons (EPH), volatile petroleum hydrocarbons (VPH), and metals at levels which exceeded applicable Massachusetts Contingency Plan (MCP) Reportable Concentrations (RCS-2 for soil and RCGW-2 for groundwater).

More specifically, VOCs (trichloroethylene (TCE), tetrachloroethylene (PCE), and cis-1,2-dichloroethylene (cis-1,2-DCE)), EPH (benzo(a)anthracene, benzo(a)pyrene, and C11-C22 aromatics), VPH (C5-C8 aliphatics), and metals (chromium and lead) were detected in soil samples at concentrations above applicable MCP RCS-2 Reportable Concentrations. Also, VOCs (TCE, PCE, cis-1,2-DCE, and vinyl chloride) and VPH (C5-C8 aliphatics) were detected in groundwater samples at concentrations above applicable MCP RCGW-2 Reportable Concentrations.

As specified in the December 2016 Release Abatement Measure (RAM) Plan, the detected presence of EPH, VPH, and metals in soil were attributed to the presence of urban fill which was determined to contain varying concentrations of brick, coal, ash, and wood. Additionally, the detected presence of VPH in groundwater was also attributed to the presence of urban fill at the site. Based on the findings of several rounds of subsurface investigations, the source of Chlorinated VOC (CVOC) impacts is believed to be attributed to a localized release located in the southeast portion of the site. The area of identified impacts is located within the limits of the “RAM Area”. Please note that, in accordance with the RAM Plan and Soil Management Plan (SMP) for the site, there will be no dewatering activities performed in the vicinity of the RAM Area, which is the sole location where CVOC impacts have been identified.

Copies of the RAM Plan as well as other available documentation associated with RTN 3-33588 is publicly available on the MassDEP Searchable Sites Database.
http://public.dep.state.ma.us/SearchableSites2/Search.aspx

PROPOSED CONTRUCTION AND MANAGEMENT OF DEWATERING EFFLUENT

Work will be performed in the unpaved and paved areas surrounding the existing structure bounded by Fid Kennedy Avenue, Capstan Way, and Dolphin Way. The work will include the installation of new subsurface utility service lines associated with proposed site renovation activities. Based on conversations with project team members and review of proposed site development drawings (refer to Sheet C101 – Utility Site Plan dated July 29, 2016), installation and construction of new utility service lines that will involve dewatering include the following:

- Installation of new subsurface water supply lines
- Installation of new subsurface sewer lines

- Installation of new subsurface stormwater service lines and infiltration system

Where possible, the project will utilize on-site recharge of groundwater encountered in utility excavations.; however, where on-site recharge is not feasible, the site contractor will treat the groundwater and discharge the dewatering effluent to the existing storm drain system via catch basins located to the east of the site in Dolphin Way, which drains to the Boston Harbor, as shown in Sheet C101 – Utility Site Plan. Site work and associated dewatering are anticipated to begin in April 2017 and are estimated to be complete around September 2017. The site contractor will provide a system as described in Appendix B and operate and maintain dewatering and sedimentation control systems for off-site discharge. The system is designed to meet the permit requirements for suspended solids, pH, and other constituents (as required) in the effluent stream prior to discharge into the nearby storm drain. See Appendix B, Water Treatment System Schematic, for the proposed initial treatment system. Once operations begin, a licensed wastewater treatment plant operator will conduct system monitoring as required. The Contractor will perform the required sampling and testing of the dewatering effluent and will report the results as required by the permit. The site contractor's sedimentation and treatment system and/or dewatering procedures will be modified as necessary to comply with the Permit Discharge Criteria.

CONTACT INFORMATION

Applicant:
25 Fid Kennedy, LLC
80 Rosedale Road
Watertown, Massachusetts 02472
Attention: Dave Cannistraro
Tel: 617.926.0092

Representative preparing this application:
The Vertex Companies, Inc.
One Congress Street, 10th Floor
Boston, Massachusetts 02114
Attention: Frank Calandra
Tel: 617.275.5407

ANALYTICAL TESTING

Analytical testing of water will be performed prior to any discharge operations and to help further design the necessary treatment system to meet required discharge parameters. VERTEX has collected and analyzed representative samples of influent water as well as a sample of the receiving water which are summarized in the attached Table 1 – RGP Analytical Results. The samples of the dewatering influent (referred to as VES-102 RGP and VES-208 RGP) were obtained from groundwater monitoring wells located at the site and the receiving water sample (VES-REC) was obtained directly from the stormwater outfall point at the Boston Harbor. The samples were analyzed for the presence of analytes referenced in Table 2 – Chemical Specific Effluent Limitations and Monitor-Only Requirements outlined in the final RGP and compared to their applicable Technology Based Effluent Limitations (TBELs) and Water Quality Based Effluent Limitations (WQBELs).

The results of the analyses indicate that concentrations of Total Suspended Solids were detected at levels exceeding the applicable effluent limitation of 30 mg/L in both influent samples. Additionally, concentrations of metals (copper, iron, lead, nickel, and zinc) were encountered in each of the influent samples at levels above their applicable WQBELs (and TBEL for iron and lead).

Analytical results of sample VES-208 RGP also identified concentrations of Group I Polycyclic Aromatic Hydrocarbons (PAHs) (specifically benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, ideno(1,2,3-cd)pyrene, and Total Group I PAHs) at levels above their applicable TBELs/WQBELs. Additionally, total PCBs were detected in sample VES-102 RGP at a level exceeding the TBEL/WQBEL.

The results of the receiving water sample indicate that no exceedances of either the TBEL or WQBEL were identified.

BEST MANAGEMENT PRACTICES PLAN

Prior to the initiation of dewatering activities or discharge of dewatering effluent, a Best Management Practices Plan (BMPP) will be prepared and implemented. At this time, it is anticipated that the BMPP will be incorporated within the Site's existing Spill Prevention Control & Counter Measures (SPCC) Plan.

CLOSING

Thank you very much for your consideration of this NOI. Please feel free to contact us should you wish to discuss the information contained herein or if you need additional information.

Sincerely,

The Vertex Companies, Inc.

Benjamin Sivonen, EIT
Assistant Project Manager

Frank Calandra, PE, LSP
Division Manager - Remediation

Attachments:

Figures

Figure 1 – Site Locus

Tables

Table 1 – RGP Analytical Results

Appendices

Appendix A – Sheet C101 – Utility Site Plan

Appendix B – Water Treatment System Schematic

Appendix C – Boston Water and Sewer Commission Sewer Map

Appendix D – Massachusetts Department of Environmental Protection Phase I Site Assessment Map

Appendix E – "Suggested Notice of Intent" (NOI) form as provided in Appendix V of the NPDES

Appendix F – Boston Water and Sewer Commission Dewatering General Permit

Appendix G - Areas of Critical Environmental Concern

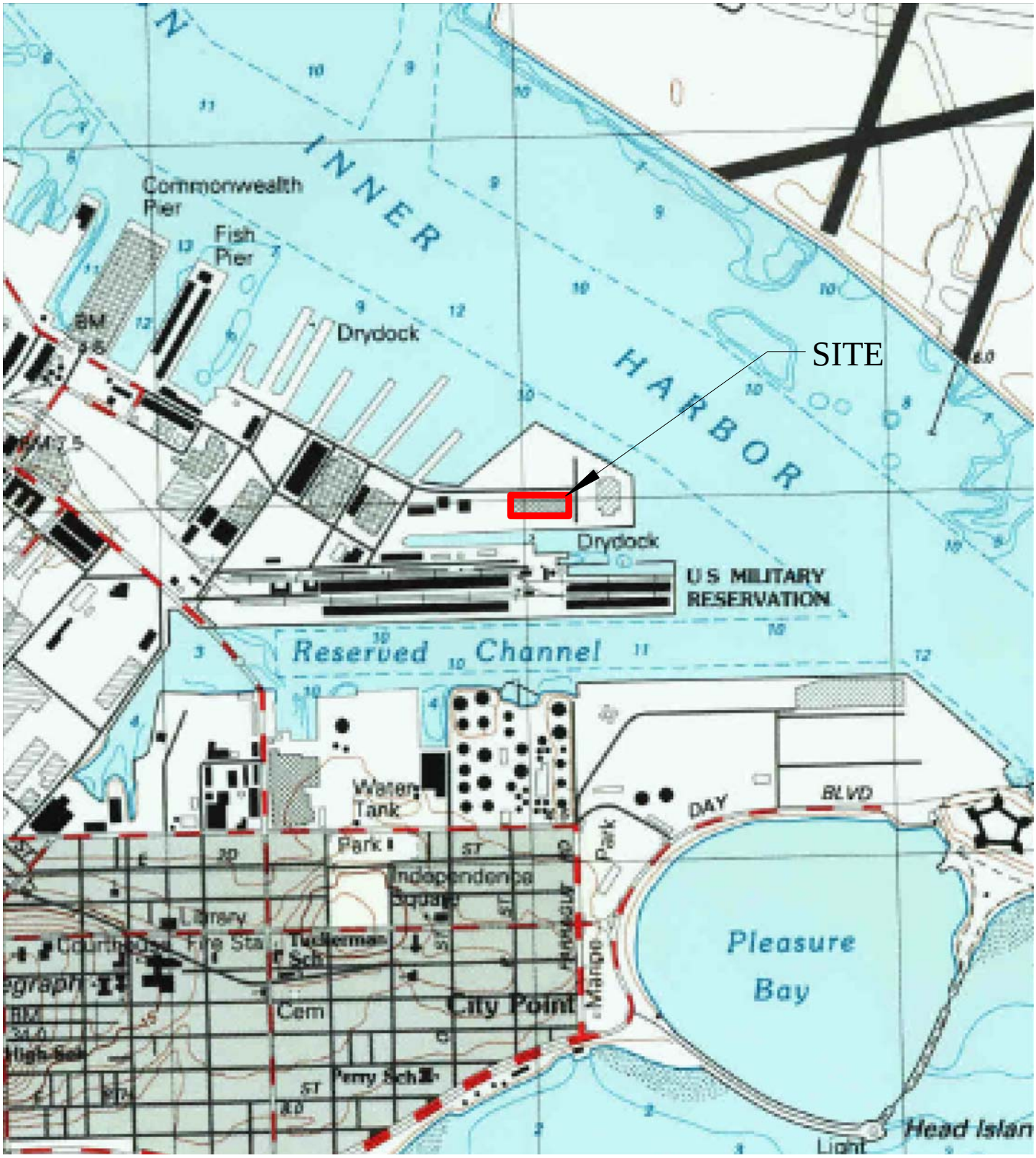
Appendix H - National Register of Historic Places and Massachusetts Historical Commission

Documentation

Appendix I - Endangered Species Act Documentation

Appendix J – Laboratory Analytical Reports

FIGURES



USGS Topographic Map, 1987
Boston South, MA Quadrangle
Contour Interval: 5 Feet

SITE LOCUS MAP

Boston Marine Industrial Park
Parcel N
25 FID Kennedy Avenue
Boston, Massachusetts

SCALE: 1:24,000

April 2017

VERTEX Proj. No. 40717

VERTEX

FIGURE NO. 1

TABLES

Table 1
RGP Analytical Results
Boston Marine Industrial Park
Parcel N
25 Fid Kennedy Avenue
Boston, Massachusetts
VERTEX Project No. 40717

LOCATION	CasNum	NPDES Effluent Limitation		Units	VES-102-RGP	VES-208-RGP	VES-REC
SAMPLING DATE					Mar-17	Mar-17	Mar-17
LAB SAMPLE ID		TBEL	WQBEL		L1708446-02/ L1709923-01	L1708446-01/ L1709923-02	L1709923-03
Alcohol Analysis							
Ethyl Alcohol	64-17-5	Report		mg/l	ND(2)	ND(2)	ND(2)
Anions							
Chloride	16887-00-6	Report		mg/l	ND(724)	ND(3440)	ND(17900)
General Chemistry							
Chlorine, Total Residual	NONE	0.2	0.0075	mg/l	ND(0.02)	ND(0.02)	ND(0.02)
Cyanide, Total	57-12-5	178	0.001	mg/l	ND(0.005)	ND(0.005)	ND(0.005)
Nitrogen, Ammonia	7664-41-7	Report		mg/l	0.156	ND(0.075)	0.079
pH (H)*	12408-02-5	6.5-8.5		SU	8.16	8.41	7.8
Phenolics, Total	NONE	NC	NC	mg/l	ND(0.03)	ND(0.03)	ND(0.03)
SALINITY	NONE	NC	NC	SU	ND(2)	3.4	9.4
Solids, Total Suspended	NONE	30		mg/l	**300**	**1700**	16
Temperature*	NONE	NC	NC	Celsius	7.2	5.5	4
TPH, SGT-HEM	NONE	5		mg/l	ND(4)	ND(5.2)	ND(4)
Chromium, Hexavalent	18540-29-9	0.323	0.05	mg/l	ND(0.01)	ND(0.01)	ND(0.01)
Semivolatile Organic Compounds (SVOCs)							
1,2,4-Trichlorobenzene	120-82-1	NC	NC	mg/l	ND(0.005)	ND(0.005)	ND(0.0049)
1,2-Dichlorobenzene	95-50-1	NC	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
1,3-Dichlorobenzene	541-73-1	NC	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
1,4-Dichlorobenzene	106-46-7	NC	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
2,4,5-Trichlorophenol	95-95-4	NC	NC	mg/l	ND(0.005)	ND(0.005)	ND(0.0049)
2,4,6-Trichlorophenol	88-06-2	NC	NC	mg/l	ND(0.005)	ND(0.005)	ND(0.0049)
2,4-Dichlorophenol	120-83-2	NC	NC	mg/l	ND(0.005)	ND(0.005)	ND(0.0049)
2,4-Dimethylphenol	105-67-9	NC	NC	mg/l	ND(0.005)	ND(0.005)	ND(0.0049)
2,4-Dinitrophenol	51-28-5	NC	NC	mg/l	ND(0.02)	ND(0.02)	ND(0.02)
2,4-Dinitrotoluene	121-14-2	NC	NC	mg/l	ND(0.005)	ND(0.005)	ND(0.0049)
2,6-Dinitrotoluene	606-20-2	NC	NC	mg/l	ND(0.005)	ND(0.005)	ND(0.0049)
2-Chlorophenol	95-57-8	NC	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
2-Methylphenol	95-48-7	NC	NC	mg/l	ND(0.005)	ND(0.005)	ND(0.0049)
2-Nitrophenol	88-75-5	NC	NC	mg/l	ND(0.01)	ND(0.01)	ND(0.0099)
3,3'-Dichlorobenzidine	91-94-1	NC	NC	mg/l	ND(0.005)	ND(0.005)	ND(0.0049)
3-Methylphenol/4-Methylphenol	108-39-4	NC	NC	mg/l	ND(0.005)	ND(0.005)	ND(0.0049)
4-Bromophenyl phenyl ether	101-55-3	NC	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
4-Chloroaniline	106-47-8	NC	NC	mg/l	ND(0.005)	ND(0.005)	ND(0.0049)
4-Nitrophenol	100-02-7	NC	NC	mg/l	ND(0.01)	ND(0.01)	ND(0.0099)
Acetophenone	98-86-2	NC	NC	mg/l	ND(0.005)	ND(0.005)	ND(0.0049)
Aniline	62-53-3	NC	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
Azobenzene	103-33-3	NC	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
Bis(2-chloroethoxy)methane	111-91-1	NC	NC	mg/l	ND(0.005)	ND(0.005)	ND(0.0049)
Bis(2-chloroethyl)ether	111-44-4	NC	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
Bis(2-chloroisopropyl)ether	108-60-1	NC	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
Bis(2-ethylhexyl)phthalate	117-81-7	0.101	0.0022	mg/l	ND(0.003)	ND(0.003)	ND(0.003)
Butyl benzyl phthalate	85-68-7	NC	NC	mg/l	ND(0.005)	ND(0.005)	ND(0.0049)
Di-n-butylphthalate	84-74-2	NC	NC	mg/l	ND(0.005)	ND(0.005)	ND(0.0049)
Di-n-octylphthalate	117-84-0	NC	NC	mg/l	ND(0.005)	ND(0.005)	ND(0.0049)
Dibenzofuran	132-64-9	NC	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
Diethyl phthalate	84-66-2	NC	NC	mg/l	ND(0.005)	ND(0.005)	ND(0.0049)
Dimethyl phthalate	131-11-3	NC	NC	mg/l	ND(0.005)	ND(0.005)	ND(0.0049)
Isophorone	78-59-1	NC	NC	mg/l	ND(0.005)	ND(0.005)	ND(0.0049)
Nitrobenzene	98-95-3	NC	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
Phenol	108-95-2	1.08	0.3	mg/l	ND(0.005)	ND(0.005)	ND(0.0049)
Total Phthalates	Multiple	0.19	NC	mg/L	ND(CS)	ND(CS)	ND(CS)
SVOCs by SIM							
2-Chloronaphthalene	91-58-7	NC	NC	mg/l	ND(0.001)	ND(0.001)	ND(0.0002)
2-Methylnaphthalene	91-57-6	NC	NC	mg/l	ND(0.001)	ND(0.001)	ND(0.0002)
Acenaphthene	83-32-9	NC	NC	mg/l	ND(0.001)	ND(0.001)	ND(0.0002)
Acenaphthylene	208-96-8	NC	NC	mg/l	ND(0.001)	ND(0.001)	ND(0.0002)
Anthracene	120-12-7	NC	NC	mg/l	ND(0.001)	ND(0.001)	ND(0.0002)
Benzo(a)anthracene	56-55-3	As Total Group I	0.00000038	mg/l	ND(0.001)	**0.0038**	ND(0.0002)
Benzo(a)pyrene	50-32-8	As Total Group I	0.00000038	mg/l	ND(0.001)	**0.0037**	ND(0.0002)
Benzo(b)fluoranthene	205-99-2	As Total Group I	0.00000038	mg/l	ND(0.001)	**0.0056**	ND(0.0002)
Benzo(ghi)perylene	191-24-2	NC	NC	mg/l	ND(0.001)	0.0028	ND(0.0002)
Benzo(k)fluoranthene	207-08-9	As Total Group I	0.00000038	mg/l	ND(0.001)	**0.0019**	ND(0.0002)
Chrysene	218-01-9	As Total Group I	0.00000038	mg/l	ND(0.001)	**0.0035**	ND(0.0002)
Dibenzo(a,h)anthracene	53-70-3	As Total Group I	0.00000038	mg/l	ND(0.001)	ND(0.001)	ND(0.0002)
Fluoranthene	206-44-0	NC	NC	mg/l	0.0013	0.0065	ND(0.0002)
Fluorene	86-73-7	NC	NC	mg/l	ND(0.001)	ND(0.001)	ND(0.0002)
Hexachlorobenzene	118-74-1	NC	NC	mg/l	ND(0.004)	ND(0.004)	ND(0.0008)
Hexachlorobutadiene	87-68-3	NC	NC	mg/l	ND(0.0025)	ND(0.0025)	ND(0.0005)
Hexachloroethane	67-72-1	NC	NC	mg/l	ND(0.004)	ND(0.004)	ND(0.0008)
Indeno(1,2,3-cd)pyrene	193-39-5	As Total Group I	0.00000038	mg/l	ND(0.001)	**0.0024**	ND(0.0002)
Naphthalene	91-20-3	0.02		mg/l	ND(0.001)	ND(0.001)	ND(0.0002)
Pentachlorophenol	87-86-5	0.001		mg/l	ND(0.004)	ND(0.004)	ND(0.0008)
Phenanthrene	85-01-8	NC	NC	mg/l	ND(0.001)	0.0016	ND(0.0002)
Pyrene	129-00-0	NC	NC	mg/l	0.0013	0.0054	ND(0.0002)
Total Group I PAHs	Multiple	0.001	As Individual	mg/l	ND(CS)	**0.209**	ND(CS)
Total Group II PAHs	Multiple	0.1		mg/l	0.0026	0.0163	ND(CS)

Table 1
RGP Analytical Results
Boston Marine Industrial Park
Parcel N
25 Fid Kennedy Avenue
Boston, Massachusetts
VERTEX Project No. 40717

LOCATION	CasNum	NPDES Effluent Limitation		Units	VES-102-RGP	VES-208-RGP	VES-REC
SAMPLING DATE					Mar-17	Mar-17	Mar-17
LAB SAMPLE ID		TBEL	WQBEL		L1708446-02/ L1709923-01	L1708446-01/ L1709923-02	L1709923-03
Total Metals							
Antimony, Total	7440-36-0	0.206	0.64	mg/l	0.0053	0.0132	0.0124
Arsenic, Total	7440-38-2	0.104	0.036	mg/l	0.0108	0.015	0.0104
Cadmium, Total	7440-43-9	0.0102	0.0088	mg/l	ND(0.0005)	0.0009	ND(0.0005)
Chromium, Total	7440-47-3	0.323	0.074	mg/l	0.0174	0.0264	ND(0.001)
Copper, Total	7440-50-8	0.242	0.0031	mg/l	**0.0945**	**0.2748**	ND(0.001)
Iron, Total	7439-89-6	5	NC	mg/l	**10**	**40**	0.12
Lead, Total	7439-92-1	0.16	0.0081	mg/l	**0.1895**	**0.329**	ND(0.005)
Mercury, Total	7439-97-6	0.000739	0.00094	mg/l	0.0005	0.0002	ND(0.0002)
Nickel, Total	7440-02-0	1.45	0.0082	mg/l	**0.033**	**0.038**	ND(0.002)
Selenium, Total	7782-49-2	0.2358	0.071	mg/l	ND(0.005)	ND(0.005)	ND(0.005)
Silver, Total	7440-22-4	0.0351	0.0019	mg/l	ND(0.0005)	0.0015	ND(0.0005)
Zinc, Total	7440-66-6	0.42	0.081	mg/l	**0.1647**	**0.2571**	ND(0.01)
Volatile Organic Compounds (VOCs)							
1,1,1,2-Tetrachloroethane	630-20-6	NC	NC	mg/l	ND(0.001)	ND(0.001)	ND(0.001)
1,1,1-Trichloroethane	71-55-6	0.2		mg/l	ND(0.001)	ND(0.001)	ND(0.001)
1,1,2,2-Tetrachloroethane	79-34-5	NC	NC	mg/l	ND(0.001)	ND(0.001)	ND(0.001)
1,1,2-Trichloroethane	79-00-5	0.005		mg/l	ND(0.001)	ND(0.001)	ND(0.001)
1,1-Dichloroethane	75-34-3	0.07		mg/l	ND(0.001)	ND(0.001)	ND(0.001)
1,1-Dichloroethene	75-35-4	0.0032		mg/l	ND(0.001)	ND(0.001)	ND(0.001)
1,1-Dichloropropene	563-58-6	NC	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
1,2,3-Trichlorobenzene	87-61-6	NC	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
1,2,3-Trichloropropane	96-18-4	NC	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
1,2,4-Trichlorobenzene	120-82-1	NC	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
1,2,4-Trimethylbenzene	95-63-6	NC	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
1,2-Dibromo-3-chloropropane	96-12-8	NC	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
1,2-Dibromoethane	106-93-4	0.00005		mg/l	ND(0.002)	ND(0.002)	ND(0.002)
1,2-Dichlorobenzene	95-50-1	0.6		mg/l	ND(0.001)	ND(0.001)	ND(0.001)
1,2-Dichloroethane	107-06-2	0.005		mg/l	ND(0.001)	ND(0.001)	ND(0.001)
1,2-Dichloroethene, Total	540-59-0	NC	NC	mg/l	ND(0.001)	ND(0.001)	ND(0.001)
1,2-Dichloropropane	78-87-5	NC	NC	mg/l	ND(0.001)	ND(0.001)	ND(0.001)
1,3,5-Trimethylbenzene	108-67-8	NC	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
1,3-Dichlorobenzene	541-73-1	0.32		mg/l	ND(0.001)	ND(0.001)	ND(0.001)
1,3-Dichloropropane	142-28-9	NC	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
1,3-Dichloropropene, Total	542-75-6	NC	NC	mg/l	ND(0.0005)	ND(0.0005)	ND(0.0005)
1,4-Dichlorobenzene	106-46-7	0.005		mg/l	ND(0.001)	ND(0.001)	ND(0.001)
1,4-Dioxane	123-91-1	0.2		mg/l	ND(0.25)	ND(0.25)	ND(0.25)
2,2-Dichloropropane	594-20-7	NC	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
2-Hexanone	591-78-6	NC	NC	mg/l	ND(0.005)	ND(0.005)	ND(0.005)
Acetone	67-64-1	7.97		mg/l	ND(0.005)	ND(0.005)	ND(0.005)
Benzene	71-43-2	0.005		mg/l	ND(0.0005)	ND(0.0005)	ND(0.0005)
Bromobenzene	108-86-1	NC	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
Bromochloromethane	74-97-5	NC	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
Bromodichloromethane	75-27-4	NC	NC	mg/l	ND(0.001)	ND(0.001)	ND(0.001)
Bromoform	75-25-2	NC	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
Bromomethane	74-83-9	NC	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
Carbon disulfide	75-15-0	NC	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
Carbon tetrachloride	56-23-5	0.0044	0.0016	mg/l	ND(0.001)	ND(0.001)	ND(0.001)
Chlorobenzene	108-90-7	NC	NC	mg/l	ND(0.001)	ND(0.001)	ND(0.001)
Chloroethane	75-00-3	NC	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
Chloroform	67-66-3	NC	NC	mg/l	ND(0.001)	ND(0.001)	ND(0.001)
Chloromethane	74-87-3	NC	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
cis-1,2-Dichloroethene	156-59-2	0.07		mg/l	ND(0.001)	ND(0.001)	ND(0.001)
cis-1,3-Dichloropropene	10061-01-5	NC	NC	mg/l	ND(0.0005)	ND(0.0005)	ND(0.0005)
Dibromochloromethane	124-48-1	NC	NC	mg/l	ND(0.001)	ND(0.001)	ND(0.001)
Dibromomethane	74-95-3	NC	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
Dichlorodifluoromethane	75-71-8	NC	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
Diethyl ether	60-29-7	NC	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
Diisopropyl Ether	108-20-3	NC	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
Ethyl-Tert-Butyl-Ether	637-92-3	NC	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
Ethylbenzene	100-41-4	NC	NC	mg/l	ND(0.001)	ND(0.001)	ND(0.001)
Hexachlorobutadiene	87-68-3	NC	NC	mg/l	ND(0.0006)	ND(0.0006)	ND(0.0006)
Isopropylbenzene	98-82-8	NC	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
Methyl ethyl ketone	78-93-3	NC	NC	mg/l	ND(0.005)	ND(0.005)	ND(0.005)
Methyl isobutyl ketone	108-10-1	NC	NC	mg/l	ND(0.005)	ND(0.005)	ND(0.005)
Methyl tert butyl ether	1634-04-4	0.07	0.02	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
Methylene chloride	75-09-2	0.0046	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
n-Butylbenzene	104-51-8	NC	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
n-Propylbenzene	103-65-1	NC	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
Naphthalene	91-20-3	0.02		mg/l	ND(0.002)	ND(0.002)	ND(0.002)
o-Chlorotoluene	95-49-8	NC	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
o-Xylene	95-47-6	NC	NC	mg/l	ND(0.001)	ND(0.001)	ND(0.001)
p-Chlorotoluene	106-43-4	NC	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
p-Isopropyltoluene	99-87-6	NC	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
p/m-Xylene	179601-23-1	NC	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
sec-Butylbenzene	135-98-8	NC	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
Styrene	100-42-5	NC	NC	mg/l	ND(0.001)	ND(0.001)	ND(0.001)
Tert-Butyl Alcohol	75-65-0	0.12		mg/l	ND(0.01)	ND(0.01)	ND(0.01)
tert-Butylbenzene	98-06-6	NC	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
Tertiary-Amyl Methyl Ether	994-05-8	0.09		mg/l	ND(0.002)	ND(0.002)	ND(0.002)
Tetrachloroethene	127-18-4	0.005	0.0033	mg/l	ND(0.001)	ND(0.001)	ND(0.001)
Tetrahydrofuran	109-99-9	NC	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
Toluene	108-88-3	NC	NC	mg/l	ND(0.001)	ND(0.001)	ND(0.001)
trans-1,2-Dichloroethene	156-60-5	NC	NC	mg/l	ND(0.001)	ND(0.001)	ND(0.001)
trans-1,3-Dichloropropene	10061-02-6	NC	NC	mg/l	ND(0.0005)	ND(0.0005)	ND(0.0005)
Trichloroethene	79-01-6	0.005		mg/l	ND(0.001)	ND(0.001)	ND(0.001)
Trichlorofluoromethane	75-69-4	NC	NC	mg/l	ND(0.002)	ND(0.002)	ND(0.002)
Vinyl chloride	75-01-4	0.002		mg/l	ND(0.001)	ND(0.001)	ND(0.001)
Xylenes, Total	1330-20-7	NC	NC	mg/l	ND(0.001)	ND(0.001)	ND(0.001)
Total BTEX	Multiple	0.1		mg/l	ND(CS)	ND(CS)	ND(CS)

Table 1
RGP Analytical Results
Boston Marine Industrial Park
Parcel N
25 Fid Kennedy Avenue
Boston, Massachusetts
VERTEX Project No. 40717

LOCATION	CasNum	NPDES Effluent Limitation		Units	VES-102-RGP	VES-208-RGP	VES-REC
SAMPLING DATE					Mar-17	Mar-17	Mar-17
LAB SAMPLE ID		TBEL	WQBEL		L1708446-02/ L1709923-01	L1708446-01/ L1709923-02	L1709923-03
VOCs by SIM							
1,4-Dioxane	123-91-1	NC	NC	mg/l	ND(0.003)	ND(0.003)	ND(0.003)
Microextractables							
1,2-Dibromoethane	106-93-4	NC	NC	mg/l	ND(0.00001)	ND(0.00001)	ND(0.00001)
Polychlorinated Biphenyls (PCBs)							
Aroclor 1016	12674-11-2	NC	NC	mg/l	ND(0.000266)	ND(0.000278)	ND(0.00025)
Aroclor 1221	11104-28-2	NC	NC	mg/l	ND(0.000266)	ND(0.000278)	ND(0.00025)
Aroclor 1232	11141-16-5	NC	NC	mg/l	ND(0.000266)	ND(0.000278)	ND(0.00025)
Aroclor 1242	53469-21-9	NC	NC	mg/l	ND(0.000266)	ND(0.000278)	ND(0.00025)
Aroclor 1248	12672-29-6	NC	NC	mg/l	ND(0.000266)	ND(0.000278)	ND(0.00025)
Aroclor 1254	11097-69-1	NC	NC	mg/l	ND(0.000266)	ND(0.000278)	ND(0.00025)
Aroclor 1260	11096-82-5	NC	NC	mg/l	0.000217	ND(0.000222)	ND(0.0002)
Total PCBs	Multiple	0.000000064		mg/l	**0.000217**	ND(CS)	ND(CS)

Notes:
1. Units presented in milligrams per liter (mg/l) unless otherwise noted
2. National Pollutant Discharge Elimination System (NPDES) Effluent Limitations
3. Technology-Based Effluent Limitation (TBEL)
4. Water-Quality Based Effluent Limitation (WQBEL)
5. ND = Not Detected (laboratory reporting limits in parentheses)
6. NC = No criterion for analyte
7. CS = Compound Specific
8. Bold and yellow highlighting indicates an exceedance of either the TBEL or WQBEL Standard
* = Parameter was measured in the field
** Refer to laboratory analytical report for full list of target analytes

APPENDIX A

LEGEND

- 16 — CONTOUR
- 16.5 — HALF FOOT CONTOUR
- 17.1 — SPOT GRADE
- VERTICAL GRANITE CURB
- 12"D — DRAIN LINE
- CATCH BASIN (CB)
- WATER QUALITY CATCH BASIN (WQD)
- DRAIN MANHOLE (DMH)
- 8"S — SEWER LINE
- SEWER MANHOLE (SMH)
- 8"W — WATER LINE
- GATE VALVE & TEE
- CONCRETE WALK
- EROSION CONTROL TUBE
- GAS LINE
- GAS/OIL/SAND SEPARATOR
- BOLLARD

NOTES:

1. LOCATIONS AND ELEVATIONS OF UNDERGROUND PIPES AND CONDUITS HAVE BEEN DETERMINED FROM THE REFERENCED PLAN AND SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. H.W. MOORE ASSOCIATES, INC. ASSUMES NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES INACCURATELY SHOWN OR OMITTED. BEFORE PLANNING FUTURE CONNECTIONS, THE PROPER UTILITY DEPARTMENT SHALL BE NOTIFIED AND THE ACTUAL LOCATIONS OF SUBSURFACE STRUCTURES SHALL BE VERIFIED IN THE FIELD. CALL THE BWSC, (617)989-7000 AND DIG-SAFE CALL CENTER, (888)344-7233, 72 HOURS (3 WORKING DAYS) PRIOR TO EXCAVATION.
2. ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO BWSC REQUIREMENTS AND ALL OTHER APPLICABLE MUNICIPAL REGULATIONS.
3. ALL DISTURBANCES WITHIN THE TRAVELED WAYS SHALL CONFORM TO CITY AND BWSC STANDARDS.
4. THIS PLAN HAS BEEN PREPARED FOR APPROVAL OF THE WATER, DRAIN AND SEWER CONNECTIONS TO THE BWSC FACILITIES. IT IS UNDERSTOOD THAT THE RESPONSIBILITY OF OWNERSHIP AND MAINTENANCE OF THE SEWER CONNECTIONS ON PRIVATE PROPERTY AND/OR PRIVATE AND PUBLIC WAYS SHALL BE THE RESPONSIBILITY OF THE DEVELOPER AND/OR OWNERS. IT IS ALSO UNDERSTOOD THAT THE WATER CONNECTIONS ON PRIVATE PROPERTY INCLUDING PRIVATE WAYS ARE ALSO THE RESPONSIBILITY OF THE DEVELOPER AND/OR OWNERS. IF THE CONNECTIONS CROSS, OR ARE NEAR INDIVIDUAL PROPERTY LINES, PROVISIONS MUST BE MADE TO ALLOW EACH OWNER TO MAINTAIN OR RECONSTRUCT THEIR RESPECTIVE CONNECTIONS. THIS FACT MUST BE INCORPORATED INTO ANY PURCHASE AND SALES AGREEMENT AND DEEDS RELATED TO THE TRANSFER OF OWNERSHIP OF THE PROPERTIES.
5. THE PROPOSED BUILDING CONNECTIONS (BY PLUMBER) SHALL BE 10' OUTSIDE THE FOUNDATION WALL.
6. SITE CONTRACTOR TO PROVIDE ALL EXCAVATION, INSTALLATION, BACK FILLING, PAVEMENT PATCHING, ETC. FOR THE INSTALLATION OF UNDERGROUND GAS, ELECTRIC, TELEPHONE, FIRE ALARM, WATER, SEWER, DRAIN AND SIMILAR SERVICES.
7. IF EXISTING ABANDONED BWSC SERVICES ARE ENCOUNTERED THEY SHALL BE CUT AND CAPPED AT THE MAIN PER BWSC STANDARDS.
8. THE SEWER GRAVITY PIPE SHALL BE POLYVINYL CHLORIDE (PVC) PIPE SDR 35 CONFORMING TO ASTM STANDARD SPECIFICATIONS D3034 UNLESS OTHERWISE NOTED.
9. STORM DRAIN PIPES SHALL BE POLYVINYL CHLORIDE (PVC) PIPE SDR 35 CONFORMING TO ASTM STANDARD SPECIFICATIONS D3034.
10. CONTRACTOR IS TO OBTAIN THE ROUGH CONSTRUCTION SIGN OFF DOCUMENT FROM THE CITY OF BOSTON INSPECTIONAL SERVICES DEPARTMENT PRIOR TO FILING A GENERAL SERVICES APPLICATION WITH BWSC.
11. CONTRACTOR WILL BE RESPONSIBLE FOR PREPARING AS-BUILT PLANS IN ACCORDANCE WITH BWSC REQUIREMENTS.
12. CONTRACTOR TO CONFIRM THE LOCATIONS AND INVERTS OF THE EXISTING UTILITIES IN THE STREET PRIOR TO THE INSTALLATION OF NEW SERVICE CONNECTIONS. SERVICES SHALL BE FIELD VERIFIED BEFORE BEGINNING CONSTRUCTION.
13. ANY CONSTRUCTION DEWATERING SHALL EMPLOY MEASURES TO FILTER OUT SEDIMENT PRIOR TO ITS DISCHARGE AND SHALL CONFORM WITH BWSC REQUIREMENTS. CONTRACTOR TO SUBMIT A SKETCH OF THESE TO THE ARCHITECT FOR APPROVAL.
14. CONTRACTOR TO EMPLOY MEASURES TO CONTROL DUST DURING CONSTRUCTION.
15. RIM ELEVATIONS OF DRAINAGE STRUCTURES ARE APPROXIMATE. FINAL ELEVATIONS ARE TO BE SET FLUSH. ADJUST ALL OTHER RIM ELEVATIONS OF EXISTING MANHOLES, WATER GATES, GAS GATES AND OTHER UTILITIES TO FINISHED GRADE WITHIN LIMITS OF SITE WORK.
16. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE, FIRE ALARM AND OTHER PRIVATE COMPANIES, AS REQUIRED.
17. COORDINATE CATV, TELEPHONE AND GAS INSTALLATION WITH THE UTILITY COMPANIES.
18. LOCATIONS OF 'CUT & CAPS' FOR THE EXISTING BUILDINGS UTILITY SERVICES ARE APPROXIMATE ONLY. CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING SERVICES TO BE CUT & CAPPED PRIOR TO START OF WORK.
19. FIRE SERVICE SHALL BE DUCTILE IRON, MANUFACTURED IN ACCORDANCE WITH THE REQUIREMENTS OF ANSI/AWWA C151/A21.51 AND SHALL BE CLASS 56. JOINTS SHALL BE INSTALLED WITH MEGALUG MECHANICAL JOINTS OR EQUAL, DUE TO CORROSIVE SOILS IN THIS AREA. ALL NEW WATER PIPE TO HAVE POLYWRAP ENCASEMENT PER BWSC SPECIFICATIONS.
20. SEE PLUMBING PLANS FOR ALL PIPE WORK WITHIN BUILDING.
21. SEE ARCHITECTURAL PLANS FOR PROPOSED SITE LAYOUT. THESE PLANS ARE FOR BWSC PERMITTING PURPOSES ONLY.
22. SEE ARCHITECTURAL PLANS FOR COMPONENTS OF EXISTING BUILDING TO BE DEMOLISHED AND/OR SALVAGED.
23. ALL EXISTING STORM DRAINS AND SEWERS SHALL BE VIDEO INSPECTED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF CONSTRUCTION TO VERIFY LOCATIONS, SIZES AND CONDITIONS OF PIPES.
24. THE RIM ELEVATIONS OF ALL UTILITY STRUCTURES WITHIN THE LIMITS OF WORK SHALL BE ADJUSTED TO FINISHED GRADE.
25. CONTRACTOR TO REMOVE AND PROPERLY DISPOSE OF ALL SITE DEBRIS, SEE NOTE ON C102.
26. PRIOR TO CONSTRUCTION OF THE CRUSHED STONE INFILTRATION TRENCH CONTRACTOR TO DETERMINE ACTUAL LOCATION OF EXISTING NEARBY GAS LINE, IF CONFLICT(S) EXIST CONTRACTOR TO COORDINATE WITH SITE ENGINEER FOR REQUIRED MODIFICATIONS.
27. CONTRACTOR TO COORDINATE A PRECONSTRUCTION MEETING WITH THE BWSC CONSTRUCTION DIVISION PRIOR TO ANY WORK ON THE PROPOSED NEW 8" SEWERS.
28. CONTRACTOR TO SAWCUT EXISTING PAVEMENT WITHIN FID KENNEDY AVENUE, CAPSTAN WAY AND DOLPHIN WAY FOR PROPOSED UTILITY TRENCHES.

STORMWATER INFILTRATION SYSTEM

DESIGN RUNOFF VOLUME

USE 1/2 INCH RAINFALL EVENT
IMPERVIOUS AREA = 3.247 AC.

RUNOFF VOLUME = 3.247 AC. x 1/2 INCH x (43,560 FT²/AC.) x (1 FT./12 INCH)= 5,893.3 C.F.

DESIGN VOLUME = 5,893.3 C.F.

STORM WATER VOLUME CALCULATIONS

INFILTRATION TRENCH "S2A"

INFILTRATION TRENCH WITH CRUSHED STONE

TRENCH VOLUME BELOW OUTLET = (EL. 15.8-EL.15.5) x (6.0+4.2)/2) x (349)) = 534.0 C.F.

CRUSHED STONE VOLUME = [(349' x 6.0) x (EL. 15.8-EL. 13.5) - 534.0]' x 0.3 VOIDS = 1,284.7 C.F.

SUBTOTAL = 534.0 C.F. + 1,284.7 C.F. = 1,818.7 C.F.

INFILTRATION SYSTEM "S3A"

18" PERFORATED PIPE INFILTRATION SYSTEM WITH CRUSHED STONE.

PIPE VOLUME = (7 x 135.5' + 19.5) x π (0.75)² = 1,710.6 C.F.

CRUSHED STONE VOLUME = [(139' x 21.5' x 2') - 1710.6 C.F.] x 0.3 VOIDS = 1,279.9 C.F.

SUBTOTAL = 1,710.6 C.F. + 1,279.9 C.F. = 2,990.5 C.F.

INFILTRATION SYSTEM "S3B"

12" PERFORATED PIPE INFILTRATION SYSTEM WITH CRUSHED STONE

PIPE VOLUME = (6 x 46 +11) x π (0.5)² = 225.4 C.F.

CRUSHED STONE VOLUME = [(49' x 13' x 1.5') - 225.4 C.F.] x 0.3 VOIDS = 219.1 C.F.

SUBTOTAL = 225.4 C.F. + 219.1 C.F. = 444.5 C.F.

INFILTRATION SYSTEM "S3C"

ROOF INFILTRATION SYSTEMS - USE 18" PERFORATED PIPE WITH CRUSHED STONE.

PIPE VOLUME = (6 x 38.5 +16.5') x π (0.75)² = 437.4 C.F.

CRUSHED STONE VOLUME = [(42' x 18.5' x 2.0') -437.4 C.F.] x 0.3 VOIDS = 335.0 C.F.

SUBTOTAL = 437.4 C.F. + 335.0 C.F. = 772.4 C.F.

TOTAL VOLUME PROVIDED = SYSTEMS "S2A" + "S3A" + "S3B" + "S3C"
= 1,818.7 + 2,990.5 C.F. + 444.5 C.F. + 772.4 C.F. = 6026.1 C.F.

TOTAL VOLUME PROVIDED = 6,026.1 C.F.

STORMWATER STORAGE VOLUME = 6,026.1 C.F. > 5,893.3 C.F. (FROM A 1/2 INCH RAINFALL EVENT)

SERVICE CONNECTION TABLE

ITEM		QTY	BWSC INSPECTOR/DATE
A1	4" SEWER SERVICE	1	
A2	4" SEWER SERVICE	1	
A3	4" SEWER SERVICE	1	
B1	6" SEWER SERVICE	1	
B2	6" SEWER SERVICE	1	
B3	6" SEWER SERVICE	1	
C1	SEWER MANHOLE	1	
SMH 17	SEWER MANHOLE	1	
SMH 18	SEWER MANHOLE	1	
C2	SEWER MANHOLE	1	
SMH 24	SEWER MANHOLE	1	
SMH 19	SEWER MANHOLE	1	
D1	GAS/OIL/SAND SEPARATOR	1	
D2	GAS/OIL/SAND SEPARATOR	1	
D3	GAS/OIL/SAND SEPARATOR	1	
E1	8" SEWER CONNECTION SMH 18	2	
E2	8" SEWER CONNECTION SMH 20	2	
F	4" DOMESTIC WATER SERVICE	1	
G	8" FIRE SERVICE	1	
H1	INFILTRATION SYSTEM S3A	1	
H2	INFILTRATION SYSTEM S3B	1	
H3	INFILTRATION SYSTEM S3C	1	
I	INFILTRATION TRENCH	1	
J1	DRAIN MANHOLE	1	
J2	DRAIN MANHOLE	1	
K1	OUTLET CONTROL MANHOLE S3A	1	
K2	OUTLET CONTROL MANHOLE S3B	1	
K3	OUTLET CONTROL MANHOLE S3C	1	
L1	WQD CB1	1	
L2	WQD CB2	1	
L3	WQD CB3	1	
L4	WQD CB4	1	
M	DRAIN CONNECTION	1	
N	DYE TEST - SEWER	1	
O	DYE TEST - DRAIN	1	
P	DON'T DUMP PLAQUE	4	
Q	CUT & CAP WATER	2	
R	CUT & CAP SEWER	3	

SPECIAL CONDITIONS

ITEM	BWSC INSPECTOR/DATE
AS-BUILT PLAN	
CONDITIONS LETTER	

Account Number X Parcel Number 2674 Ward 6

Property Location 25 FID KENNEDY AVENUE

Project Name 25 FID KENNEDY

Neighborhood SOUTH BOSTON Extended Zip Code 02210

Owner (SEE BELOW)

Type of Premise I Meter Size 1.5" Inside X Outside

Owner's Mailing Address
ECONOMIC DEVELOPMENT AND INDUSTRIAL CORPORATION
Name c/o BOSTON REDEVELOPMENT AUTHORITY

Street ONE CITY HALL SQUARE

City BOSTON State MA Zip 02201-1007

Home Phone N/A Work Phone 617-741-4464

BOSTON LAND USE CODE: "I"
INDUSTRIAL

WARD No.: 6 PARCEL No.: 2674

WATER METER INFORMATION

PROPOSED WATER ACCOUNT No. :

MTU (METER TRANSMISSION UNIT) TO BE INSTALLED BY BWSC
(PROPOSED WATER METER SIZE = 1.5 INCHES)

ANTICIPATED SEWAGE FLOW

INDUSTRIAL PLANT WITHOUT CAFETERIA :

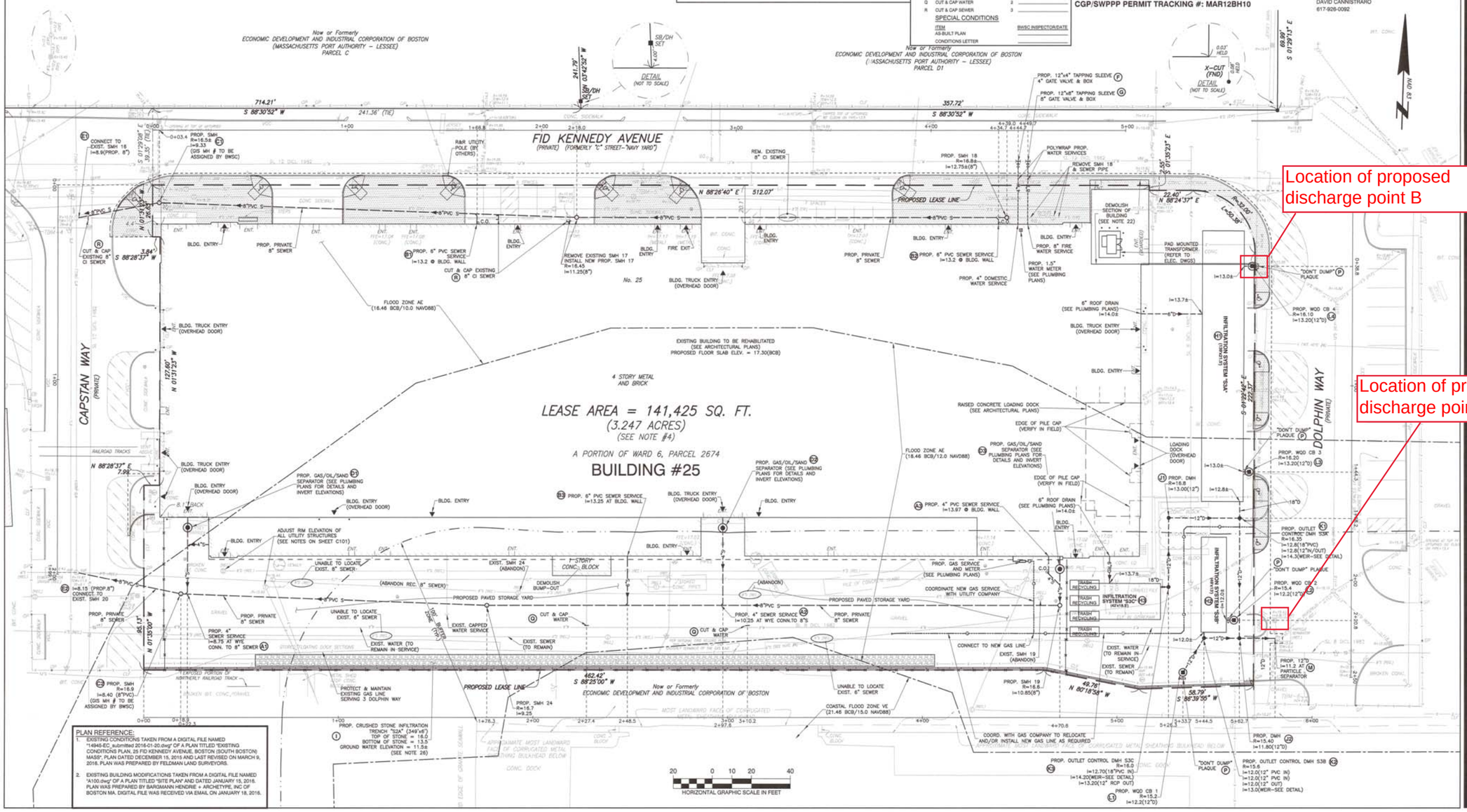
100 PERSONS x 15 GPD/PERSON = 1,500 GPD

CGP/SWPPP PERMIT TRACKING #: MAR12BH10

RESERVED FOR BWSC USE

OWNER
ECONOMIC DEVELOPMENT AND INDUSTRIAL CORPORATION
c/o BOSTON REDEVELOPMENT AUTHORITY
ONE CITY HALL SQUARE
BOSTON, MA 02201-1007
ATTN: MR. GARY UTER
617-742-4464

APPLICANT
J. C. CANNISTRARO, LLC
80 ROSEDALE ROAD
WATERTOWN, MA 02472
ATTN: JOHN CANNISTRARO
DAVID CANNISTRARO
617-926-0092



PLAN REFERENCE:

1. EXISTING CONDITIONS TAKEN FROM A DIGITAL FILE NAMED "14945-EC_submitted 2016-01-20.dwg" OF A PLAN TITLED "EXISTING CONDITIONS PLAN, 25 FID KENNEDY AVENUE, BOSTON (SOUTH BOSTON) MASS", PLAN DATED DECEMBER 15, 2015 AND LAST REVISED ON MARCH 9, 2016. PLAN WAS PREPARED BY FELDMAN LAND SURVEYORS.
2. EXISTING BUILDING MODIFICATIONS TAKEN FROM A DIGITAL FILE NAMED 'A100.dwg' OF A PLAN TITLED "SITE PLAN" AND DATED JANUARY 15, 2016. PLAN WAS PREPARED BY BARGMANN HENDRIE + ARCHETYPE, INC OF BOSTON MA. DIGITAL FILE WAS RECEIVED VIA EMAIL ON JANUARY 18, 2016.

ARCHITECT
bh+a
Bargmann Hendrie + Archetype, Inc.
300 A Street
Boston, MA 02210
617 350-0450 Tel

PROJECT NAME
25 Fid Kennedy
25 Fid Kennedy Avenue
South Boston, MA 02210

CLIENT
J.C. Cannistraro, LLC
80 Rosedale Road
Watertown, MA 02472

PROJECT TEAM

Architect
Bargmann Hendrie + Archetype, Inc.
300 A Street
Boston, MA 02210
617-350-0450

Civil Engineer
H.W. Moore Associates, Inc.
112 Shawmut Avenue
Boston, MA 02118
617-357-8145

Structural Engineer
McNamara Salvia
101 Federal Street, 11'th Floor
Boston, MA 02110
617-737-0040

Mechanical, Electrical, Plumbing, Life Safety
AHA Consulting Engineers
24 Hartwell Avenue, Third Floor
Lexington, MA 02421
781-372-3000

Fire Protection
J.C. Cannistraro, LLC
80 Rosedale Road
Watertown, MA 02471
617-926-0092

REVISIONS

	DATE
1	
2	
3	
4	
5	

DRAWING TITLE
UTILITY SITE PLAN

DRAWING INFORMATION

JAMES M. WHITE CIVIL No. 22148 REGISTERED ENGINEER

July 29, 2016
DATE OF ISSUE

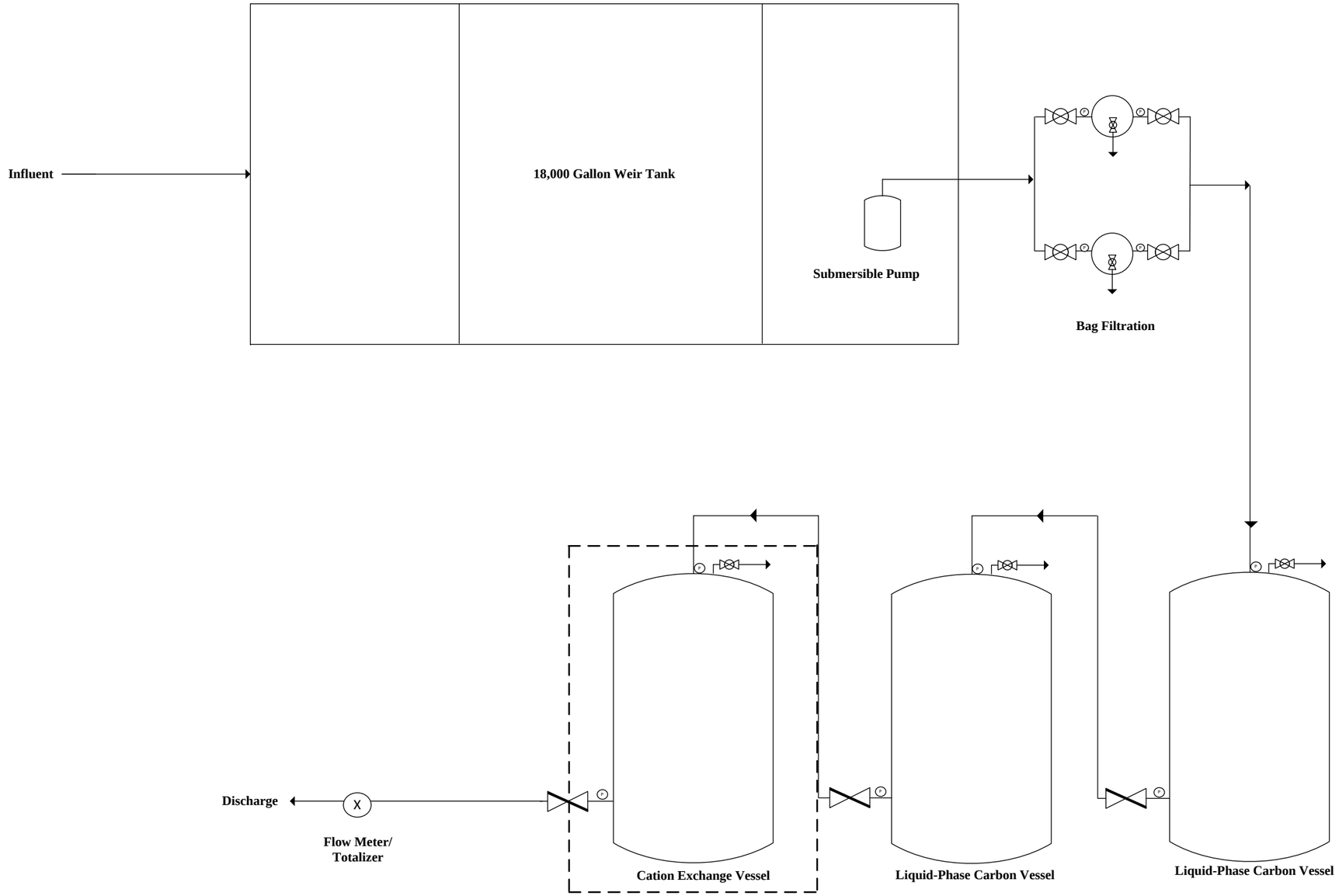
DESCRIPTION

1" = 20'	BW
SCALE	DRAWN BY
HWMA-3691	3691
PROJECT #	FILE NAME

DRAWING NUMBER
C101
BWSC # 16095

File Name: C:\3691\3691-S13.dwg Saved: 7/28/2016 10:17 AM Plotted: Jul 28, 2016 10:28 AM
File: C101 Per Option Plotted By: Mathew

APPENDIX B



Notes:
1. Figure not drawn to scale
2. System rated for 50 GPM
3. Contingency — — — — .

Lockwood Remediation Technologies, LLC
89 Crawford Street
Leominster, MA 01453
Office: 774-450-7177

DESIGNED BY: LRT DRAWN BY: T. Hagie

DATE: 2/8/17 REVISION:

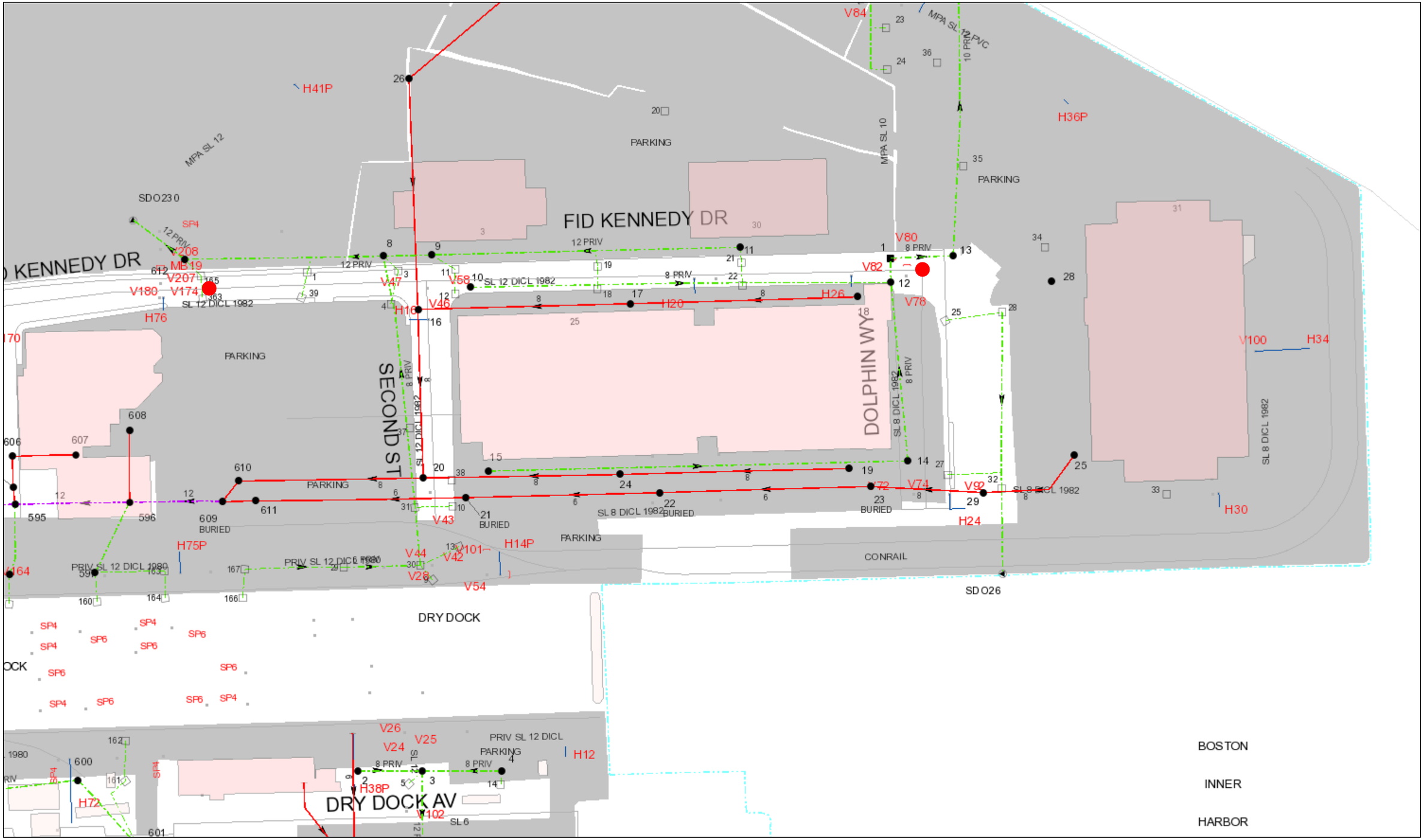
Water Treatment System Schematic

25 Fid Kennedy Avenue
Boston, Massachusetts

PROJECT No.

FIGURE No.

APPENDIX C



BOSTON WATER AND SEWER

N
W E
S

0 35 70 140 210 280 Feet

APPENDIX D

MassDEP - Bureau of Waste Site Cleanup

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

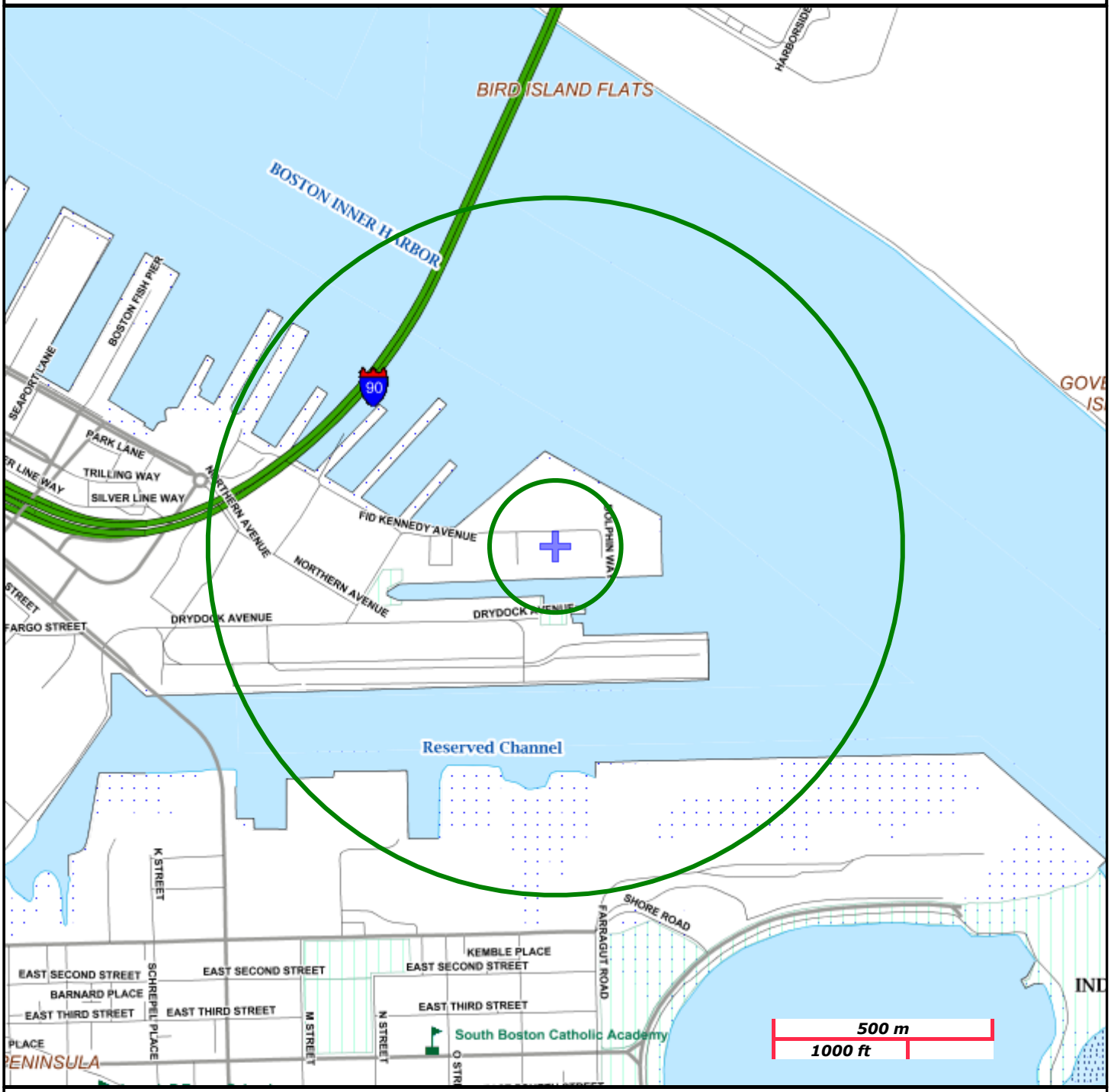
Site Information:

25 FID KENNEDY AVE BOSTON, MA

NAD83 UTM Meters:
4690216mN , 333100mE (Zone: 19)
February 13, 2017

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.

APPENDIX E

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

A. General site information:

<table>
<tr><td rowspan="2">1. Name of site:
25 Fid Kennedy Ave</td><td colspan="3">Site address:
Street: 25 Fid Kennedy Avenue</td></tr>
<tr><td>City: Boston</td><td>State: MA</td><td>Zip: 02110</td></tr>
<tr><td rowspan="4">2. Site owner
25 Fid Kennedy, LLC

Owner is (check one): ☐ Federal ☐ State/Tribal ☐ Private
☐ Other; if so, specify:</td><td colspan="3">Contact Person: Dave Cannistraro</td></tr>
<tr><td colspan="2">Telephone: 617-926-0092</td><td>Email: dcannistaro@cannistraro.com</td></tr>
<tr><td colspan="3">Mailing address:
Street: 80 Rosedale Road</td></tr>
<tr><td>City: Watertown</td><td>State: MA</td><td>Zip: 02472</td></tr>
<tr><td rowspan="4">3. Site operator, if different than owner
J. Derenzo Company
338 Howard Street
Brockton MA 02302</td><td colspan="3">Contact Person: Bradd Biagini</td></tr>
<tr><td colspan="2">Telephone: 508-897-8035</td><td>Email: bbiagini@JDerenzo.com</td></tr>
<tr><td colspan="3">Mailing address:
Street: 338 Howard Street</td></tr>
<tr><td>City: Brockton</td><td>State: MA</td><td>Zip: 02302</td></tr>
<tr><td>4. NPDES permit number assigned by EPA:
NA

NPDES permit is (check all that apply: ☐ RGP ☐ DGP ☐ CGP
☐ MSGP ☐ Individual NPDES permit ☐ Other; if so, specify:</td><td colspan="3">5. Other regulatory program(s) that apply to the site (check all that apply):
■ MA Chapter 21e; list RTN(s): 3-33588
☐ NH Groundwater Management Permit or Groundwater Release Detection Permit:
☐ CERCLA
☐ UIC Program
☐ POTW Pretreatment
☐ CWA Section 404</td></tr>
</table>

B. Receiving water information:

1. Name of receiving water(s):	Waterbody identification of receiving water(s):	Classification of receiving water(s):
Boston Harbor (Proper)	MA70-02	SB (CSO)

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

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

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

3. Indicate if the receiving water(s) is listed in the State's Integrated List of Waters (i.e., CWA Section 303(d)). Include which designated uses are impaired, and any pollutants indicated. Also, indicate if a final TMDL is available for any of the indicated pollutants. For more information, contact the appropriate State as noted in Part 4.6 of the RGP. Yes, Neponset River Basin. Fish consumption and shell fishing (Fecal Coliform). TMDL = 10% ≤ 260 organisms per 100 ml

4. Indicate the seven day-ten-year low flow (7Q10) of the receiving water determined in accordance with the instructions in Appendix V for sites located in Massachusetts and Appendix VI for sites located in New Hampshire.	Marine Water, No 7Q10
5. Indicate the requested dilution factor for the calculation of water quality-based effluent limitations (WQBELs) determined in accordance with the instructions in Appendix V for sites in Massachusetts and Appendix VI for sites in New Hampshire.	None

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

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

C. Source water information:

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

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

2. Source water contaminants: cis-1,2-dichloroethene, tetrachloroethene, trichloroethene, vinyl chloride, and C5-C8 Aliphatics	
a. For source waters that are contaminated groundwater or contaminated surface water, indicate are any contaminants present that are not included in the RGP? (check one): ☐ Yes ■ No If yes, indicate the contaminant(s) and the maximum concentration present in accordance with the instructions in Appendix VIII.	b. For a source water that is a surface water other than the receiving water, potable water or other, indicate any contaminants present at the maximum concentration in accordance with the instructions in Appendix VIII? (check one): ☐ Yes ■ No
3. Has the source water been previously chlorinated or otherwise contains residual chlorine? (check one): ☐ Yes ■ No	

D. Discharge information

1.The discharge(s) is a(n) (check any that apply): ☐ Existing discharge ■ New discharge ☐ New source	
Outfall(s): 1	Outfall location(s): (Latitude, Longitude) 42.347508, -71.024747
Discharges enter the receiving water(s) via (check any that apply): ☐ Direct discharge to the receiving water ■ Indirect discharge, if so, specify: ☐ A private storm sewer system ■ A municipal storm sewer system If the discharge enters the receiving water via a private or municipal storm sewer system: Has notification been provided to the owner of this system? (check one): ■ Yes ☐ No Has the operator has received permission from the owner to use such system for discharges? (check one): ■ Yes ☐ No, if so, explain, with an estimated timeframe for obtaining permission: Has the operator attached a summary of any additional requirements the owner of this system has specified? (check one): ☐ Yes ■ No	
Provide the expected start and end dates of discharge(s) (month/year): May 2017 - October 2017 Indicate if the discharge is expected to occur over a duration of: ■ less than 12 months ☐ 12 months or more ☐ is an emergency discharge	
Has the operator attached a site plan in accordance with the instructions in D, above? (check one): ■ Yes ☐ No	

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

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

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

4. Influent and Effluent Characteristics

Parameter	Known or believed absent	Known or believed present	# of samples	Test method (#)	Detection limit (µg/l)	Influent		Effluent Limitations	
						Daily maximum (µg/l)	Daily average (µg/l)	TBEL	WQBEL
A. Inorganics									
Ammonia		✔	2	44,350.1	75	156	78	Report mg/L	---
Chloride		✔	2	44,300.0	250000	3440000	2082000	Report µg/l	---
Total Residual Chlorine	✔		2	121,4500C	20	NA	NA	0.2 mg/L	7.5 ug/L
Total Suspended Solids		✔	2	121,2540D	5000	1700000	1000000	30 mg/L	30 mg/L
Antimony		✔	2	97, 6020A	4	13.2	9.25	206 µg/L	640 ug/L
Arsenic		✔	2	97, 6020A	0.5	15	12.9	104 µg/L	36 ug/L
Cadmium		✔	2	97, 6020A	0.5	0.9	.45	10.2 µg/L	8.8 ug/L
Chromium III		✔	2	97, 6020A	1	26.4	21.9	323 µg/L	100 ug/L
Chromium VI	✔		2	97, 7196A	10			323 µg/L	50 ug/L
Copper		✔	2	97, 6020A	1	274.8	184.65	242 µg/L	3.1 ug/L
Iron		✔	2	97, 6020A	50	40000	25000	5,000 µg/L	---
Lead	✔		2	97, 6020A	5	329	259.25	160 µg/L	8.1 ug/L
Mercury		✔	2	97, 6020A	0.2	0.5	0.35	0.739 µg/L	0.94 ug/L
Nickel		✔	2	97, 6020A	2	38	35.5	1,450 µg/L	8.2 ug/L
Selenium	✔		2	97, 6020A	5			235.8 µg/L	71 ug/L
Silver		✔	2	97, 6020A	0.5	1.5	0.75	35.1 µg/L	1.9 ug/L
Zinc	✔		2	97, 6020A	10	257.1	210.9	420 µg/L	81 ug/L
Cyanide	✔		2	121,	5			178 mg/L	1.0 ug/L
B. Non-Halogenated VOCs									
Total BTEX	✔		2	97, 8260C	1			100 µg/L	---
Benzene	✔		2	97, 8260C	0.5			5.0 µg/L	---
1,4 Dioxane	✔		2	8260C-SI	250			200 µg/L	---
Acetone	✔		2	8260C	5			7.97 mg/L	---
Phenol	✔		2	8270D	5			1,080 µg/L	300 ug/L

Parameter	Known or believed absent	Known or believed present	# of samples	Test method (#)	Detection limit (µg/l)	Influent		Effluent Limitations	
						Daily maximum (µg/l)	Daily average (µg/l)	TBEL	WQBEL
C. Halogenated VOCs									
Carbon Tetrachloride	✔		2	8260C	1			4.4 µg/L	1.6 ug/L
1,2 Dichlorobenzene	✔		2	8260C	1			600 µg/L	---
1,3 Dichlorobenzene	✔		2	8260C	1			320 µg/L	---
1,4 Dichlorobenzene	✔		2	8260C	1			5.0 µg/L	---
Total dichlorobenzene	✔		2	8260C	1			763 µg/L in NH	---
1,1 Dichloroethane	✔		2	8260C	1			70 µg/L	---
1,2 Dichloroethane	✔		2	8260C	1			5.0 µg/L	---
1,1 Dichloroethylene	✔		2	8260C	1			3.2 µg/L	---
Ethylene Dibromide	✔		2	8260C	2			0.05 µg/L	---
Methylene Chloride	✔		2	8260C	2			4.6 µg/L	---
1,1,1 Trichloroethane	✔		2	8260C	1			200 µg/L	---
1,1,2 Trichloroethane	✔		2	8260C	1			5.0 µg/L	---
Trichloroethylene	✔		2	8260C	1			5.0 µg/L	---
Tetrachloroethylene	✔		2	8260C	1			5.0 µg/L	3.3 ug/L
cis-1,2 Dichloroethylene	✔		2	8260C	1			70 µg/L	---
Vinyl Chloride	✔		2	8260C	1			2.0 µg/L	---
D. Non-Halogenated SVOCs									
Total Phthalates	✔		2	8270D	5			190 µg/L	3.4 ug/L
Diethylhexyl phthalate	✔		2	8270D	5			101 µg/L	2.2 ug/L
Total Group I PAHs		✔	2	8270D	1	209	104.5	1.0 µg/L	---
Benzo(a)anthracene		✔	2	8270D	1	3.8	1.8	As Total PAHs	0.0038 ug/L
Benzo(a)pyrene		✔	2	8270D	1	3.7	1.85		0.0038 ug/L
Benzo(b)fluoranthene		✔	2	8270D	1	5.6	2.8		0.0038 ug/L
Benzo(k)fluoranthene		✔	2	8270D	1	1.9	0.95		0.0038 ug/L
Chrysene	✔		2	8270D	1	3.5	1.75		0.0038 ug/L
Dibenzo(a,h)anthracene	✔		2	8270D	1				0.0038 ug/L
Indeno(1,2,3-cd)pyrene		✔	2	8270D	1	2.4	1.2		0.0038 ug/L

Parameter	Known or believed absent	Known or believed present	# of samples	Test method (#)	Detection limit (µg/l)	Influent		Effluent Limitations	
						Daily maximum (µg/l)	Daily average (µg/l)	TBEL	WQBEL
Total Group II PAHs		✔	2	8270D	1	16.3	8.15	100 µg/L	---
Naphthalene	✔		2	8270D	1			20 µg/L	---
E. Halogenated SVOCs									
Total PCBs		✔	2	608	0.278	0.217	0.1085	0.000064 µg/L	---
Pentachlorophenol	✔		2	8270D	4			1.0 µg/L	---
F. Fuels Parameters									
Total Petroleum Hydrocarbons	✔		2	74, 1664A	4000			5.0 mg/L	---
Ethanol	✔		2	1, 8015D	2000			Report mg/L	---
Methyl-tert-Butyl Ether	✔		2	8260C	2			70 µg/L	20 ug/L
tert-Butyl Alcohol	✔		2	8260C	10			120 µg/L in MA 40 µg/L in NH	---
tert-Amyl Methyl Ether	✔		2	8260C	2			90 µg/L in MA 140 µg/L in NH	---
Other (i.e., pH, temperature, hardness, salinity, LC_{50}, additional pollutants present); if so, specify:									
pH			2	Field		8.41	8.285		
Salinity			2	121,	2	3.4	1.7		
Temperature			2	Field		7.2	6.35		

E. Treatment system information

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

☐ Adsorption/Absorption ☐ Advanced Oxidation Processes ☐ Air Stripping ■ Granulated Activated Carbon ("GAC")/Liquid Phase Carbon Adsorption
■ Ion Exchange ☐ Precipitation/Coagulation/Flocculation ■ Separation/Filtration ☐ Other; if so, specify:
cation exchange to be used as needed based on effluent sampling analytical results.

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

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

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

3. Provide the **design flow capacity** in gallons per minute (gpm) of the most limiting component. Indicate the most limiting component: Is use of a flow meter feasible? (check one): ■ Yes ☐ No, if so, provide justification:	100 gpm
Provide the proposed maximum effluent flow in gpm.	100 gpm
Provide the average effluent flow in gpm.	25 gpm
If Activity Category IV applies, indicate the estimated total volume of water that will be discharged:	N/A

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

F. Chemical and additive information

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

☐ Algaecides/biocides ☐ Antifoams ☐ Coagulants ☐ Corrosion/scale inhibitors ☐ Disinfectants ☐ Flocculants ☐ Neutralizing agents ☐ Oxidants ☐ Oxygen ☐ scavengers ■ pH conditioners ☐ Bioremedial agents, including microbes ☐ Chlorine or chemicals containing chlorine ☐ Other; if so, specify:
To be implemented as necessary, dependent on final treatment system design.

2. Provide the following information for each chemical/additive, using attachments, if necessary:
Chemical/Additive information will be provided as necessary depending on treatment system design.

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

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

G. Endangered Species Act eligibility determination

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

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

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

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

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

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

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

H. National Historic Preservation Act eligibility determination

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

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

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

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

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

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

I. Supplemental information

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

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

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

J. Certification requirement

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

BMPP certification statement:	A BMPP meeting the requirements of this general permit will be developed and implemented upon the initiation of discharge.
Notification provided to the appropriate State, including a copy of this NOI, if required.	Check one: Yes ☐ No ■
Notification provided to the municipality in which the discharge is located, including a copy of this NOI, if requested.	Check one: Yes ■ No ☐
Notification provided to the owner of a private or municipal storm sewer system, if such system is used for site discharges, including a copy of this NOI, if requested.	Check one: Yes ■ No ☐ NA ☐
Permission obtained from the owner of a private or municipal storm sewer system, if such system is used for site discharges. If yes, attach additional conditions. If no, attach explanation and timeframe for obtaining permission.	Check one: Yes ■ No ☐ NA ☐
Notification provided to the owner/operator of the area associated with activities covered by an additional discharge permit(s). Additional discharge permit is (check one): ☐ RGP ☐ DGP ☐ CGP ☐ MSGP ☐ Individual NPDES permit ☐ Other; if so, specify:	Check one: Yes ☐ No ☐ NA ■
Signature:	Date: 4/26/2017
Print Name and Title: BRADD BIAGINI - PROJECT MANAGER	

APPENDIX F

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

DEWATERING DISCHARGE PERMIT APPLICATION

OWNER / AUTHORIZED APPLICANT PROVIDE INFORMATION HERE:

Company Name: 25 Fid Kennedy, LLC Address: 25 Fid Kennedy Ave, Boston MA 02210

Phone Number: 617-926-0092 Fax number: _____

Contact person name: Dave Cannistraro Title: Owner

Cell number: _____ Email address: dcannistraro@cannistraro.com

Permit Request (check one): [X] New Application ☐ Permit Extension ☐ Other (Specify): _____

Owner's Information (if different from above):

Owner of property being dewatered: _____

Owner's mailing address: _____ Phone number: _____

Location of Discharge & Proposed Treatment System(s):

Street number and name: 25 Fid Kennedy Ave Neighborhood South Boston, MA

Discharge is to a: ☐ Sanitary Sewer ☐ Combined Sewer [X] Storm Drain ☐ Other (specify): _____

Describe Proposed Pre-Treatment System(s): Sedimentation tank and bag filters, other treatment as required

BWSC Outfall No. SD O26 Receiving Waters Boston Harbor

Temporary Discharges (Provide Anticipated Dates of Discharge): From April, 2017 To October, 2017

☐ Groundwater Remediation	☐ Tank Removal/Installation	☐ Foundation Excavation
[X] Utility/Manhole Pumping	☐ Test Pipe	☐ Trench Excavation
☐ Accumulated Surface Water	☐ Hydrogeologic Testing	☐ Other _____

Permanent Discharges

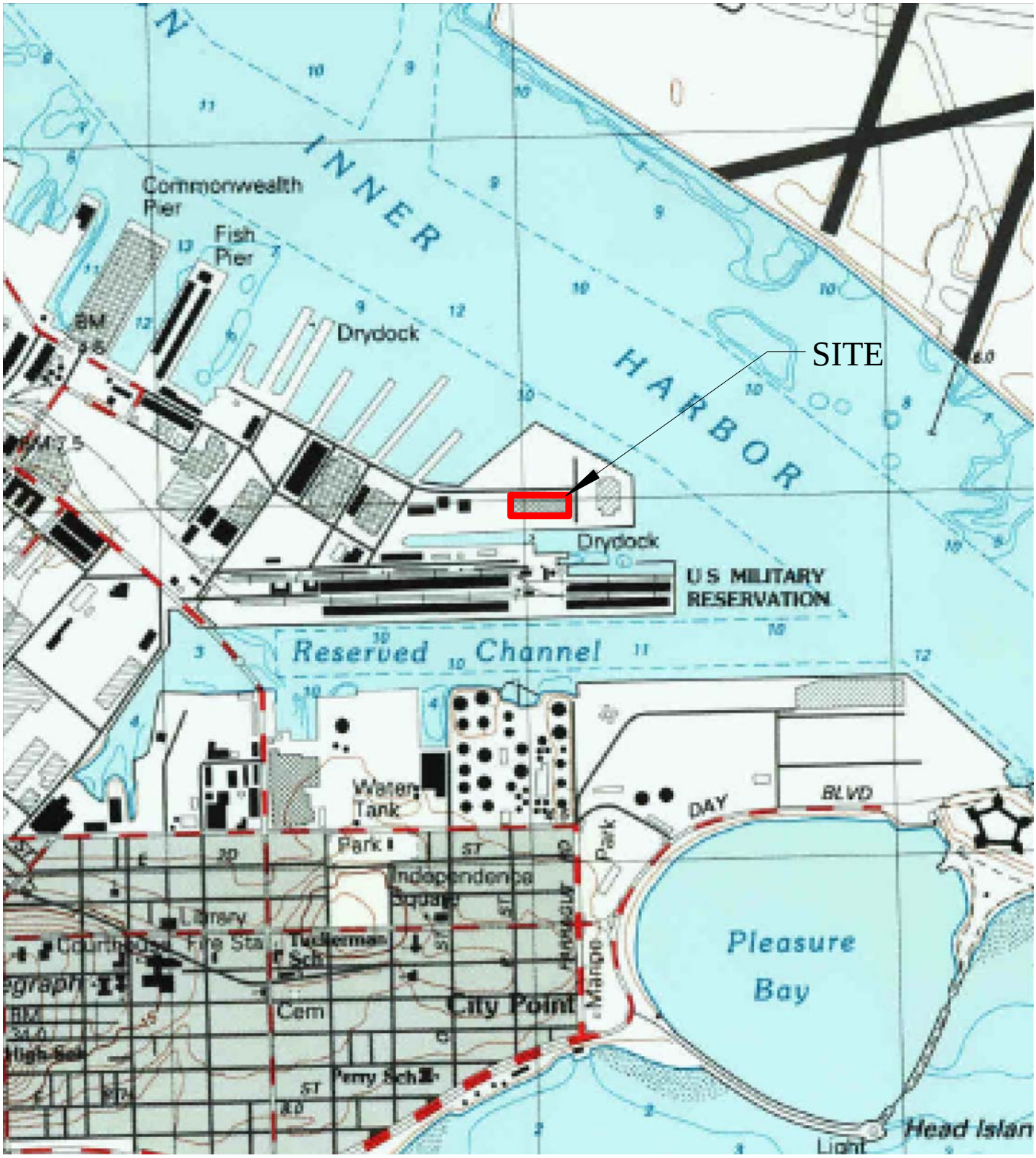
☐ Foundation Drainage	☐ Crawl Space/Footing Drain
☐ Accumulated Surface Water	☐ Non-contact/Uncontaminated Cooling
☐ Non-contact/Uncontaminated Process	☐ Other; _____

---

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

Submit Completed Application to: Boston Water and Sewer Commission
Engineering Customer Services
980 Harrison Avenue, Boston, MA 02119
Attn: Matthew Tuttle, Engineering Customer Service
E-mail: tuttlemp@bwsc.org
Phone: 617-989-7204 Fax: 617-989-7716

Signature of Authorized Representative for Property Owner: _____ Date: 3/22/2017



USGS Topographic Map, 1987
Boston South, MA Quadrangle
Contour Interval: 5 Feet

SITE LOCUS MAP

Boston Marine Industrial Park
Parcel N
25 FID Kennedy Avenue
Boston, Massachusetts

SCALE: 1:24,000

February 2017

VERTEX Proj. No. 40717

VERTEX

FIGURE NO. 1

LEGEND

Symbol	Description
—— 16 ——	CONTOUR
- - - 16.5 - - -	HALF FOOT CONTOUR
17.1	SPOT GRADE
———	VERTICAL GRANITE CURB
— —12"D— — —	DRAIN LINE
■	CATCH BASIN (CB)
◙	WATER QUALITY CATCH BASIN (WQO)
●	DRAIN MANHOLE (DMH)
— —8"S— —	SEWER LINE
○	SEWER MANHOLE (SMH)
- - - 8"W - - -	WATER LINE
	GATE VALVE & TEE
	CONCRETE WALK
	EROSION CONTROL TUBE
——G——	GAS LINE
◉	GAS/OIL/SAND SEPARATOR
•	BOLLARD

NOTES:

1. LOCATIONS AND ELEVATIONS OF UNDERGROUND PIPES AND CONDUITS HAVE BEEN DETERMINED FROM THE REFERENCED PLAN AND SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. H.W. MOORE ASSOCIATES, INC. ASSUMES NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES INACCURATELY SHOWN OR OMITTED. BEFORE PLANNING FUTURE CONNECTIONS, THE PROPER UTILITY DEPARTMENT SHALL BE NOTIFIED AND THE ACTUAL LOCATIONS OF SUBSURFACE STRUCTURES SHALL BE VERIFIED IN THE FIELD. CALL THE BWSC, (617)989-7000 AND DIG-SAFE CALL CENTER, (888)344-7233, 72 HOURS (3 WORKING DAYS) PRIOR TO EXCAVATION.
2. ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO BWSC REQUIREMENTS AND ALL OTHER APPLICABLE MUNICIPAL REGULATIONS.
3. ALL DISTURBANCES WITHIN THE TRAVELED WAYS SHALL CONFORM TO CITY AND BWSC STANDARDS.
4. THIS PLAN HAS BEEN PREPARED FOR APPROVAL OF THE WATER, DRAIN AND SEWER CONNECTIONS TO THE BWSC FACILITIES. IT IS UNDERSTOOD THAT THE RESPONSIBILITY OF OWNERSHIP AND MAINTENANCE OF THE SEWER CONNECTIONS ON PRIVATE PROPERTY AND/OR PRIVATE AND PUBLIC WAYS SHALL BE THE RESPONSIBILITY OF THE DEVELOPER AND/OR OWNERS. IT IS ALSO UNDERSTOOD THAT THE WATER CONNECTIONS ON PRIVATE PROPERTY INCLUDING PRIVATE WAYS ARE ALSO THE RESPONSIBILITY OF THE DEVELOPER AND/OR OWNERS. IF THE CONNECTIONS CROSS, OR ARE NEAR INDIVIDUAL PROPERTY LINES, PROVISIONS MUST BE MADE TO ALLOW EACH OWNER TO MAINTAIN OR RECONSTRUCT THEIR RESPECTIVE CONNECTIONS. THIS FACT MUST BE INCORPORATED INTO ANY PURCHASE AND SALES AGREEMENT AND DEEDS RELATED TO THE TRANSFER OF OWNERSHIP OF THE PROPERTIES.
5. THE PROPOSED BUILDING CONNECTIONS (BY PLUMBER) SHALL BE 10' OUTSIDE THE FOUNDATION WALL.
6. SITE CONTRACTOR TO PROVIDE ALL EXCAVATION, INSTALLATION, BACK FILLING, PAVEMENT PATCHING, ETC. FOR THE INSTALLATION OF UNDERGROUND GAS, ELECTRIC, TELEPHONE, FIRE ALARM, WATER, SEWER, DRAIN AND SIMILAR SERVICES.
7. IF EXISTING ABANDONED BWSC SERVICES ARE ENCOUNTERED THEY SHALL BE CUT AND CAPPED AT THE MAIN PER BWSC STANDARDS.
8. THE SEWER GRAVITY PIPE SHALL BE POLYVINYL CHLORIDE (PVC) PIPE SDR 35 CONFORMING TO ASTM STANDARD SPECIFICATIONS D3034 UNLESS OTHERWISE NOTED.
9. STORM DRAIN PIPES SHALL BE POLYVINYL CHLORIDE (PVC) PIPE SDR 35 CONFORMING TO ASTM STANDARD SPECIFICATIONS D3034.
10. CONTRACTOR IS TO OBTAIN THE ROUGH CONSTRUCTION SIGN OFF DOCUMENT FROM THE CITY OF BOSTON INSPECTIONAL SERVICES DEPARTMENT PRIOR TO FILING A GENERAL SERVICES APPLICATION WITH BWSC.
11. CONTRACTOR WILL BE RESPONSIBLE FOR PREPARING AS-BUILT PLANS IN ACCORDANCE WITH BWSC REQUIREMENTS.
12. CONTRACTOR TO CONFIRM THE LOCATIONS AND INVERTS OF THE EXISTING UTILITIES IN THE STREET PRIOR TO THE INSTALLATION OF NEW SERVICE CONNECTIONS. SERVICES SHALL BE FIELD VERIFIED BEFORE BEGINNING CONSTRUCTION.
13. ANY CONSTRUCTION DEWATERING SHALL EMPLOY MEASURES TO FILTER OUT SEDIMENT PRIOR TO ITS DISCHARGE AND SHALL CONFORM WITH BWSC REQUIREMENTS. CONTRACTOR TO SUBMIT A SKETCH OF THESE TO THE ARCHITECT FOR APPROVAL.
14. CONTRACTOR TO EMPLOY MEASURES TO CONTROL DUST DURING CONSTRUCTION.
15. RIM ELEVATIONS OF DRAINAGE STRUCTURES ARE APPROXIMATE. FINAL ELEVATIONS ARE TO BE SET FLUSH. ADJUST ALL OTHER RIM ELEVATIONS OF EXISTING MANHOLES, WATER GATES, GAS GATES AND OTHER UTILITIES TO FINISHED GRADE WITHIN LIMITS OF SITE WORK.
16. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE, FIRE ALARM AND OTHER PRIVATE COMPANIES, AS REQUIRED.
17. COORDINATE CATV, TELEPHONE AND GAS INSTALLATION WITH THE UTILITY COMPANIES.
18. LOCATIONS OF "CUT & CAPS" FOR THE EXISTING BUILDINGS UTILITY SERVICES ARE APPROXIMATE ONLY. CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING SERVICES TO BE CUT & CAPPED PRIOR TO START OF WORK.
19. FIRE SERVICE SHALL BE DUCTILE IRON, MANUFACTURED IN ACCORDANCE WITH THE REQUIREMENTS OF ANSI/AWWA C151/A21.51 AND SHALL BE CLASS 56. JOINTS SHALL BE INSTALLED WITH MEGALUG MECHANICAL JOINTS OR EQUAL. DUE TO CORROSIVE SOILS IN THIS AREA, ALL NEW WATER PIPE TO HAVE POLYWRAP ENCASEMENT PER BWSC SPECIFICATIONS.
20. SEE PLUMBING PLANS FOR ALL PIPE WORK WITHIN BUILDING.
21. SEE ARCHITECTURAL PLANS FOR PROPOSED SITE LAYOUT. THESE PLANS ARE FOR BWSC PERMITTING PURPOSES ONLY.
22. SEE ARCHITECTURAL PLANS FOR COMPONENTS OF EXISTING BUILDING TO BE DEMOLISHED AND/OR SALVAGED.
23. ALL EXISTING STORM DRAINS AND SEWERS SHALL BE VIDEO INSPECTED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF CONSTRUCTION TO VERIFY LOCATIONS, SIZES AND CONDITIONS OF PIPES.
24. THE RIM ELEVATIONS OF ALL UTILITY STRUCTURES WITHIN THE LIMITS OF WORK SHALL BE ADJUSTED TO FINISHED GRADE.
25. CONTRACTOR TO REMOVE AND PROPERLY DISPOSE OF ALL SITE DEBRIS. SEE NOTE ON C102.
26. PRIOR TO CONSTRUCTION OF THE CRUSHED STONE INFILTRATION TRENCH CONTRACTOR TO DETERMINE ACTUAL LOCATION OF EXISTING NEARBY GAS LINE. IF CONFLICT(S) EXIST CONTRACTOR TO COORDINATE WITH SITE ENGINEER FOR REQUIRED MODIFICATIONS.
27. CONTRACTOR TO COORDINATE A PRECONSTRUCTION MEETING WITH THE BWSC CONSTRUCTION DIVISION PRIOR TO ANY WORK ON THE PROPOSED NEW 8" SEWERS.
28. CONTRACTOR TO SAWCUT EXISTING PAVEMENT WITHIN FID KENNEDY AVENUE, CAPSTAN WAY AND DOLPHIN WAY FOR PROPOSED UTILITY TRENCHES.

STORMWATER INFILTRATION SYSTEM

DESIGN RUNOFF VOLUME

USE 1/2 INCH RAINFALL EVENT
IMPERVIOUS AREA = 3.247 AC.

RUNOFF VOLUME = 3.247 AC. x 1/2 INCH x (43,560 FT²/AC.) x (1 FT./12 INCH) = 5,893.3 C.F.

DESIGN VOLUME = 5,893.3 C.F.

STORM WATER VOLUME CALCULATIONS

INFILTRATION TRENCH "S2A"

INFILTRATION TRENCH WITH CRUSHED STONE

TRENCH VOLUME BELOW OUTLET = (EL. 15.8-EL.15.5) x ((6.0+4.2)/2) x (349)) = 534.0 C.F.

CRUSHED STONE VOLUME = [(349' x 6.0) x (EL. 15.8-EL. 13.5) - 534.0]' x 0.3 VOIDS = 1,284.7 C.F.

SUBTOTAL = 534.0 C.F. + 1,284.7 C.F. = 1,818.7 C.F.

INFILTRATION SYSTEM "S3A"

18" PERFORATED PIPE INFILTRATION SYSTEM WITH CRUSHED STONE.

PIPE VOLUME = (7 x 135.5' + 19.5) x π (0.75)² = 1,710.6 C.F.

CRUSHED STONE VOLUME = [(139' x 21.5' x 2') - 1710.6 C.F.] x 0.3 VOIDS = 1,279.9 C.F.

SUBTOTAL = 1,710.6 C.F. + 1,279.9 C.F. = 2,990.5 C.F.

INFILTRATION SYSTEM "S3B"

12" PERFORATED PIPE INFILTRATION SYSTEM WITH CRUSHED STONE

PIPE VOLUME = (6 x 46 + 11') x π (0.5)² = 225.4 C.F.

CRUSHED STONE VOLUME = [(49' x 13' x 1.5') - 225.4 C.F.] x 0.3 VOIDS = 219.1 C.F.

SUBTOTAL = 225.4 C.F. + 219.1 C.F. = 444.5 C.F.

INFILTRATION SYSTEM "S3C"

ROOF INFILTRATION SYSTEMS - USE 18" PERFORATED PIPE WITH CRUSHED STONE.

PIPE VOLUME = (6 x 38.5+16.5') x π (0.75)² = 437.4 C.F.

CRUSHED STONE VOLUME = [(42' x 18.5' x 2.0') -437.4 C.F.] x 0.3 VOIDS =335.0 C.F.

SUBTOTAL = 437.4 C.F. + 335.0 C.F. = 772.4 C.F.

TOTAL VOLUME PROVIDED = SYSTEMS "S2A" + "S3A" + "S3B" + "S3C"
= 1,818.7 + 2,990.5 C.F. + 444.5 C.F. + 772.4 C.F. = 6026.1 C.F.

TOTAL VOLUME PROVIDED = 6,026.1 C.F.

STORMWATER STORAGE VOLUME = 6,026.1 C.F. > 5,893.3 C.F. (FROM A 1/2 INCH RAINFALL EVENT)

SERVICE CONNECTION TABLE

	ITEM	QTY	BWSC INSPECTOR/DATE
A1	4" SEWER SERVICE	1	
A2	4" SEWER SERVICE	1	
A3	4" SEWER SERVICE	1	
B1	6" SEWER SERVICE	1	
B2	6" SEWER SERVICE	1	
B3	6" SEWER SERVICE	1	
C1	SEWER MANHOLE	1	
SMH 17	SEWER MANHOLE	1	
SMH 18	SEWER MANHOLE	1	
C2	SEWER MANHOLE	1	
SMH 24	SEWER MANHOLE	1	
SMH 19	SEWER MANHOLE	1	
D1	GAS/OIL/SAND SEPARATOR	1	
D2	GAS/OIL/SAND SEPARATOR	1	
D3	GAS/OIL/SAND SEPARATOR	1	
E1	8" SEWER CONNECTION SMH 16	2	
E2	8" SEWER CONNECTION SMH 20	2	
F	4" DOMESTIC WATER SERVICE	1	
G	8" FIRE SERVICE	1	
H1	INFILTRATION SYSTEM S3A	1	
H2	INFILTRATION SYSTEM S3B	1	
H3	INFILTRATION SYSTEM S3C	1	
I	INFILTRATION TRENCH	1	
J1	DRAIN MANHOLE	1	
J2	DRAIN MANHOLE	1	
K1	OUTLET CONTROL MANHOLE S3A	1	
K2	OUTLET CONTROL MANHOLE S3B	1	
K3	OUTLET CONTROL MANHOLE S3C	1	
L1	WQO CB1	1	
L2	WQO CB2	1	
L3	WQO CB3	1	
L4	WQO CB4	1	
M	DRAIN CONNECTION	1	
N	DYE TEST - SEWER	1	
O	DYE TEST - DRAIN	1	
P	DON'T DUMP PLAQUE	4	
Q	CUT & CAP WATER	2	
R	CUT & CAP SEWER	3	

SPECIAL CONDITIONS

ITEM	BWSC INSPECTOR/DATE
AS-BUILT PLAN	
CONDITIONS LETTER	

Account Number X Parcel Number 2674 Ward 6
Property Location 25 FID KENNEDY AVENUE
Project Name 25 FID KENNEDY
Neighborhood SOUTH BOSTON Extended Zip Code 02210
Owner (SEE BELOW)
Type of Premise I Meter Size 1.5" Inside X Outside

Owner's Mailing Address
Name ECONOMIC DEVELOPMENT AND INDUSTRIAL CORPORATION c/o BOSTON REDEVELOPMENT AUTHORITY
Street ONE CITY HALL SQUARE
City BOSTON State MA Zip 02201-1007
Home Phone N/A Work Phone 617-741-4464

BOSTON LAND USE CODE: "I"
INDUSTRIAL

WARD No. : 6 PARCEL No.: 2674

WATER METER INFORMATION

PROPOSED WATER ACCOUNT No. :

MTU (METER TRANSMISSION UNIT) TO BE INSTALLED BY BWSC
(PROPOSED WATER METER SIZE = 1.5 INCHES)

ANTICIPATED SEWAGE FLOW

INDUSTRIAL PLANT WITHOUT CAFETERIA :

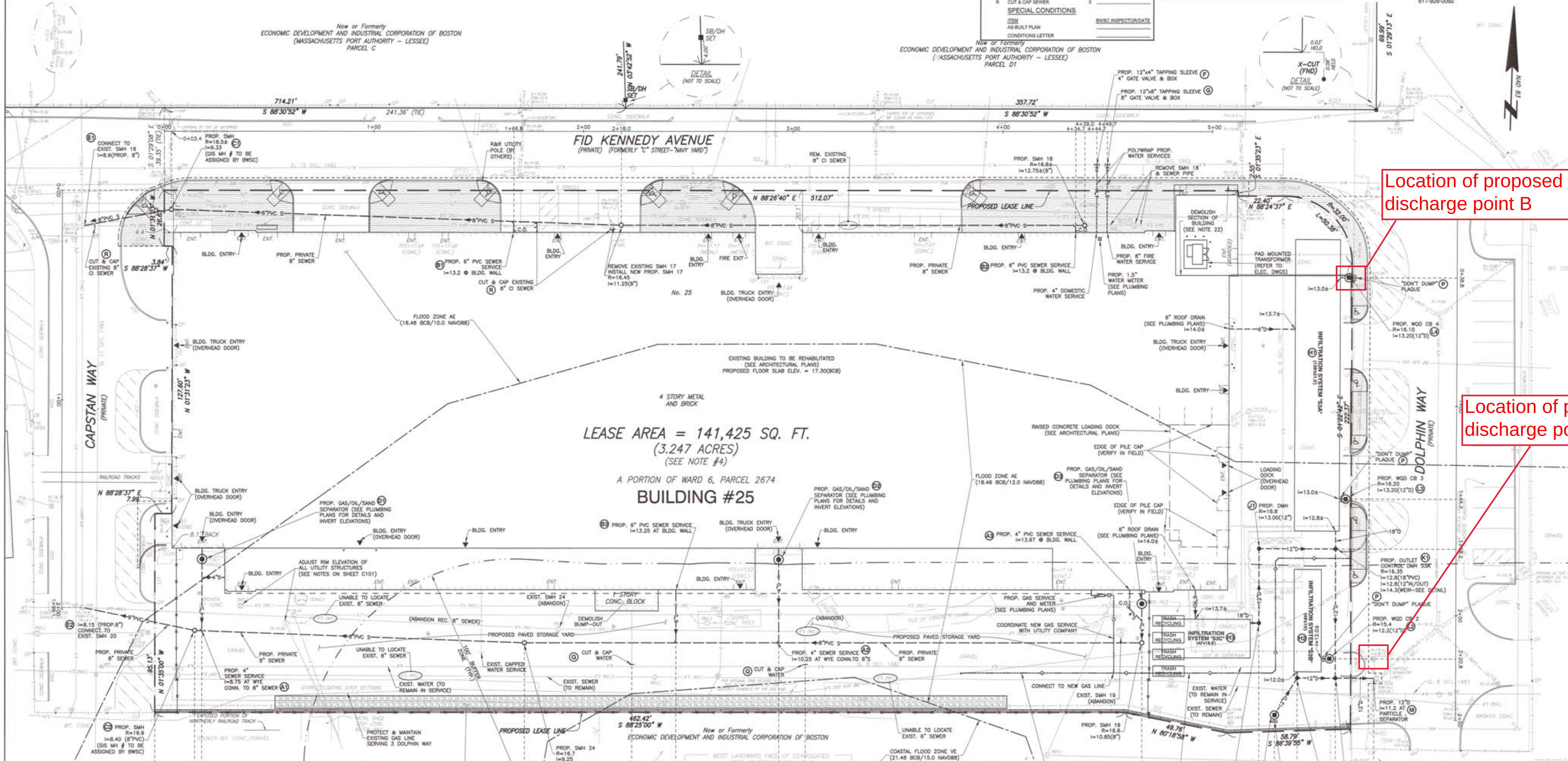
100 PERSONS x 15 GPD/PERSON = 1,500 GPD

CGP/SWPPP PERMIT TRACKING #: MAR12BH10

RESERVED FOR BWSC USE

OWNER
ECONOMIC DEVELOPMENT AND INDUSTRIAL CORPORATION
c/o BOSTON REDEVELOPMENT AUTHORITY
ONE CITY HALL SQUARE
BOSTON, MA 02201-1007
ATTN: MR. GARY UTER
617-742-4464

APPLICANT
J. C. CANNISTRARO, LLC
80 ROSEDALE ROAD
WATERTOWN, MA 02472
ATTN: JOHN CANNISTRARO
DAVID CANNISTRARO
617-926-0092



PLAN REFERENCE:
1. EXISTING CONDITIONS TAKEN FROM A DIGITAL FILE NAMED "14945-EC_submitted 2016-01-20.dwg" OF A PLAN TITLED "EXISTING CONDITIONS PLAN, 25 FID KENNEDY AVENUE, BOSTON (SOUTH BOSTON) MASS", PLAN DATED DECEMBER 15, 2015 AND LAST REVISED ON MARCH 9, 2016. PLAN WAS PREPARED BY FELDMAN LAND SURVEYORS.
2. EXISTING BUILDING MODIFICATIONS TAKEN FROM A DIGITAL FILE NAMED "A100.dwg" OF A PLAN TITLED "SITE PLAN" AND DATED JANUARY 15, 2016. PLAN WAS PREPARED BY BARGMANN HENDRIE + ARCHETYPE, INC OF BOSTON MA. DIGITAL FILE WAS RECEIVED VIA EMAIL ON JANUARY 18, 2016.

ARCHITECT
bh+a
Bargmann Hendrie + Archetype, Inc.
300 A Street
Boston, MA 02210
617 350-0450 Tel

PROJECT NAME
25 Fid Kennedy
25 Fid Kennedy Avenue
South Boston, MA 02210

CLIENT
J.C. Cannistraro, LLC
80 Rosedale Road
Watertown, MA 02472

PROJECT TEAM

Architect
Bargmann Hendrie + Archetype, Inc.
300 A Street
Boston, MA 02210
617-350-0450

Civil Engineer
H.W. Moore Associates, Inc.
112 Shawmut Avenue
Boston, MA 02118
617-357-8145

Structural Engineer
McNamara Salvia
101 Federal Street, 11'th Floor
Boston, MA 02110
617-737-0040

Mechanical, Electrical, Plumbing, Life Safety
AHA Consulting Engineers
24 Hartwell Avenue, Third Floor
Lexington, MA 02421
781-372-3000

Fire Protection
J.C. Cannistraro, LLC
80 Rosedale Road
Watertown, MA 02471
617-926-0092

REVISIONS
1
2
3
4
5
6
DATE

DRAWING TITLE
UTILITY SITE PLAN

DRAWING INFORMATION

JAMES M. WHITE CIVIL No. 32148 REGISTERED PROFESSIONAL ENGINEER

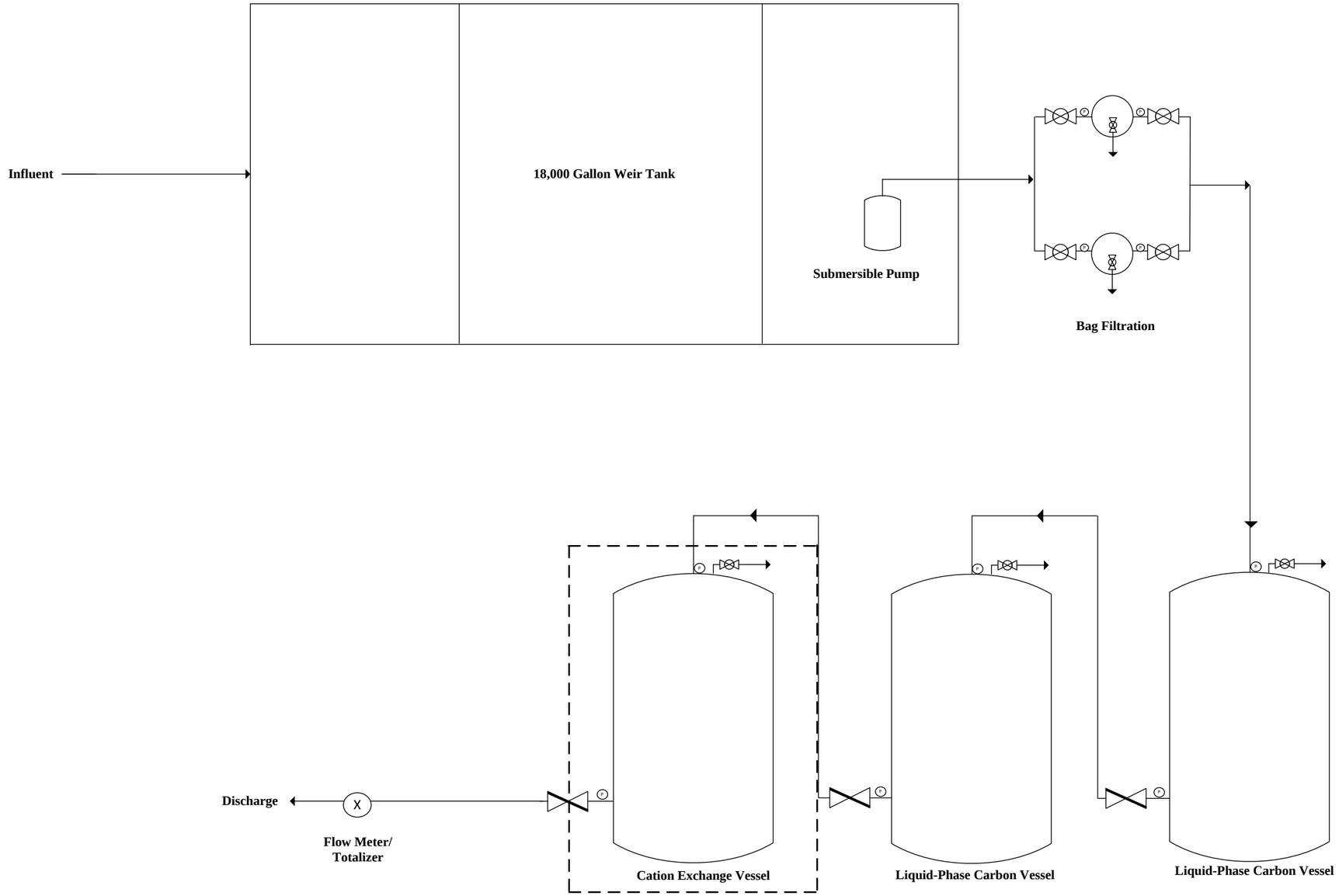
July 29, 2016
DATE OF ISSUE

DESCRIPTION

1" = 20' SCALE
jsg DRAWN BY
HWM-3691 PROJECT #
3691 FILE NAME

DRAWING NUMBER
C101
BWSC # 16095

3691-S13.dwg Saved: 7/28/2016 10:17 AM Plotted: Jul 28, 2016 10:28am



Notes:
1. Figure not drawn to scale
2. System rated for 50 GPM
3. Contingency — — — — .

Lockwood Remediation Technologies, LLC
89 Crawford Street
Leominster, MA 01453
Office: 774-450-7177

DESIGNED BY: LRT DRAWN BY: T. Hagie

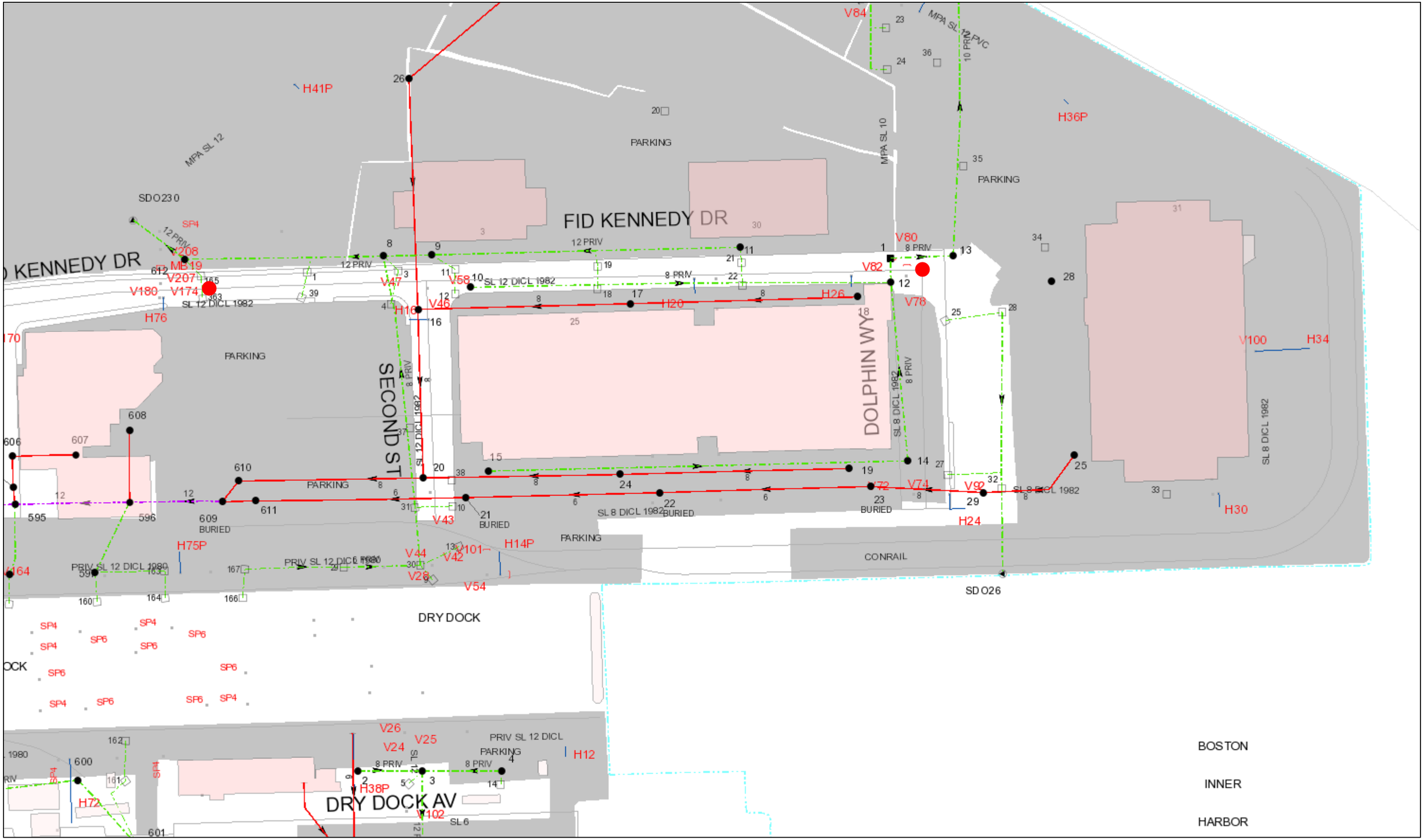
DATE: 2/8/17 REVISION:

Water Treatment System Schematic

25 Fid Kennedy Avenue
Boston, Massachusetts

PROJECT No.

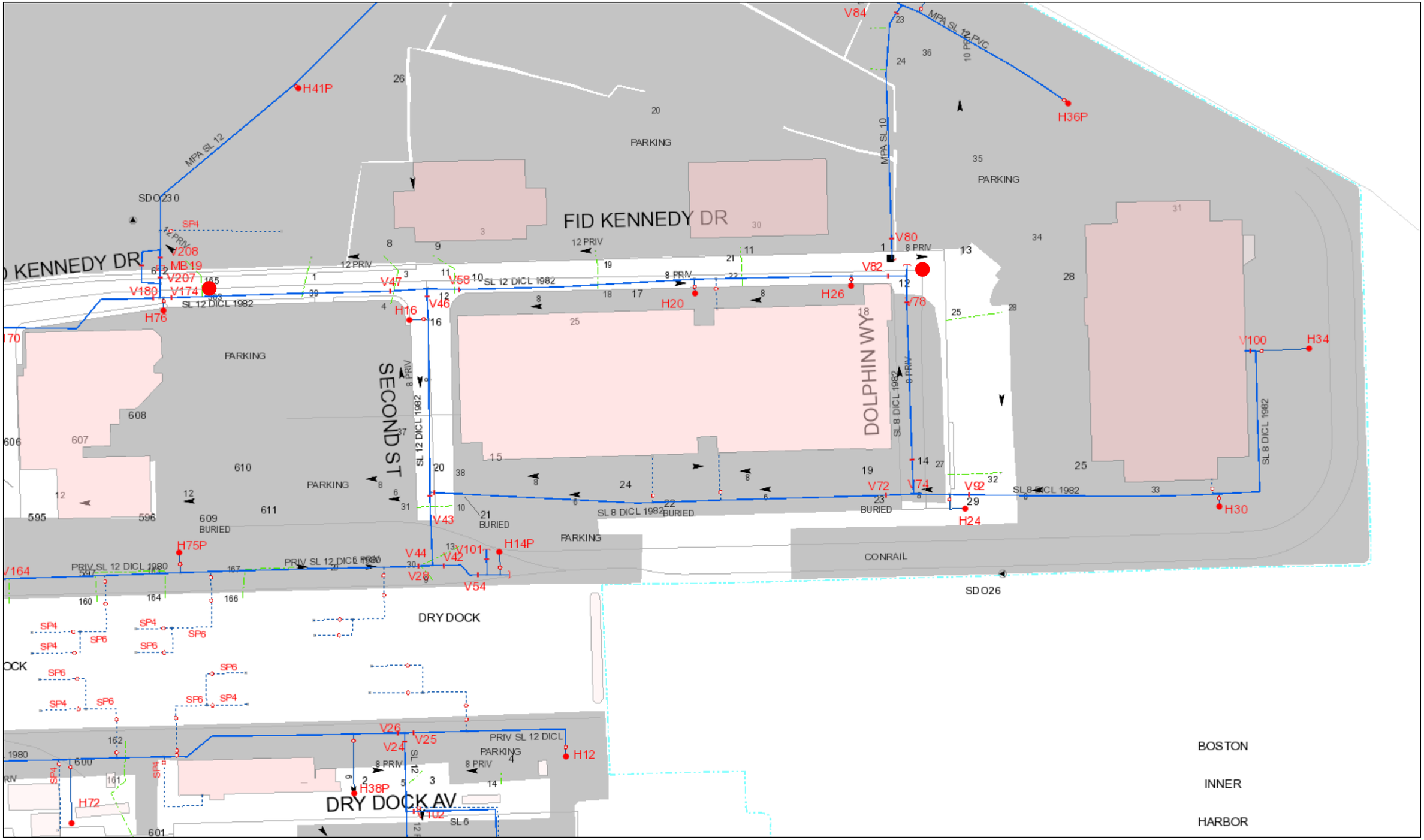
FIGURE No.



BOSTON WATER AND SEWER

N
W E
S

0 35 70 140 210 280 Feet



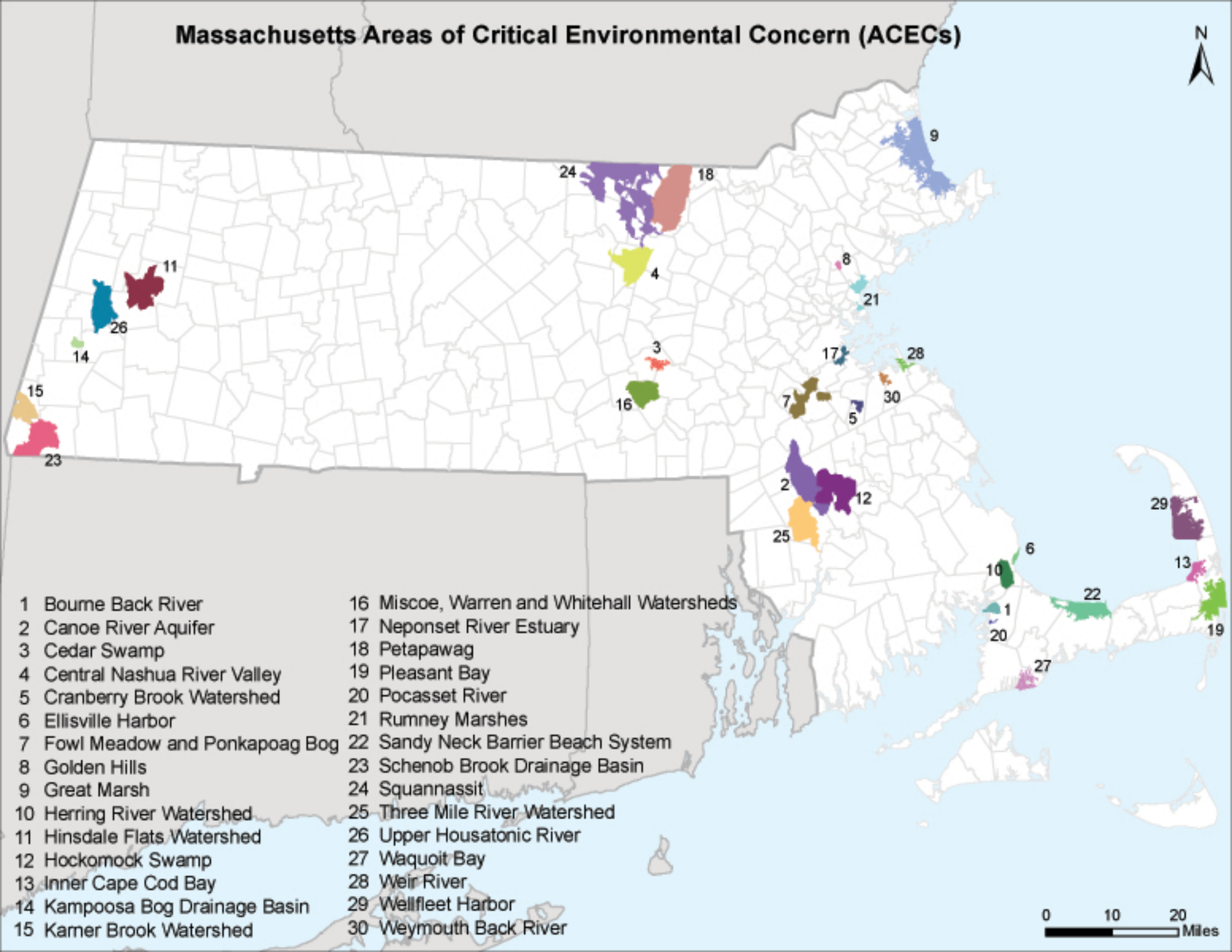
BOSTON WATER AND SEWER

N W E S

0 35 70 140 210 280 Feet

APPENDIX G

Massachusetts Areas of Critical Environmental Concern (ACECs)



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

MASSACHUSETTS AREAS OF CRITICAL ENVIRONMENTAL CONCERN
November 2010

Total Approximate Acreage: 268,000 acres
Approximate acreage and designation date follow ACEC names below.

Bourne Back River
(1,850 acres, 1989) Bourne

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

Cedar Swamp
(1,650 acres, 1975) Hopkinton and Westborough

Central Nashua River Valley
(12,900 acres, 1996) Bolton, Harvard, Lancaster, and Leominster

Cranberry Brook Watershed
(1,050 acres, 1983) Braintree and Holbrook

Ellisville Harbor
(600 acres, 1980) Plymouth

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

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

Great Marsh (originally designated as Parker River/Essex Bay)
(25,500 acres, 1979) Essex, Gloucester, Ipswich, Newbury, and Rowley

Herring River Watershed
(4,450 acres, 1991) Bourne and Plymouth

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

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

Inner Cape Cod Bay
(2,600 acres, 1985) Brewster, Eastham, and Orleans

Kampoosa Bog Drainage Basin
(1,350 acres, 1995) Lee and Stockbridge

Karner Brook Watershed
(7,000 acres, 1992) Egremont and Mount Washington

Miscoe, Warren, and Whitehall Watersheds
(8,700 acres, 2000) Grafton, Hopkinton, and Upton

Neponset River Estuary
(1,300 acres, 1995) Boston, Milton, and Quincy

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

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

Pocasset River
(160 acres, 1980) Bourne

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

Sandy Neck Barrier Beach System
(9,130 acres, 1978) Barnstable and Sandwich

Schenob Brook Drainage Basin
(13,750 acres, 1990) Mount Washington and Sheffield

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

Three Mile River Watershed
(14,280 acres, 2008) Dighton, Norton, Taunton

Upper Housatonic River
(12,280 acres, 2009) Lee, Lenox, Pittsfield, Washington

Waquoit Bay
(2,580 acres, 1979) Falmouth and Mashpee

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

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

Weymouth Back River
(800 acres, 1982) Hingham and Weymouth

ACEC acreages above are based on MassGIS calculations and may differ from numbers originally presented in designation documents and other ACEC publications due to improvements in accuracy of GIS data and boundary clarifications. Listed acreages have been rounded to the nearest 50 or 10 depending on whether boundary clarification has occurred. For more information please see, http://www.mass.gov/dcr/stewardship/acec/aboutMaps.htm.

Towns with ACECs within their Boundaries — November 2010

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

.

APPENDIX H

Massachusetts Cultural Resource Information System

MACRIS

MACRIS Search Results

Search Criteria: Town(s): Boston; Place: South Boston; Resource Type(s): Area, Building, Burial Ground, Object, Structure;

Inv. No.	Property Name	Street	Town	Year
BOS.CX	Fort Point Channel District		Boston	
BOS.IQ	Old Harbor Village		Boston	
BOS.IR	Dorchester Heights National Historic Site		Boston	
BOS.IU	Saint Augustine Chapel and Cemetery		Boston	
BOS.IV	South Boston Waterfront District		Boston	
BOS.RT	Boston Army Supply Base		Boston	
BOS.RU	C Street Industrial Area		Boston	
BOS.RV	King Terminal		Boston	
BOS.SI	Cathedral of Saint George Historic District		Boston	
BOS.TP	Dorchester Heights Historic District		Boston	
BOS.WQ	Gate of Heaven Roman Catholic Church Complex		Boston	
BOS.WR	Our Lady of Czestochowa Roman Catholic Church		Boston	
BOS.WS	Saint Augustine Roman Catholic Church Complex		Boston	
BOS.WT	Saint Brigid Roman Catholic Church Complex		Boston	
BOS.WU	Saint Peter (Lithuanian) Roman Catholic Church		Boston	
BOS.WV	Saints Peter and Paul Roman Catholic Church		Boston	
BOS.WW	Saint Vincent de Paul Roman Catholic Church		Boston	
BOS.WZ	Fort Point Channel Historic District		Boston	
BOS.YG	South Boston Boat Clubs Historic District		Boston	
BOS.ZD	Old Harbor Reservation Parkways		Boston	
BOS.ZG	Fort Point Channel Landmark District		Boston	
BOS.AAU	Beckler Avenue, 1-16		Boston	
BOS.6815	Dahlquist Coppersmiths Manufacturing Company	87-97 A St	Boston	r 1895
BOS.6816	United States Post Office Garage	135 A St	Boston	1941
BOS.5498	Boston Wharf Company Warehouse	168-170 A St	Boston	1897

Inv. No.	Property Name	Street	Town	Year
BOS.5499	Boston Wharf Company Warehouse	169 A St	Boston	1919
BOS.5500	Boston Wharf Company Warehouse	172-174 A St	Boston	1897
BOS.5501	Boston Wharf Company Warehouse	176-178 A St	Boston	1897
BOS.5502	Boston Wharf Company Warehouse	191-205 A St	Boston	1919
BOS.5503	Boston Wharf Company Building	207-209 A St	Boston	1916
BOS.5504	Boston Wharf Company Building	211-213 A St	Boston	1915
BOS.5505	Boston Wharf Company Warehouse	215-225 A St	Boston	1922
BOS.5506	Boston Wharf Company Warehouse	227-229 A St	Boston	1903
BOS.5507	Barlow, Frederick Building	239-241 A St	Boston	c 1895
BOS.5508	Factory Buildings Trust Industrial Building #5	249-255 A St	Boston	c 1895
BOS.5509	Keith, George E. Shoe Factory	288-304 A St	Boston	1912
BOS.5510	Boston Wharf Company Warehouse	289-293 A St	Boston	1893
BOS.5511	Boston Wharf Company Warehouse	319-321 A St	Boston	1913
BOS.15340	Dwinell - Wright Company Warehouse	319R A St	Boston	1923
BOS.15342	A Street Deli	324 A St	Boston	1945
BOS.15343	Boston Button Company Warehouse	326 A St	Boston	1889
BOS.12944	McDonald, Matt J. Company Special Steel Company	3 Anchor Way	Boston	c 1980
BOS.6817	Pike, Jacob - Abbott, Timothy Double House	92-94 B St	Boston	c 1834
BOS.6818	Boston Fire Department Hose Company #9	116 B St	Boston	1860
BOS.6819	Lawrence School	125 B St	Boston	1856
BOS.9652	Old Harbor Parkway - Babe Ruth Park Drive	Babe Ruth Park Dr	Boston	1924
BOS.6828	Beckler Avenue Rowhouse	1 Beckler Ave	Boston	c 1872
BOS.6820	Beckler Avenue Rowhouse	2 Beckler Ave	Boston	c 1872
BOS.6829	Beckler Avenue Rowhouse	3 Beckler Ave	Boston	c 1872
BOS.6821	Beckler Avenue Rowhouse	4 Beckler Ave	Boston	c 1872
BOS.6830	Beckler Avenue Rowhouse	5 Beckler Ave	Boston	c 1872
BOS.6822	Beckler Avenue Rowhouse	6 Beckler Ave	Boston	c 1872
BOS.6831	Beckler Avenue Rowhouse	7 Beckler Ave	Boston	c 1872
BOS.6823	Beckler Avenue Rowhouse	8 Beckler Ave	Boston	c 1872
BOS.6832	Beckler Avenue Rowhouse	9 Beckler Ave	Boston	c 1872
BOS.6824	Beckler Avenue Rowhouse	10 Beckler Ave	Boston	c 1872
BOS.6833	Beckler Avenue Rowhouse	11 Beckler Ave	Boston	c 1872
BOS.6825	Beckler Avenue Rowhouse	12 Beckler Ave	Boston	c 1872
BOS.6834	Beckler Avenue Rowhouse	13 Beckler Ave	Boston	c 1872
BOS.6826	Beckler Avenue Rowhouse	14 Beckler Ave	Boston	c 1872
BOS.6835	Beckler Avenue Rowhouse	15 Beckler Ave	Boston	c 1872
BOS.6827	Beckler Avenue Rowhouse	16 Beckler Ave	Boston	c 1872

Inv. No.	Property Name	Street	Town	Year
BOS.5512	Factory Buildings Trust Industrial Building #1	14-18 Binford St	Boston	1895
BOS.5513	Factory Buildings Trust Industrial Building #2	22-30 Binford St	Boston	1895
BOS.5514	Factory Buildings Trust Industrial Building #3	32-40 Binford St	Boston	1895
BOS.5515	Factory Buildings Trust Industrial Building #4	42-48 Binford St	Boston	1895
BOS.12945	Boston Army Supply Base - Wharf Shed	1 Black Falcon Dr	Boston	1918
BOS.15332	Saint Vincent de Paul Roman Catholic Rectory	201 Bolton St	Boston	r 1870
BOS.9243	Boston Street Bridge over MBTA	Boston St	Boston	1925
BOS.15322	Saint Mary's Roman Catholic Parochial School	46 Boston St	Boston	1911
BOS.6836	Broadway Streetcar - Broadway Bus Staton	Broadway Ave	Boston	1919
BOS.9247	Broadway Bridge over Fort Point Channel	Broadway Ave	Boston	1914
BOS.9249	Broadway Subway Station	Broadway Ave	Boston	1917
BOS.6837		450-454 Broadway Ave	Boston	r 1895
BOS.12973	Gahm, Joseph and Son Bottling Plant	340 C St	Boston	1908
BOS.12974	Brooklyn Cooperage Co. Kiln Building & Cooper Shop	352 C St	Boston	1904
BOS.12975	Brooklyn Cooperage Co. Storage & Shipping Building	360-366 C St	Boston	c 1904
BOS.12976	Standard Sanitary Manufacturing Company Building	365 C St	Boston	1924
BOS.12977		445 C St	Boston	1924
BOS.12978		475 C St	Boston	1919
BOS.12979	Brown and Wales Steel and Iron Company Warehouse	489-493 C St	Boston	c 1910
BOS.6838	Fort Independence	Castle Island	Boston	1809
BOS.5546	Boston Wharf Company Warehouse	1-5 Channel Center St	Boston	1916
BOS.5547	Boston Wharf Company Warehouse	1-5 Channel Center St	Boston	1914
BOS.5548	Abbott, W. Herbert, Inc. Building	1-5 Channel Center St	Boston	1913
BOS.5543	Boston Wharf Company Warehouse	15 Channel Center St	Boston	c 1914
BOS.5544	Boston Wharf Company Warehouse	15 Channel Center St	Boston	1911
BOS.5545	Boston Wharf Company Warehouse	15 Channel Center St	Boston	1912
BOS.5541	Boston Wharf Company Warehouse	35 Channel Center St	Boston	1902
BOS.12946	Boston Army Supply Base - Building 17	7 Channel St	Boston	c 1940
BOS.8062	Boston Army Supply Base Steam Locomotive Shop	11 Channel St	Boston	1918
BOS.12947	Boston Army Supply Base - Building 32	12 Channel St	Boston	c 1940
BOS.9648	Old Harbor Reservation Parkway - Columbia Road	Columbia Rd	Boston	1897
BOS.9649	Old Harbor Parkway - Columbia Road Median Strip	Columbia Rd	Boston	1897
BOS.9650	Old Harbor Parkway - Laporte, Joseph E.	Columbia Rd	Boston	1965

Inv. No.	Property Name	Street	Town	Year
	Monument			
BOS.9653	Old Harbor Reservation Parkway - Preble Circle	Columbia Rd	Boston	c 1941
BOS.9656	Old Harbor Reservation Parkway - Columbia Circle	Columbia Rd	Boston	1924
BOS.9657	Old Harbor Parkway - Kosciuszko, Tadeusz Monument	Columbia Rd	Boston	1951
BOS.9651	Old Harbor Parkway - Columbus Park Headworks	1305 Columbia Rd	Boston	1967
BOS.6839	Johnson, Samuel W. Three Decker	1650 Columbia Rd	Boston	1913
BOS.6840	Johnson, Samuel W. Three Decker	1654 Columbia Rd	Boston	1913
BOS.6841	Johnson, Samuel W. Three Decker	1658 Columbia Rd	Boston	1913
BOS.6842	Johnson, Samuel W. Three Decker	1662 Columbia Rd	Boston	1913
BOS.6843	Johnson, Samuel W. Two-Family House	1736 Columbia Rd	Boston	1911
BOS.6844	Johnson, Samuel W. Three Decker	1788 Columbia Rd	Boston	1904
BOS.6845	Johnson, Samuel W. Three Decker	1790 Columbia Rd	Boston	1904
BOS.6846	Johnson, Samuel W. Three Decker	1792 Columbia Rd	Boston	1904
BOS.6855	Boston Yacht Club	1793-1805 Columbia Rd	Boston	1874
BOS.6847	Johnson, Samuel W. Three Decker	1794 Columbia Rd	Boston	1904
BOS.6852	Puritan Canoe Club	1819 Columbia Rd	Boston	1899
BOS.6853	Columbia Yacht Club	1825-1829 Columbia Rd	Boston	1899
BOS.6854	South Boston Yacht Club	1839-1849 Columbia Rd	Boston	1899
BOS.9002	Congress Street Bridge over Fort Point Channel	Congress St	Boston	1930
BOS.9510	The Beaver	Congress St	Boston	
BOS.15344	Congress Street Bridge Tenders House	Congress St	Boston	1930
BOS.15345		305 Congress St	Boston	1983
BOS.5516	New Haven Terminal Stores	308-316 Congress St	Boston	c 1890
BOS.15346	Hood, H. P. Milk Bottle	308 Congress St	Boston	1934
BOS.15347	Lombard's Congress Street Stores	313 Congress St	Boston	1886
BOS.5517	Boston Wharf Company Building	320-324 Congress St	Boston	1888
BOS.5518	Boston Wharf Company Warehouse	326-330 Congress St	Boston	1888
BOS.5519	Boston Wharf Company Warehouse	332-336 Congress St	Boston	1892
BOS.5520	American Railway Express Company Stable	343 Congress St	Boston	1888
BOS.5521	Congress Street Fire Station	344-346 Congress St	Boston	1891
BOS.5522	Chase and Company Candy Company Factory	347-351 Congress St	Boston	1887
BOS.5523	Boston Wharf Company Warehouse	348-352 Congress St	Boston	1894
BOS.5524	Boston Wharf Company Warehouse	354-358 Congress St	Boston	1900
BOS.5525	Tremont Electric Lighting Company	355-359 Congress St	Boston	c 1905
BOS.5526	Boston Wharf Company Building	364-372 Congress St	Boston	1901
BOS.5527	Boston Wharf Company Wool Warehouse	369-375 Congress St	Boston	1918

Inv. No.	Property Name	Street	Town	Year
BOS.5528	Boston Wharf Company Building	374-384 Congress St	Boston	c 1903
BOS.5529	Boston Wharf Company Building	381-389 Congress St	Boston	1907
BOS.9775	Schooner Roseway	Courthouse Pier	Boston	1925
BOS.12980	Burnett, Joseph Company Extract Building	437 D St	Boston	1921
BOS.12981		451 D St	Boston	1910
BOS.6849	Woods, S. A. Woodworking Machinery Company Stable	27-37 Damrell St	Boston	c 1886
BOS.6850	Woods, S. A. Woodworking Machinery Company	28 Damrell St	Boston	1886
BOS.9647	Old Harbor Reservation Parkway - Farragut Rotary	Day, William J. Blvd	Boston	1893
BOS.6856	Gogin, Thomas House	7 Dexter St	Boston	r 1860
BOS.6857	Roers, R. House	9 Dexter St	Boston	r 1860
BOS.6859	Clough, Joseph H. House	15 Dexter St	Boston	r 1860
BOS.6858	Clough, Joseph H. House	19 Dexter St	Boston	r 1860
BOS.6860	Ellis, Charles H. House	23 Dexter St	Boston	r 1860
BOS.6861	Wadleigh, Dexter - Sharp, William Double House	27-29 Dexter St	Boston	c 1852
BOS.13275	Stetson, Alpheus M. House	12 Dixfield St	Boston	c 1869
BOS.13276	Stetson, Alpheus M. House	14 Dixfield St	Boston	c 1869
BOS.13277		15 Dixfield St	Boston	r 1880
BOS.13278	Rich, Reuben House	16 Dixfield St	Boston	c 1869
BOS.6862	Kent, Barker B. House	17 Dixfield St	Boston	c 1849
BOS.13279	Stetson, Alpheus M. House	18 Dixfield St	Boston	c 1869
BOS.13280		19 Dixfield St	Boston	
BOS.13281		21 Dixfield St	Boston	
BOS.13282		24 Dixfield St	Boston	
BOS.13283		26 Dixfield St	Boston	
BOS.12948	Boston Army Supply Base - Building 31	3 Dolphin Way	Boston	c 1940
BOS.6864	Andrew Street Car Transfer Station	Dorchester Ave	Boston	1918
BOS.9242	Dorchester Avenue Bridge over MBTA	Dorchester Ave	Boston	1925
BOS.9244	NY, NH and H Railroad Bridge #1.08	Dorchester Ave	Boston	
BOS.9248	Andrew Subway Station	Dorchester Ave	Boston	1918
BOS.9513	Dorchester Avenue Sea Wall	Dorchester Ave	Boston	
BOS.6863	MacAllen Electric Railway Material Co. Building	135-137 Dorchester Ave	Boston	r 1905
BOS.6865	Norway Iron Works Machine Shop	383 Dorchester Ave	Boston	c 1845
BOS.15319	Our Lady of Czestochowa Roman Catholic Church	655 Dorchester Ave	Boston	1894
BOS.15320	Our Lady of Czestochowa Roman Catholic Rectory	655 Dorchester Ave	Boston	1900
BOS.15321	Our Lady of Czestochowa Roman Catholic	666 Dorchester Ave	Boston	c 1900

Inv. No.	Property Name	Street	Town	Year
	Convent			
BOS.9240	N.Y., N.H. and H. Railroad Bridge (Milepost #1.19)	Dorchester Brook	Boston	1961
BOS.6879	Unity Unitarian Chapel - Washington Village Chapel	Dorchester St	Boston	c 1860
BOS.6872	South Boston Gas Light Company	3-5 Dorchester St	Boston	c 1852
BOS.6873	Boston Engine House #1 & Municipal District Court	119-121 Dorchester St	Boston	1868
BOS.13284	White, Amos T. Three Decker	124 Dorchester St	Boston	1891
BOS.13285	Marion Manor	130 Dorchester St	Boston	1965
BOS.6866	Briggs, James Edwin House	142 Dorchester St	Boston	r 1856
BOS.6867	Sears, Jabez H. - Woods, Solomon A. House	146 Dorchester St	Boston	1859
BOS.13286	Morse, Albert House	149 Dorchester St	Boston	r 1860
BOS.13287	Whitcher, Martin C. House	151 Dorchester St	Boston	r 1860
BOS.13288		153 Dorchester St	Boston	r 1860
BOS.13289	Hall, Daniel Double House	154 Dorchester St	Boston	c 1852
BOS.13290	Silsby, Thomas J. House	155 Dorchester St	Boston	c 1852
BOS.13291	Adams, Orison Double House	156 Dorchester St	Boston	c 1852
BOS.13292	Orcutt, William K. House	158 Dorchester St	Boston	r 1860
BOS.13293	Pearson, E. House	159 Dorchester St	Boston	r 1860
BOS.13294	Giles, S. House	160 Dorchester St	Boston	r 1860
BOS.13295		161 Dorchester St	Boston	r 1860
BOS.6868	Lincoln, Charles House	162 Dorchester St	Boston	1858
BOS.13296	Bail, William V. House	164 Dorchester St	Boston	r 1860
BOS.6875	Rose, George Double House	165-169 Dorchester St	Boston	r 1855
BOS.13297	Collins, Jeremiah House	170 Dorchester St	Boston	r 1860
BOS.13298	Thayer, Samuel J. F. House	172 Dorchester St	Boston	c 1865
BOS.811	Saint Augustine Cemetery	181 Dorchester St	Boston	1819
BOS.7180	Saint Augustine Roman Catholic Chapel	181 Dorchester St	Boston	1819
BOS.6869	Mason, William H. House	200 Dorchester St	Boston	r 1855
BOS.6876	Saint Augustine Roman Catholic Church and Rectory	225 Dorchester St	Boston	c 1870
BOS.6870	Boston Fire House Horse Hose Company #10	330 Dorchester St	Boston	1861
BOS.6871	Dorchester Street Methodist Episcopal Church	340 Dorchester St	Boston	c 1889
BOS.6877	Richmond, Augustus C. House	351 Dorchester St	Boston	c 1873
BOS.6878	Hussey, Robert House	381 Dorchester St	Boston	c 1866
BOS.6880		397-403 Dorchester St	Boston	c 1910
BOS.9427	Boston Army Supply Base - Dry Dock #3	Dry Dock Ave	Boston	c 1914
BOS.12949	Boston Army Supply Base - Building 114	Dry Dock Ave	Boston	1918

Inv. No.	Property Name	Street	Town	Year
BOS.12952	Boston Army Supply Base - Parking Garage	Dry Dock Ave	Boston	c 1980
BOS.12957	Boston Army Supply Base - Building 22	Dry Dock Ave	Boston	c 1918
BOS.12958	Boston Army Supply Base - Building 23	Dry Dock Ave	Boston	c 1918
BOS.12961	Boston Army Supply Base - Building 40	Dry Dock Ave	Boston	c 1918
BOS.12962	Boston Army Supply Base - Buildings 117 and 113	Dry Dock Ave	Boston	1918
BOS.12950	Boston Army Supply Base - Building 15	10 Dry Dock Ave	Boston	c 1940
BOS.12951	British Airways World Cargo Building	15 Dry Dock Ave	Boston	c 1980
BOS.12953	Boston Army Supply Base - Building 20	20 Dry Dock Ave	Boston	c 1940
BOS.12954	Boston Army Supply Base - Public Works Building	22 Dry Dock Ave	Boston	c 1940
BOS.12955	Boston Army Supply Base - Building 21	24-26 Dry Dock Ave	Boston	c 1940
BOS.12959	Boston Army Supply Base - Building 1	32 Dry Dock Ave	Boston	c 1918
BOS.12960	Coastal Cement Corporation	39 Dry Dock Ave	Boston	c 1980
BOS.6881	Saint Augustine Roman Catholic Parochial School	201 E St	Boston	1893
BOS.15324	Saint Augustine Roman Catholic Church Convent	207 E St	Boston	1926
BOS.7119	Glynn, Martin T. and William Apartment Building	313 E St	Boston	1897
BOS.6882	Fletcher, Henry W. Double House	336-338 E St	Boston	c 1852
BOS.6883	Harris, James W. Double House	368-370 E St	Boston	c 1852
BOS.9257	Farragut, Adm. David Glasgow Statue	East Broadway	Boston	1893
BOS.9259	Independence Square	East Broadway	Boston	1855
BOS.6952	James, Francis Row House	495 East Broadway	Boston	1860
BOS.6918	Monks, John P. - Howes, Osborn Double House	512-514 East Broadway	Boston	1845
BOS.6919	Kenney, John - Hersey, Francis C. Double House	516 East Broadway	Boston	1874
BOS.14295	James, George B. House	517 East Broadway	Boston	c 1868
BOS.6921	Bill, Abner D. House	520 East Broadway	Boston	c 1868
BOS.6884	Cathedral of Saint George	523 East Broadway	Boston	1872
BOS.14296	Jenney, Bernard House	525 East Broadway	Boston	1868
BOS.6922	Stover, Theophilus - Jenkins, Joshua House	534 East Broadway	Boston	c 1856
BOS.6885	South Boston Municipal Building	535 East Broadway	Boston	1913
BOS.6923	Souther, Henry - Gavin, Dr. Michael Freeborn House	546 East Broadway	Boston	1868
BOS.6924	Meins, Walter R. Row House	548 East Broadway	Boston	1871
BOS.6925	Vance, Samuel Row House	550 East Broadway	Boston	1871
BOS.6926		552 East Broadway	Boston	1871
BOS.6927		554 East Broadway	Boston	1871
BOS.6928		556 East Broadway	Boston	1871
BOS.6929	Warner, William D. Row House	558 East Broadway	Boston	1871

Inv. No.	Property Name	Street	Town	Year
BOS.6930		560 East Broadway	Boston	1871
BOS.6931	Warner, William D. Row House	562 East Broadway	Boston	1871
BOS.6886	Driscoll, Mitchell J. House	585 East Broadway	Boston	1892
BOS.6887		705 East Broadway	Boston	1859
BOS.6888		707 East Broadway	Boston	1859
BOS.6889		709 East Broadway	Boston	1859
BOS.6890		711 East Broadway	Boston	1859
BOS.6932	Pilgrim Hall	732-734 East Broadway	Boston	1890
BOS.6933	Handy, Lottie G. Row House	766 East Broadway	Boston	1874
BOS.6891	Warner, William H. House	767 East Broadway	Boston	c 1858
BOS.6934	Cobb Lime Company Row House	768 East Broadway	Boston	1874
BOS.6935	Cobb Lime Company Row House	770 East Broadway	Boston	1874
BOS.6892	Scott, John M. - Bixby, Sampson L. Double House	771-773 East Broadway	Boston	c 1867
BOS.6936	Cobb Lime Company Row House	772 East Broadway	Boston	1874
BOS.6937	Cobb Lime Company Row House	774 East Broadway	Boston	1874
BOS.6893	Scott, John M. Double House	775-777 East Broadway	Boston	1868
BOS.6938	Whitney, William A. House	776 East Broadway	Boston	1875
BOS.6939	Whitney, William A. House	778 East Broadway	Boston	1873
BOS.6894	Scott, John M. Double House	779-781 East Broadway	Boston	1868
BOS.6940	Hawes, Walter E. House	780 East Broadway	Boston	1870
BOS.6941	Gray, Solomon S. - Dana, Otis D. Stable	786 East Broadway	Boston	r 1870
BOS.6895	Scott, John M. House	787 East Broadway	Boston	c 1862
BOS.6942	Gray, Solomon S. - Dana, Otis D. House	788 East Broadway	Boston	c 1866
BOS.6896	Loring, Harrison House	789 East Broadway	Boston	1865
BOS.6897	Clark, William H. Row House	797 East Broadway	Boston	1868
BOS.6898	Moore, Alexander Row House	799 East Broadway	Boston	1868
BOS.6899	Souther, Joaquim Row House	801 East Broadway	Boston	1868
BOS.6900	Souther, John T. Row House	803 East Broadway	Boston	1868
BOS.6901	Brown, Albert Row House	805 East Broadway	Boston	1868
BOS.6902	Brown, Albert Row House	807 East Broadway	Boston	1868
BOS.6903	Hall, Leonard Row House	809 East Broadway	Boston	1868
BOS.6904	Canfield, Rev. C. T. Row House	811 East Broadway	Boston	1868
BOS.6905	Murray, Mary E. T. Row House	813 East Broadway	Boston	c 1870
BOS.6906	Tay, Rodney S. Row House	815 East Broadway	Boston	c 1870
BOS.6907	Gibbs, Horace G. Row House	817 East Broadway	Boston	c 1870
BOS.6908	Baker, Mary Row House	819 East Broadway	Boston	c 1870
BOS.6909	Baker, Charles H. Row House	821 East Broadway	Boston	c 1870

Inv. No.	Property Name	Street	Town	Year
BOS.6910	Bemis, Emily Row House	823 East Broadway	Boston	c 1870
BOS.6911	Hall, Francis D. Row House	825 East Broadway	Boston	c 1870
BOS.6912	Scott, John M. Row House	827 East Broadway	Boston	c 1870
BOS.6943	Whiton, Lewis C. House	838 East Broadway	Boston	c 1869
BOS.15326	Saint Brigid Roman Catholic Church Rectory	845 East Broadway	Boston	c 1917
BOS.15327	Saint Brigid Roman Catholic Church School	866 East Broadway	Boston	1964
BOS.6944		898-904 East Broadway	Boston	1886
BOS.6914	Gleeson, James A. Double House	901-903 East Broadway	Boston	c 1865
BOS.6915	Clark, Henry S. Three Decker	925 East Broadway	Boston	1907
BOS.6916	Blake, Samuel House	927-931R East Broadway	Boston	1835
BOS.6945	Collins, James Mansion	928 East Broadway	Boston	1867
BOS.6946	Collins, James Row House	934 East Broadway	Boston	1884
BOS.6947	Collins, James Row House	936 East Broadway	Boston	1884
BOS.6948	Collins, James Row House	938 East Broadway	Boston	1884
BOS.6949	Collins, James Row House	940 East Broadway	Boston	1884
BOS.6950	Collins, James Row House	942 East Broadway	Boston	1884
BOS.6917	Taylor, William H. House	945 East Broadway	Boston	1939
BOS.6951	Falvey, J. H. House	948 East Broadway	Boston	r 1900
BOS.13299		344 East Eighth St	Boston	c 1884
BOS.13300	Graf, Emily House	348 East Eighth St	Boston	r 1885
BOS.13301	Stapleton, B. J. and E. House	350 East Eighth St	Boston	r 1885
BOS.13302	Towle, A. J. and William House	352 East Eighth St	Boston	r 1885
BOS.13303	Devine - Wenzler House	354 East Eighth St	Boston	r 1885
BOS.13304	McCarthy - Clark House	356 East Eighth St	Boston	r 1885
BOS.13305	Grafter, William House	358 East Eighth St	Boston	r 1885
BOS.13306	Barth, Sophie A. House	360 East Eighth St	Boston	r 1885
BOS.13307		362 East Eighth St	Boston	r 1980
BOS.13308		364 East Eighth St	Boston	r 1980
BOS.13309		366 East Eighth St	Boston	r 1885
BOS.6966	Arion Hall - German-American Singing Society	367 East Eighth St	Boston	1892
BOS.13310		368 East Eighth St	Boston	r 1885
BOS.13311		370 East Eighth St	Boston	r 1885
BOS.13312		372 East Eighth St	Boston	r 1885
BOS.13313		374 East Eighth St	Boston	r 1885
BOS.13314		412 East Eighth St	Boston	r 1890
BOS.13315		413 East Eighth St	Boston	r 1890
BOS.13316		414 East Eighth St	Boston	r 1890
BOS.13317		415 East Eighth St	Boston	r 1890

Inv. No.	Property Name	Street	Town	Year
BOS.13318		417 East Eighth St	Boston	r 1865
BOS.13319		419 East Eighth St	Boston	r 1865
BOS.13320		421 East Eighth St	Boston	r 1865
BOS.13321		428 East Eighth St	Boston	r 1880
BOS.6963	Ellis, Albert House	582 1/2 East Eighth St	Boston	c 1845
BOS.6967	Spinney, Samuel R. House	601 East Eighth St	Boston	1853
BOS.7087	Sharp, John H. House	673 East Eighth St	Boston	1858
BOS.7088	Sharp, John H. House	675 East Eighth St	Boston	1858
BOS.7089	Sharp, John H. House	679 East Eighth St	Boston	1858
BOS.6964	Johnson, Samuel W. Three Decker	690 East Eighth St	Boston	1909
BOS.6965	Perry, Oliver Hazard Grammar School	770 East Eighth St	Boston	1904
BOS.13322		390 East Fifth St	Boston	r 1865
BOS.13323	Thompson, A. D. House	391 East Fifth St	Boston	r 1865
BOS.13324		392 East Fifth St	Boston	r 1865
BOS.13325	Manson, George H. House	393 East Fifth St	Boston	r 1865
BOS.13326		395 East Fifth St	Boston	r 1865
BOS.13327		397 East Fifth St	Boston	r 1865
BOS.6793	Perkins Institute for the Blind Rental Housing	422-424 East Fifth St	Boston	1893
BOS.6794	Emerson, Jacob House	562 East Fifth St	Boston	1847
BOS.6795	Hawes, John House	568 East Fifth St	Boston	c 1805
BOS.6796	Hathaway, Hiram F. House	611 East Fifth St	Boston	c 1852
BOS.6797	Masury, Joseph Double House	620-622 East Fifth St	Boston	1848
BOS.6798	Wheaton, Timothy Building	779 East Fifth St	Boston	1886
BOS.6800	Collins, James Apartment Block	828-834 East Fifth St	Boston	c 1880
BOS.6801	Harriss, John A. House	847 East Fifth St	Boston	c 1852
BOS.6802	Griffith, Mary A. - Butler, N. House	848 East Fifth St	Boston	c 1870
BOS.6803	Gleason, Michael House	855 East Fifth St	Boston	c 1856
BOS.12994		East First St	Boston	r 1950
BOS.12991		564 East First St	Boston	1919
BOS.12992	Grueby Faience Company Work Shop	566 East First St	Boston	c 1899
BOS.12993		570 East First St	Boston	r 1920
BOS.6752	Condit Electrical Company Building	603-609 East First St	Boston	1915
BOS.6753	Boston Elevated Railway South Boston Power Station	696 East First St	Boston	1911
BOS.6754	Walworth Radiator Manufacturing Company Warehouse	881 East First St	Boston	1904
BOS.9258	Lincoln Park	East Fourth St	Boston	c 1860
BOS.6765	Gate of Heaven Roman Catholic Church	0 East Fourth St	Boston	1862

Inv. No.	Property Name	Street	Town	Year
BOS.13328	Bird - Lord House	469 East Fourth St	Boston	c 1852
BOS.13329		470 East Fourth St	Boston	r 1865
BOS.13330	Bird - Barstow House	471 East Fourth St	Boston	c 1852
BOS.13331		472 East Fourth St	Boston	r 1865
BOS.13332		474 East Fourth St	Boston	r 1865
BOS.13333		476 East Fourth St	Boston	r 1890
BOS.13334		478 East Fourth St	Boston	r 1890
BOS.6763	Bird, John Hawes House	480-482 East Fourth St	Boston	1830
BOS.6764	Mount Washington Female Institute	484 East Fourth St	Boston	c 1874
BOS.13335	Burton, H. J. and R. A. House	491 East Fourth St	Boston	r 1865
BOS.13336		493 East Fourth St	Boston	r 1865
BOS.13337		494 East Fourth St	Boston	r 1980
BOS.13338		495 East Fourth St	Boston	r 1865
BOS.13339		496 East Fourth St	Boston	r 1980
BOS.13340		497 East Fourth St	Boston	r 1865
BOS.13341	Gerrish, Thomas P. Double House	498 East Fourth St	Boston	c 1852
BOS.13342	Pierce, William P. Double House	500 East Fourth St	Boston	c 1852
BOS.13343	Bowen, H. B. House	502 East Fourth St	Boston	c 1852
BOS.13344	Spaulding, Ira D. Double House	504 East Fourth St	Boston	r 1855
BOS.13345	Kingman, George W. Double House	506 East Fourth St	Boston	r 1865
BOS.13346	Lutted, William House	508 East Fourth St	Boston	c 1852
BOS.13347	Cole - Lewis House	510 East Fourth St	Boston	c 1852
BOS.13348	Wright, Albert J. Jr. House	512 East Fourth St	Boston	c 1852
BOS.13349	Leonard, Isaac M. House	514 East Fourth St	Boston	c 1852
BOS.13350	Clapp, Howard House	523 East Fourth St	Boston	r 1865
BOS.13351	Greely, Phillip House	525 East Fourth St	Boston	r 1865
BOS.13352	Clapp, Howard House	527 East Fourth St	Boston	r 1865
BOS.13353		528 East Fourth St	Boston	c 1852
BOS.13354		529 East Fourth St	Boston	r 1865
BOS.13355		530 East Fourth St	Boston	c 1852
BOS.13356		531 East Fourth St	Boston	r 1865
BOS.15317	Gate of Heaven Roman Catholic Church Rectory	606 East Fourth St	Boston	1958
BOS.15318	Gate of Heaven Roman Catholic Church School	609 East Fourth St	Boston	1922
BOS.6766	Gate of Heaven Roman Catholic Church	615 East Fourth St	Boston	c 1896
BOS.6775	Boston Police Station #12 and Jail	675 East Fourth St	Boston	1874
BOS.6776	Boston Fire Station Engine #2 - Ladder #19	680 East Fourth St	Boston	1932
BOS.9230	Boston Fire Station #2 Hose Drying Tower	680 East Fourth St	Boston	1932
BOS.6767	Sawyer, Oliver T. House	742 East Fourth St	Boston	1860

Inv. No.	Property Name	Street	Town	Year
BOS.6768	Scanlon, Mary A. Row House	746 East Fourth St	Boston	c 1871
BOS.6769	Pollard, Rev. Andrew Row House	748 East Fourth St	Boston	c 1871
BOS.6770	Miller, Ellen S. Row House	750 East Fourth St	Boston	c 1871
BOS.6771	Becker, J. M. Row House	752 East Fourth St	Boston	c 1871
BOS.6772	Round, Julius S. Row House	754 East Fourth St	Boston	c 1871
BOS.6773	Ring, James - Underwood, Frank H. Double House	756-758 East Fourth St	Boston	c 1865
BOS.6774	Harding, William H. - Bowles, Hiram Double House	760-762 East Fourth St	Boston	c 1865
BOS.6777	Webb Row House	789 East Fourth St	Boston	c 1871
BOS.6778	Flanders - Crawford Row House	791 East Fourth St	Boston	c 1871
BOS.6779	Wilson, Joseph F. Row House	793 East Fourth St	Boston	c 1871
BOS.6780	Jessop, H. H. Row House	795 East Fourth St	Boston	c 1871
BOS.6781	Bird, Lewis J. Row House	797 East Fourth St	Boston	c 1871
BOS.6782	Marous, A. A. Row House	799 East Fourth St	Boston	c 1871
BOS.6783	McCouson, Ansel Three Decker	908 East Fourth St	Boston	1905
BOS.6784	Boyle, Patrick House	913 East Fourth St	Boston	1856
BOS.6785	Simpson, Daniel House	918-920 East Fourth St	Boston	1856
BOS.6791	Simpson, Daniel House	924 East Fourth St	Boston	c 1848
BOS.6787	Johnson, Samuel W. Three Decker	925 East Fourth St	Boston	1909
BOS.6788	Johnson, Samuel W. Three Decker	927 East Fourth St	Boston	1909
BOS.6789	Carmoody, Elizabeth G. Three Decker	929 East Fourth St	Boston	1909
BOS.6790	Johnson, Samuel W. Three Decker	931 East Fourth St	Boston	1909
BOS.6792	Connolly, Mary C. Three Decker	936 East Fourth St	Boston	1892
BOS.6756	Bay State Iron Company Worker Housing	591 East Second St	Boston	c 1852
BOS.6757	Bay State Iron Company Worker Housing	593 East Second St	Boston	c 1852
BOS.6758	Bay State Iron Company Worker Housing	595 East Second St	Boston	c 1852
BOS.6759	Bay State Iron Company Worker Housing	597 East Second St	Boston	c 1852
BOS.6755	Leeds, Samuel House	687 East Second St	Boston	1834
BOS.13357		399 East Seventh St	Boston	1897
BOS.13358		401 East Seventh St	Boston	1897
BOS.13360		403 East Seventh St	Boston	1897
BOS.13359		404 East Seventh St	Boston	r 1865
BOS.13362		405 East Seventh St	Boston	1897
BOS.13361		406 East Seventh St	Boston	r 1865
BOS.6953	Howard, Thomas and Henry Three Decker	447 East Seventh St	Boston	1903
BOS.6954	Meyer, Conrad Double Three Decker	448-450 East Seventh St	Boston	1892
BOS.6955	Lappen, James House	492 East Seventh St	Boston	c 1852

Inv. No.	Property Name	Street	Town	Year
BOS.6956	Hatch, Converse R. Row House	602 East Seventh St	Boston	1869
BOS.6957	Ham, Alonzo G. Row House	604 East Seventh St	Boston	1869
BOS.6958	Whitridge, Thomas Row House	606 East Seventh St	Boston	1869
BOS.6959	Lewis, Albert G. Row House	608 East Seventh St	Boston	1869
BOS.6960	Kimball, Frank H. Row House	610 East Seventh St	Boston	1869
BOS.6961	Small, Maria A. Row House	612 East Seventh St	Boston	1869
BOS.6962	Spofford, Charles Row House	614 East Seventh St	Boston	1869
BOS.6804	Capen Primary School	518 East Sixth St	Boston	1871
BOS.6805	Higgins, William R. Row House	586 East Sixth St	Boston	c 1872
BOS.6806	Wright, Fred S. Row House	588 East Sixth St	Boston	c 1872
BOS.6807	Woodward, Elliot W. Row House	590 East Sixth St	Boston	c 1872
BOS.6808	Shaw, Jeremiah Row House	592 East Sixth St	Boston	c 1872
BOS.6809	Tufts, C. Row House	594 East Sixth St	Boston	c 1872
BOS.6810	Hersey, Francis C. Row House	596 East Sixth St	Boston	c 1872
BOS.6811	Hersey, Francis C. Row House	598 East Sixth St	Boston	c 1872
BOS.6812	Hersey, Francis C. Row House	600 East Sixth St	Boston	c 1872
BOS.6813	Wheaton, Timothy House	814 East Sixth St	Boston	1871
BOS.6814	Atlantic House Hotel	868 East Sixth St	Boston	c 1870
BOS.6760	Locke, Richard House	411R East Third St	Boston	c 1828
BOS.6761	Burnham, Choate Elementary School	486 East Third St	Boston	1892
BOS.6762	Wade, Ellen M. House	512 East Third St	Boston	r 1895
BOS.12996	King Terminal Pump House - Electrical Cabinet	Elkins St	Boston	r 1920
BOS.12995	Puritan Wine - Northern Industrial Chemical Co.	7 Elkins St	Boston	1916
BOS.12997	King Terminal No. 11 - Kohnstamm, H. and Company	11 Elkins St	Boston	1915
BOS.12998	Shaw, John and Company Chemical Works	15 Elkins St	Boston	r 1920
BOS.12999		21 Elkins St	Boston	r 1920
BOS.13000	King Terminal No. 7	22 Elkins St	Boston	1927
BOS.810	Hawes Cemetery	Emerson St	Boston	1817
BOS.6971		133 Emerson St	Boston	r 1905
BOS.6968		172 Emerson St	Boston	c 1830
BOS.6969		176 Emerson St	Boston	r 1850
BOS.6970		204 Emerson St	Boston	r 1830
BOS.6972	Furbush, Milo House	249 Emerson St	Boston	1844
BOS.6973	Hotel Eaton	309-311 Emerson St	Boston	1887
BOS.6974	Pierce, Samuel H. L. House	313 Emerson St	Boston	1862
BOS.15323	Blessed Sacrament Roman Catholic Chapel	9 F St	Boston	1886
BOS.6975	Kent, Barker B. Double House	92-96 F St	Boston	c 1868

Inv. No.	Property Name	Street	Town	Year
BOS.6976	Kent, Barker B. Double House	98-100 F St	Boston	c 1852
BOS.6977	Pond, Adams and Basco Row House	114 F St	Boston	r 1870
BOS.6978	Pond, Adams and Basco Row House	116 F St	Boston	r 1870
BOS.6979	Gifford, Moses S. - Goodwin, Nathaniel Row House	118 F St	Boston	r 1870
BOS.6980	Gifford, Moses S. - Goodwin, Nathaniel Row House	120 F St	Boston	r 1870
BOS.6981	Gifford, Goodwin and Baker Row House	122 F St	Boston	r 1870
BOS.6982	Gifford, Goodwin and Baker Row House	124 F St	Boston	r 1870
BOS.12982	Boston Market Terminal Freight House #12	31 Fargo St	Boston	1928
BOS.12983		51-53 Fargo St	Boston	1920
BOS.12984		80 Fargo St	Boston	1917
BOS.5530	Boston Wharf Company Wool Warehouse	11-15 Farnsworth St	Boston	1893
BOS.5531	Boston Wharf Company Building	12-22 Farnsworth St	Boston	1917
BOS.15348	Farnsworth Street Garage	17-31 Farnsworth St	Boston	1987
BOS.5532	Boston Wharf Company Building	24-32 Farnsworth St	Boston	c 1895
BOS.5533	Boston Wharf Company Building	33-39 Farnsworth St	Boston	1909
BOS.5534	Boston Wharf Company Building	34-36 Farnsworth St	Boston	1909
BOS.5535	Boston Wharf Company Building	41-45 Farnsworth St	Boston	1908
BOS.5536	Boston Wharf Company Building	44-54 Farnsworth St	Boston	1915
BOS.5537	Boston Wharf Company Warehouse	47-53 Farnsworth St	Boston	1895
BOS.9256	Marine Park	Farragut Rd	Boston	c 1883
BOS.6983		65 Farragut Rd	Boston	r 1905
BOS.6984	Higgins, William J. Three Decker	73 Farragut Rd	Boston	1908
BOS.6985	Higgins, William J. Three Decker	75 Farragut Rd	Boston	1908
BOS.6986	Higgins, William J. Three Decker	77 Farragut Rd	Boston	1908
BOS.12964	Subaru Distributors Dealership	FID Kennedy Way	Boston	c 1980
BOS.12963	Au Bon Pain Offices	19 FID Kennedy Way	Boston	c 1980
BOS.12965	Boston Army Supply Base - Building 16	25 FID Kennedy Way	Boston	c 1940
BOS.6987	Saint Peter Lithuanian Roman Catholic Church	75 Flaherty Way	Boston	1901
BOS.9152	Fort Point Channel	Fort Point Channel	Boston	r 1850
BOS.9153	Fort Point Channel Bulkheads	Fort Point Channel	Boston	r 1850
BOS.9241	Fort Point Channel Bridge	Fort Point Channel	Boston	1898
BOS.9514	South Boston Sea Wall	Fort Point Channel	Boston	
BOS.13363		1 Fourth St Place	Boston	r 1865
BOS.13364		2 Fourth St Place	Boston	r 1865
BOS.13365		3 Fourth St Place	Boston	r 1865
BOS.13366		31 G St	Boston	c 1852

Inv. No.	Property Name	Street	Town	Year
BOS.13367		33 G St	Boston	c 1852
BOS.13368		34 G St	Boston	c 1852
BOS.13369		35 G St	Boston	c 1852
BOS.13370		36 G St	Boston	c 1852
BOS.13371		37 G St	Boston	r 1865
BOS.13372	Cook, Samuel House	39 G St	Boston	r 1865
BOS.13373	Kent, Barker B. House	41 G St	Boston	r 1865
BOS.13374	Jenkins, Reuben Y. Double House	43 G St	Boston	r 1865
BOS.13375	Jenkins, Reuben Y. Double House	45 G St	Boston	r 1865
BOS.13376		46 G St	Boston	1834
BOS.13377	Elms, James C. Double House	47 G St	Boston	r 1865
BOS.13378		48 G St	Boston	1834
BOS.13379	Whitman - Tucker Double House	49 G St	Boston	r 1865
BOS.13380		50 G St	Boston	r 1865
BOS.13381	Standish - Burnham Double House	51 G St	Boston	r 1865
BOS.6988	Briggs, Harrison O. House	52 G St	Boston	c 1852
BOS.13382	Fraught, George N. Double House	53 G St	Boston	r 1865
BOS.13383	Peterson, Capt. Peter House	54 G St	Boston	c 1861
BOS.13384	Smith, George P. Double House	55 G St	Boston	r 1865
BOS.13385		56 G St	Boston	c 1861
BOS.13386	Ellis, George W. Double House	57 G St	Boston	r 1865
BOS.13387		58 G St	Boston	c 1861
BOS.13388	Neilson, William House	59 G St	Boston	r 1865
BOS.13389		60 G St	Boston	r 1865
BOS.13390		60A G St	Boston	r 1865
BOS.13391	Johson - Hills Double House	61 G St	Boston	r 1865
BOS.13392		62 G St	Boston	r 1865
BOS.13393	Noyes, Elisha Double House	63 G St	Boston	r 1865
BOS.13394		64 G St	Boston	r 1865
BOS.13395	Wilson, Harvey Double House	65 G St	Boston	r 1865
BOS.13396		66 G St	Boston	r 1865
BOS.13397		67 G St	Boston	r 1890
BOS.13398		68 G St	Boston	r 1865
BOS.13399		69 G St	Boston	r 1890
BOS.13400		70 G St	Boston	r 1865
BOS.13401		72 G St	Boston	r 1865
BOS.13402		73 G St	Boston	r 1880
BOS.13403	Wallackas Meats	73A G St	Boston	r 1905

Inv. No.	Property Name	Street	Town	Year
BOS.13404		74 G St	Boston	r 1865
BOS.13405	Copeland, Joseph House	75 G St	Boston	c 1860
BOS.13407		76 G St	Boston	r 1865
BOS.6989	Harding, Lemon P. House	80 G St	Boston	c 1868
BOS.6990	Harding, Lemon P. House	82 G St	Boston	c 1853
BOS.13408		84 G St	Boston	r 1880
BOS.6991	Connor, James Row House	88 G St	Boston	c 1865
BOS.6992	Connor, James Row House	90 G St	Boston	c 1865
BOS.6993	Connor, James Row House	92 G St	Boston	c 1865
BOS.6994	Connor, James Row House	94 G St	Boston	c 1874
BOS.6995	South Boston High School	95 G St	Boston	1901
BOS.13409		96 G St	Boston	r 1865
BOS.13410		98 G St	Boston	r 1880
BOS.13411		100 G St	Boston	r 1890
BOS.13412		102 G St	Boston	r 1890
BOS.13413		104 G St	Boston	r 1865
BOS.13414		106 G St	Boston	r 1865
BOS.13415		108 G St	Boston	r 1865
BOS.6996	Johnson, Samuel W. Two-Family House	111 G St	Boston	1911
BOS.13416	Johnson, J. L. and S. J. Three Decker	115 G St	Boston	r 1895
BOS.13417		116 G St	Boston	r 1865
BOS.13418		118 G St	Boston	r 1865
BOS.13419	Johnson, J. L. and S. J. Three Decker	119 G St	Boston	r 1895
BOS.13420		120 G St	Boston	r 1865
BOS.13421	James, Francis Double House	121 G St	Boston	r 1880
BOS.13422		122 G St	Boston	r 1880
BOS.13423	Wyman, Charles F. Double House	123 G St	Boston	r 1880
BOS.13424		124 G St	Boston	r 1880
BOS.13425	Reardon, John A. Double House	125 G St	Boston	r 1880
BOS.13426		126 G St	Boston	r 1880
BOS.13427	McGrath, Mary E. Double House	127 G St	Boston	r 1880
BOS.13428		128 G St	Boston	r 1880
BOS.13429		129 G St	Boston	r 1880
BOS.13430		130 G St	Boston	r 1880
BOS.13431		131 G St	Boston	r 1890
BOS.13432		Gates St	Boston	r 1925
BOS.13433		4 Gates St	Boston	r 1865
BOS.13434	Gleason, Alpheus House	5 Gates St	Boston	r 1865

Inv. No.	Property Name	Street	Town	Year
BOS.13435		6 Gates St	Boston	r 1865
BOS.13436		7 Gates St	Boston	r 1865
BOS.13437	Carlton - Dean Double House	8 Gates St	Boston	c 1852
BOS.13438	Webber, William C. Double House	9 Gates St	Boston	r 1865
BOS.13439	Whiton - Sears Double House	10 Gates St	Boston	c 1852
BOS.13440		11 Gates St	Boston	r 1865
BOS.13441		12 Gates St	Boston	r 1865
BOS.13442		13 Gates St	Boston	r 1865
BOS.13443		14 Gates St	Boston	r 1865
BOS.13444		15 Gates St	Boston	r 1865
BOS.13445		16 Gates St	Boston	r 1865
BOS.13446		17 Gates St	Boston	r 1865
BOS.13447		18 Gates St	Boston	r 1865
BOS.13448		19 Gates St	Boston	r 1865
BOS.13449		20 Gates St	Boston	r 1865
BOS.13450		21 Gates St	Boston	r 1880
BOS.6997	Smith, James House	22 Gates St	Boston	c 1875
BOS.13451		23 Gates St	Boston	r 1880
BOS.13452		26 Gates St	Boston	r 1865
BOS.15227	Saint Monica's Roman Catholic Church Rectory	70 Gen. Wm. Devine Way	Boston	1955
BOS.6998	Power, Jacob P. House	98 H St	Boston	r 1880
BOS.6999	Power, Jacob P. House	100 H St	Boston	r 1880
BOS.7000	Stetson, Alpheus M. Three Decker	174 H St	Boston	c 1885
BOS.7001	Souther, Henry Row House	1 H Street Pl	Boston	r 1880
BOS.7002	Souther, Henry Row House	2 H Street Pl	Boston	r 1880
BOS.7003	Souther, Henry Row House	3 H Street Pl	Boston	r 1880
BOS.12966	Boston Army Supply Base - Building 19	6 Harbor St	Boston	c 1940
BOS.7004		36 I St	Boston	1905
BOS.7005	Gray, Solomon S. Row House	86 I St	Boston	c 1874
BOS.7006	Gray, Solomon S. Row House	88 I St	Boston	c 1874
BOS.7007	Gray, Solomon S. Row House	90 I St	Boston	c 1874
BOS.7008	Stark, Hannah Row House	92 I St	Boston	c 1884
BOS.7009	Stark, Hannah Row House	94 I St	Boston	c 1884
BOS.7010	Stark, Hannah Row House	96 I St	Boston	c 1884
BOS.7011	Stark, Hannah Row House	98 I St	Boston	c 1884
BOS.7012	Stark, Hannah Row House	100 I St	Boston	c 1884
BOS.7013	Stark, Hannah Row House	102 I St	Boston	c 1884
BOS.7014	Saint Agnes Convent - Gate of Heaven Church	127 I St	Boston	1879

Inv. No.	Property Name	Street	Town	Year
BOS.7015	Griffin Brothers Row House	151 I St	Boston	c 1874
BOS.7016	Griffin Brothers Row House	153 I St	Boston	c 1874
BOS.7017	Griffin Brothers Row House	155 I St	Boston	c 1874
BOS.7018	Griffin Brothers Row House	157 I St	Boston	c 1874
BOS.13453		1 Jason Terr	Boston	r 1865
BOS.13454		2 Jason Terr	Boston	r 1865
BOS.13455		3 Jason Terr	Boston	r 1865
BOS.13456		4 Jason Terr	Boston	r 1865
BOS.7019		10-12 Jenkins St	Boston	c 1852
BOS.13002	Goller, Allen Shoe Factory	60 K St	Boston	r 1920
BOS.13003	Dimes, Richard Silversmith Company	72 K St	Boston	r 1920
BOS.13004	New England Annealing and Tool Company Building	80 K St	Boston	r 1920
BOS.7020	Hawes, The	278 K St	Boston	r 1895
BOS.7032	Beckler, Daniel W. Row House	283 K St	Boston	1870
BOS.7033	Beckler, Daniel W. Row House	285 K St	Boston	1870
BOS.7034	Beckler, Daniel W. Row House	287 K St	Boston	1870
BOS.7035	Beckler, Daniel W. Row House	289 K St	Boston	1870
BOS.7036	Beckler, Daniel W. Row House	291 K St	Boston	1870
BOS.7037	Beckler, Daniel W. Row House	293 K St	Boston	1870
BOS.7038	Beckler, Daniel W. Row House	295 K St	Boston	1870
BOS.7039	Beckler, Daniel W. Row House	297 K St	Boston	1870
BOS.7021	James, Benjamin - James, George B. Row House	298 K St	Boston	1872
BOS.7040	Beckler, Daniel W. Row House	299 K St	Boston	1870
BOS.7022	James, Benjamin - James, George B. Row House	300 K St	Boston	1872
BOS.7041	Beckler, Daniel W. Row House	301 K St	Boston	1870
BOS.7023	James, Benjamin - James, George B. Row House	302 K St	Boston	1872
BOS.7042	Beckler, Daniel W. Row House	303 K St	Boston	1870
BOS.7024	James, Benjamin - James, George B. Row House	304 K St	Boston	1872
BOS.7043	Beckler, Daniel W. Row House	305 K St	Boston	1870
BOS.7025	James, Benjamin - James, George B. Row House	306 K St	Boston	1872
BOS.7026	Beckler, Daniel W. Row House	308 K St	Boston	1872
BOS.7027	Berry, David A. House	318 K St	Boston	c 1870
BOS.7028	Berry, David A. Row House	354 K St	Boston	c 1871
BOS.7029	Russell, Sheppard Row House	356 K St	Boston	c 1871

Inv. No.	Property Name	Street	Town	Year
BOS.7030	Berry, David A. Row House	358 K St	Boston	c 1871
BOS.7031	Rodgers, Josephine W. Row House	360 K St	Boston	c 1871
BOS.7044	O'Brien, Thomas House	372 K St	Boston	1853
BOS.7045	Goodnow, Jane H. House	384 K St	Boston	c 1858
BOS.7046	Mullay, John House	390 K St	Boston	1859
BOS.7047	Johnson, Samuel W. Three Decker	415 K St	Boston	1911
BOS.7054	Reardon, John W. House	7 Knowlton St	Boston	1909
BOS.7048	Eaton, William T. Apartment Building	92-96 L St	Boston	1884
BOS.7050	Eaton, William T. Row House	98 L St	Boston	1884
BOS.7051	Eaton, William T. Row House	100 L St	Boston	1884
BOS.7052	Eaton, William T. Apartment Building	102-108 L St	Boston	1884
BOS.7055	Flint, H. G. Three Decker	206 L St	Boston	1902
BOS.7056	Flint, H. G. Three Decker	208 L St	Boston	1902
BOS.7057		2 Leeds St	Boston	c 1863
BOS.7058		4 Leeds St	Boston	c 1863
BOS.7059		6 Leeds St	Boston	c 1863
BOS.13457	Wright, Frederick S. Double House	1 Linden St	Boston	c 1860
BOS.13458	James, Elisha F. Double House	2 Linden St	Boston	c 1860
BOS.13459	Wright, Frederick S. Double House	3 Linden St	Boston	c 1860
BOS.13460	Pettingill Double House	4 Linden St	Boston	c 1860
BOS.13461	James, Benjamin Double House	5 Linden St	Boston	c 1860
BOS.13462	Bowen, Hosea B. Double House	6 Linden St	Boston	c 1860
BOS.13463	Neale, Mary A. Double House	7 Linden St	Boston	c 1860
BOS.13464	James, Edward P. Double House	8 Linden St	Boston	c 1860
BOS.13465	Shales, Daniel House	9 Linden St	Boston	1863
BOS.13466	Hasting, Zorilda House	10 Linden St	Boston	1863
BOS.13467	Covington, Leonard House	11 Linden St	Boston	1863
BOS.13468	Richardson, Mary A. House	12 Linden St	Boston	1863
BOS.13469	Davis, Mary D. House	13 Linden St	Boston	1863
BOS.13470	Jenkins, Isaac N. House	14 Linden St	Boston	1863
BOS.13471	Patch, Charles F. House	15 Linden St	Boston	1863
BOS.13472	James, Benjamin House	16 Linden St	Boston	1863
BOS.13473	Hoyt, Anna M. House	17 Linden St	Boston	1863
BOS.13474	Foster, Dara S. House	18 Linden St	Boston	1863
BOS.13475	Kemp House	19 Linden St	Boston	1863
BOS.13476	Knapp, H. C. House	20 Linden St	Boston	1863
BOS.7060	Winchester, William W. House	21 Linden St	Boston	c 1863
BOS.13477		23 Linden St	Boston	1863

Inv. No.	Property Name	Street	Town	Year
BOS.7061	Burrell, Adoniram Row House	47 M St	Boston	1872
BOS.7062	Burrell, Adoniram Row House	49 M St	Boston	1872
BOS.7063	Burrell, Adoniram Row House	51 M St	Boston	1872
BOS.7064	Burrell, Adoniram Row House	53 M St	Boston	1872
BOS.7065	Ford, Catherine House	99-101 M St	Boston	c 1862
BOS.7066	Carmody, Mary J. Three Decker	177 M St	Boston	1910
BOS.7067	Carmody, Mary J. Three Decker	179 M St	Boston	1910
BOS.7068	Carmody, Mary J. Three Decker	181 M St	Boston	1910
BOS.5576	Boston Wharf Company Wool Warehouse	10 Melcher St	Boston	c 1903
BOS.9511	Boston Wharf Company Roof Sign	10 Melcher St	Boston	
BOS.15349	Boston Wharf Company Offices	10 Melcher St	Boston	1905
BOS.15350	New England Confectionary Company	11-17 Melcher St	Boston	1902
BOS.15351	New England Confectionary Company	19-27 Melcher St	Boston	1902
BOS.15352	New England Confectionary Company	29-37 Melcher St	Boston	1902
BOS.5538	Boston Wharf Company Building	49 Melcher St	Boston	1910
BOS.5539	Boston Wharf Company Building	51-61 Melcher St	Boston	1916
BOS.5540	French, Shriner and Urner Shoe Manufacturing Co.	63 Melcher St	Boston	1909
BOS.5542	Boston Wharf Company Warehouse	18-22 Midway St	Boston	c 1912
BOS.5549	Boston Wharf Company Warehouse	76-82 Midway St	Boston	1905
BOS.7069	Hemmen, Herman Double House	46-48 N St	Boston	1896
BOS.7071	Beckler, Daniel W. Row House	58 N St	Boston	1887
BOS.7072	Beckler, Daniel W. Row House	60 N St	Boston	1887
BOS.7073	Beckler, Daniel W. Row House	62 N St	Boston	1887
BOS.6913	Saint Brigid Roman Catholic Church	96 N St	Boston	1933
BOS.15328	Saint Brigid Roman Catholic Church Convent	100 N St	Boston	1966
BOS.7074	Stratton, Henry B. House	110-112 N St	Boston	1882
BOS.13478	Hayes, E. House	2 National St	Boston	r 1880
BOS.13479	Leonard, N. House	4 National St	Boston	r 1865
BOS.13480	Tappan, F. House	6 National St	Boston	r 1880
BOS.13481	Romosky, Anna House	8 National St	Boston	r 1865
BOS.13482	Sturtevant, George W. House	10 National St	Boston	r 1865
BOS.13483	Tripp, Abner L. House	12 National St	Boston	r 1865
BOS.13484	Stratton, Henry B. House	14 National St	Boston	r 1865
BOS.13485	Stratton, Henry B. - Roche House	18 National St	Boston	r 1890
BOS.5550	Boston Wharf Company Building	1 Necco Ct	Boston	1907
BOS.5551	Boston Wharf Company Building	3 Necco Ct	Boston	1907
BOS.15353	New England Confectionary Company	5 Necco Ct	Boston	1907

Inv. No.	Property Name	Street	Town	Year
BOS.15354	New England Confectionary Company	6 Necco Ct	Boston	1907
BOS.15355	Necco Street Garage	10 Necco St	Boston	1992
BOS.9000	Northern Avenue Draw Bridge	Northern Ave	Boston	c 1907
BOS.12967	Boston Army Supply Base - Refrigeration Plant	Northern Ave	Boston	c 1980
BOS.12968	Boston Army Supply Base - Building 38	Northern Ave	Boston	c 1940
BOS.12971	Boston Army Supply Base - Building 18	Northern Ave	Boston	c 1940
BOS.15356	Northern Avenue Draw Bridge Tenders House	Northern Ave	Boston	1908
BOS.15229	Chapel of Our Lady of Good Voyage	65 Northern Ave	Boston	1952
BOS.7179	Commonwealth Pier Five	165 Northern Ave	Boston	1914
BOS.9252	South Boston Fish Pier	212-234 Northern Ave	Boston	c 1910
BOS.16589	South Boston Fish Pier - East Building	212-234 Northern Ave	Boston	c 1910
BOS.16590	South Boston Fish Pier - West Building	212-234 Northern Ave	Boston	c 1910
BOS.16591	South Boston Fish Pier - Fish Exchange Building	212-234 Northern Ave	Boston	c 1910
BOS.12969	Boston Army Supply Base - Building 56	300 Northern Ave	Boston	c 1940
BOS.12970	Boston Army Supply Base - Building 53	306 Northern Ave	Boston	c 1940
BOS.7075	Judkins, Charles S. - Robinson, L. Double House	84-86 O St	Boston	r 1880
BOS.6799	Pope, Benjamin Primary School	114 O St	Boston	1883
BOS.7076	Johnson, Samuel W. Three Decker	124 O St	Boston	1912
BOS.7077	Johnson, Samuel W. Three Decker	126 O St	Boston	1912
BOS.7078	Johnson, Samuel W. Three Decker	128 O St	Boston	1912
BOS.7079	Johnson, Samuel W. Three Decker	130 O St	Boston	1912
BOS.9654	Old Harbor Parkway - Old Colony Avenue	Old Colony Ave	Boston	1898
BOS.9655	Old Harbor Parkway - Old Harbor Village Footbridge	Old Colony Ave	Boston	1941
BOS.15226	Saint Monica's Roman Catholic Church	333 Old Colony Ave	Boston	1955
BOS.9645	Old Harbor Reservation Parkways	Old Harbor Pkwy	Boston	1883
BOS.9646	Old Harbor Reservation Parkway - Gardner Way	Old Harbor Pkwy	Boston	1883
BOS.9484		Old Harbor St	Boston	
BOS.7080	Carney Hospital Outpatient Building	4 Old Harbor St	Boston	1901
BOS.13486	Hatch - Powell House	17 Old Harbor St	Boston	r 1865
BOS.13487	Hatch - Stickney Double House	19 Old Harbor St	Boston	r 1880
BOS.13488	Hersey - Mosely Double House	23 Old Harbor St	Boston	r 1880
BOS.13489	Hersey, Charles H. Double House	25 Old Harbor St	Boston	r 1880
BOS.13490	Nickerson - Stapleton Double House	27 Old Harbor St	Boston	r 1880
BOS.13491	Moore, Nicholas F. House	37 Old Harbor St	Boston	r 1865
BOS.13492	Adamson - Crosby House	39 Old Harbor St	Boston	r 1865
BOS.7081	Carney Hospital Nurses Residence	40 Old Harbor St	Boston	1925
BOS.13493	Bassett - Moore House	41 Old Harbor St	Boston	r 1865

Inv. No.	Property Name	Street	Town	Year
BOS.13494	Bassett - Kellum House	43 Old Harbor St	Boston	r 1865
BOS.13495	Bassett - Lucas House	45 Old Harbor St	Boston	r 1865
BOS.13496	Wilson - Stout Double House	47 Old Harbor St	Boston	r 1865
BOS.13497	Thompson, William Double House	49 Old Harbor St	Boston	r 1865
BOS.13498	Bassett - Lockwood House	51 Old Harbor St	Boston	r 1865
BOS.13499	Bedlington, S. M. Double House	53 Old Harbor St	Boston	r 1865
BOS.13500		61 Old Harbor St	Boston	r 1880
BOS.13501	Bond, G. H. Double House	63 Old Harbor St	Boston	r 1880
BOS.13502	Simonds, J. F. Double House	65 Old Harbor St	Boston	r 1890
BOS.13503	Arnold, Jonathan M. Double House	67 Old Harbor St	Boston	r 1865
BOS.13504	Payson, Mary Double House	69 Old Harbor St	Boston	r 1865
BOS.13505	Morston, Frances E. House	71 Old Harbor St	Boston	r 1865
BOS.13506	Gill, Charles H. Double House	73 Old Harbor St	Boston	r 1865
BOS.13507	Pond, George F. Double House	75 Old Harbor St	Boston	r 1865
BOS.13508	Pond - Molloy Double House	77 Old Harbor St	Boston	r 1880
BOS.13509	Berry - Carroll Double House	79 Old Harbor St	Boston	r 1865
BOS.13510	Stetson, Alpheus M. House	80 Old Harbor St	Boston	r 1880
BOS.13511	Barstow, M. H. House	81 Old Harbor St	Boston	r 1880
BOS.13512	Suck, G. Frederick House	82 Old Harbor St	Boston	r 1865
BOS.13513	Fuller, C. House	83 Old Harbor St	Boston	r 1895
BOS.13514	Howard, T. and H. Three Decker	85 Old Harbor St	Boston	r 1895
BOS.13515	Boyson, William House	86 Old Harbor St	Boston	c 1852
BOS.13516	Howard, T. and H. Three Decker	87 Old Harbor St	Boston	r 1895
BOS.13517	Smith, Delia Three Decker	89 Old Harbor St	Boston	r 1895
BOS.13518	Kelly, James H. Three Decker	91 Old Harbor St	Boston	r 1895
BOS.13519	Plett, Chris F. Three Decker	93 Old Harbor St	Boston	r 1895
BOS.13520	Megan - Bowen House	99 Old Harbor St	Boston	r 1865
BOS.13521		100 Old Harbor St	Boston	r 1880
BOS.13522		101 Old Harbor St	Boston	r 1890
BOS.13523		102 Old Harbor St	Boston	r 1880
BOS.13524		103 Old Harbor St	Boston	r 1890
BOS.13525		104 Old Harbor St	Boston	r 1880
BOS.13526		106 Old Harbor St	Boston	r 1880
BOS.15330	Saint Peter Roman Catholic Church Rectory	50 Orton Marotta Way	Boston	1913
BOS.7082	Collins, James Row House	50 P St	Boston	1868
BOS.7083	Collins, James Row House	52 P St	Boston	1868
BOS.7084	Collins, James Row House	54 P St	Boston	1868
BOS.7085	Collins, James Row House	56 P St	Boston	1868

Inv. No.	Property Name	Street	Town	Year
BOS.7086	Collins, James Row House	58 P St	Boston	1868
BOS.13527		1 Pacific St	Boston	r 1865
BOS.13528	Tuckerman, W. I. House	2 Pacific St	Boston	r 1865
BOS.13529		3 Pacific St	Boston	r 1865
BOS.13530	Brown, Maria House	4 Pacific St	Boston	r 1865
BOS.13531		5 Pacific St	Boston	r 1865
BOS.13532	Wilson, Henry W. House	6 Pacific St	Boston	r 1865
BOS.13533		7 Pacific St	Boston	r 1865
BOS.13534	Wilson, Henry W. House	8 Pacific St	Boston	r 1865
BOS.13535		9 Pacific St	Boston	r 1880
BOS.13536	Wilson, Henry W. House	10 Pacific St	Boston	r 1865
BOS.13537		11 Pacific St	Boston	r 1880
BOS.13538	Wilson, Henry W. House	12 Pacific St	Boston	r 1865
BOS.13539		13 Pacific St	Boston	r 1865
BOS.13540	Parsons, Joseph C. House	14 Pacific St	Boston	r 1865
BOS.13541	Wilson, Henry W. House	16 Pacific St	Boston	r 1865
BOS.9512	Moakley, Evelyn Bridge	Seaport Blvd	Boston	1996
BOS.9237	Silver Street Bridge over Conrail	Silver St	Boston	1918
BOS.5561	Boston Wharf Company Building	15-21 Sleeper St	Boston	1911
BOS.5562	Boston Wharf Company Building	29-31 Sleeper St	Boston	1915
BOS.5563	Boston Wharf Company Building	35-37 Sleeper St	Boston	1911
BOS.5564	United Shoe Machine Corporation	51 Sleeper St	Boston	1929
BOS.7091	Washington Village Substation	Southampton St	Boston	1914
BOS.9236	Southampton Street Bridge over MBTA	Southampton St	Boston	1902
BOS.5565	Boston Wharf Company Iron Warehouse	5-9 Stillings St	Boston	1907
BOS.5566	Boston Wharf Company Paint Warehouse	11-15 Stillings St	Boston	1907
BOS.15364	Stillings Street Garage	11-23 Stillings St	Boston	2001
BOS.5567	Boston Wharf Company Radiator Warehouse	17-27 Stillings St	Boston	1905
BOS.5568	Boston Wharf Company Warehouse	29 Stillings St	Boston	1926
BOS.5569	Boston Wharf Company Iron Warehouse	35-37 Stillings St	Boston	1913
BOS.5570	Boston Wharf Company Warehouse	38-40 Stillings St	Boston	1913
BOS.5572	Boston Wharf Company Iron and Oil Warehouse	43 Stillings St	Boston	1904
BOS.5571	Boston Wharf Company Wholesale Grocery Warehouse	44-48 Stillings St	Boston	1914
BOS.13542		2 Story St	Boston	r 1865
BOS.13543		4 Story St	Boston	r 1865
BOS.13544		6 Story St	Boston	r 1865
BOS.13545		8 Story St	Boston	r 1865

Inv. No.	Property Name	Street	Town	Year
BOS.13546		9 Story St	Boston	r 1880
BOS.13547		10-12 Story St	Boston	r 1880
BOS.13548		11 Story St	Boston	r 1890
BOS.13550		13 Story St	Boston	r 1890
BOS.13549		14-16 Story St	Boston	r 1890
BOS.13551		20 Story St	Boston	r 1890
BOS.13552		24 Story St	Boston	r 1890
BOS.7092	Dana, Otis D. Two-Family House	26-28 Story St	Boston	r 1885
BOS.13553		28 Story St	Boston	r 1890
BOS.13554		28 Story St	Boston	r 1890
BOS.13555		30 Story St	Boston	r 1890
BOS.9001	Summer Street Bridge over Fort Point Channel	Summer St	Boston	1899
BOS.9155	Summer Street Bridge over A Street	Summer St	Boston	c 1890
BOS.9233	Summer Street Bridge over B Street	Summer St	Boston	1900
BOS.9234	L Street Bridge	Summer St	Boston	1892
BOS.9235	Summer Street Bridge over C Street	Summer St	Boston	1900
BOS.9250	Summer Street Viaduct Bridge	Summer St	Boston	1901
BOS.5573	Boston Wharf Company Wool Warehouse	250-254 Summer St	Boston	1899
BOS.5574	New England Confectionary Company Factory	253 Summer St	Boston	1902
BOS.5575	Boston Wharf Company Wool Warehouse	256-260 Summer St	Boston	1899
BOS.5577	Boston Wharf Company Wool Warehouse	262-266 Summer St	Boston	1899
BOS.5578	Boston Wharf Company Wool Warehouse	268-272 Summer St	Boston	1898
BOS.5579	Boston Wharf Company Wool Warehouse	269-273 Summer St	Boston	1910
BOS.5580	Boston Wharf Company Wool Warehouse	274-278 Summer St	Boston	1898
BOS.5581	United States Rubber Company Warehouse	280-290 Summer St	Boston	1898
BOS.5582	Boston Wharf Company Wool Warehouse	281-283 Summer St	Boston	1904
BOS.5583	Boston Wharf Company Wool Warehouse	285-297 Summer St	Boston	1903
BOS.5584	Williams, J. and Company Wool Warehouse	292-302 Summer St	Boston	1898
BOS.5585	Dwinell-Wright Coffee Importing Company Warehouse	311-319 Summer St	Boston	1904
BOS.5586	Boston Wharf Company Wool Warehouse	312-320 Summer St	Boston	1904
BOS.5587	Howes Brothers Tanning Company	321-325 Summer St	Boston	1911
BOS.5588	Foster, F. A. Dry Goods - Puritan Drapery Fabrics	322-330 Summer St	Boston	1910
BOS.5589	Daylight Baking Supplies Factory	327-333 Summer St	Boston	1911
BOS.15357	Middleby, Joseph Jr. Warehouse	337-347 Summer St	Boston	1907
BOS.12985	Western Electric Co. Electrical Supplies Building	385 Summer St	Boston	1917
BOS.12986		401 Summer St	Boston	1919
BOS.12987		415 Summer St	Boston	1917

Inv. No.	Property Name	Street	Town	Year
BOS.12988	Union Wool Company Wool Warehouse	425 Summer St	Boston	1917
BOS.12989	Williams, Jeremiah Wool Warehouse	495 Summer St	Boston	1910
BOS.12943	Boston Edison L Street Power Station	776 Summer St	Boston	1898
BOS.13005	Clayton, S. C. Syrup - Diamond Drug Company	803 Summer St	Boston	1923
BOS.13006	Karpp Building Supply Company	825 Summer St	Boston	r 1920
BOS.7093	Delaporte, Andrew Gustave House	5 Telegraph St	Boston	c 1870
BOS.7094	Mullin, Thomas M. - Willis, John E. Double House	19-21 Telegraph St	Boston	c 1875
BOS.13556	Molloy, Valentine Double House	52 Telegraph St	Boston	
BOS.13557	Giblin, Daniel C. Double House	54 Telegraph St	Boston	
BOS.13558	Staniford, Lydia E. House	56 Telegraph St	Boston	
BOS.13559		58 Telegraph St	Boston	
BOS.13560	O'Connor, Patrick House	60 Telegraph St	Boston	r 1865
BOS.13561		61 Telegraph St	Boston	r 1865
BOS.13562	Henchy, John House	62 Telegraph St	Boston	r 1865
BOS.13563		63 Telegraph St	Boston	r 1865
BOS.13564		64 Telegraph St	Boston	r 1880
BOS.13565		65 Telegraph St	Boston	r 1865
BOS.13566	Wade, Shadrach Double House	66 Telegraph St	Boston	r 1865
BOS.13567		67 Telegraph St	Boston	r 1865
BOS.13568	Shattuck, Ferdinand Double House	68 Telegraph St	Boston	r 1865
BOS.13569		69 Telegraph St	Boston	r 1865
BOS.9260	Dorchester Heights Monument	Thomas Park	Boston	1901
BOS.9261	Dorchester Heights - Knox, Henry Monument	Thomas Park	Boston	1927
BOS.9262	Dorchester Heights - 1876 Centennial Monument	Thomas Park	Boston	1877
BOS.9263	Dorchester Heights - Perimeter Fence	Thomas Park	Boston	1901
BOS.9485	South Boston Veteran's Memorial	Thomas Park	Boston	1982
BOS.9486	Thomas Park	Thomas Pk	Boston	c 1850
BOS.9795	Dorchester Heights Concrete Path System	Thomas Pk	Boston	c 1870
BOS.13570	Gray - Wadsworth House	5 Thomas Pk	Boston	r 1865
BOS.13571	Elms, Joseph D. Double House	7 Thomas Pk	Boston	r 1865
BOS.13572	James, Charles Double House	9 Thomas Pk	Boston	r 1865
BOS.13573	James, Benjamin House	11 Thomas Pk	Boston	r 1865
BOS.13574	James, Benjamin Stable	12 Thomas Pk	Boston	r 1865
BOS.7095	Whitman, Edward W. - Rogers, William Double House	13-14 Thomas Pk	Boston	c 1871
BOS.13575	Lee - Holbrook Double House	15 Thomas Pk	Boston	r 1880
BOS.13576	Beard - Connors Double House	16 Thomas Pk	Boston	r 1880

Inv. No.	Property Name	Street	Town	Year
BOS.13577	Bray, Susan House	17 Thomas Pk	Boston	r 1880
BOS.13578	Lothrop House	18 Thomas Pk	Boston	r 1880
BOS.7096	Bassett, Joseph Row House	19 Thomas Pk	Boston	1874
BOS.13579	James, Benjamin Double House	21 Thomas Pk	Boston	r 1865
BOS.13580	Earl - Moulton Double House	22 Thomas Pk	Boston	r 1865
BOS.13581		23 Thomas Pk	Boston	r 1865
BOS.13582		24 Thomas Pk	Boston	r 1865
BOS.7097	Callahan, Cornelius H. Double House	25-26 Thomas Pk	Boston	1871
BOS.13583		36 Thomas Pk	Boston	r 1890
BOS.13584	Stratton, Henry J. Double House	39 Thomas Pk	Boston	1884
BOS.13585	Stratton - Kelly Double House	40 Thomas Pk	Boston	r 1880
BOS.13586	Stratton - Kelly Double House	41 Thomas Pk	Boston	r 1880
BOS.13587	Stratton - Kelly Double House	42 Thomas Pk	Boston	r 1880
BOS.13588	Goodwin - Kenney House	43 Thomas Pk	Boston	r 1880
BOS.13589	Stetson - Ormsby House	44 Thomas Pk	Boston	r 1880
BOS.13590	Stetson - Kelly House	45 Thomas Pk	Boston	r 1880
BOS.7098	Hutchins, Clement House	46 Thomas Pk	Boston	c 1875
BOS.13591	Wenners, Elizabeth Double House	47 Thomas Pk	Boston	r 1890
BOS.13592	Goodman, Walter G. Double House	48 Thomas Pk	Boston	r 1890
BOS.13593	Goodman, Walter G. Double House	49 Thomas Pk	Boston	r 1890
BOS.13594	Greene, Maria J. Double House	50 Thomas Pk	Boston	r 1890
BOS.13595	Martin, George House	51 Thomas Pk	Boston	1886
BOS.13596	Martin, George House	52 Thomas Pk	Boston	1886
BOS.13597	Hotel Marie	53 Thomas Pk	Boston	r 1890
BOS.7099	Walbridge, Frederick House	56 Thomas Pk	Boston	1876
BOS.13598	Reardon, Mary C. House	57 Thomas Pk	Boston	r 1890
BOS.13599	Curtis, Thomas C. House	58 Thomas Pk	Boston	r 1890
BOS.7100	Stetson, John A. Double House	59-60 Thomas Pk	Boston	1887
BOS.7101	Gogin, Thomas House	61 Thomas Pk	Boston	c 1873
BOS.13600		63 Thomas Pk	Boston	1927
BOS.13601		65 Thomas Pk	Boston	1927
BOS.13602		67 Thomas Pk	Boston	1927
BOS.13603		68 Thomas Pk	Boston	1927
BOS.7102	Manning, Thomas - Johnson, Samuel W. House	69 Thomas Pk	Boston	c 1867
BOS.5552	Boston Wharf Company Building	12-18 Thomson Pl	Boston	1907
BOS.5553	Boston Wharf Company Paint and Varnish Warehouse	19-23 Thomson Pl	Boston	1907
BOS.15358	Thomson Financial Offices	22-24 Thomson Pl	Boston	1992

Inv. No.	Property Name	Street	Town	Year
BOS.5554	Boston Wharf Company Warehouse	25-27 Thomson Pl	Boston	1909
BOS.5555	Boston Wharf Company Building	26-28 Thomson Pl	Boston	1908
BOS.15359	Boston Wharf Company Building	29-33 Thomson Pl	Boston	1912
BOS.5556	Boston Wharf Company Building	30-34 Thomson Pl	Boston	1916
BOS.15360	Boston Wharf Company Building	35-37 Thomson Pl	Boston	1913
BOS.5557	Boston Wharf Company Building	36-40 Thomson Pl	Boston	1900
BOS.5558	Boston Wharf Company Warehouse	41-45 Thomson Pl	Boston	1924
BOS.5559	Pittsburgh Plate Glass Company Warehouse	42-56 Thomson Pl	Boston	1909
BOS.5560	Boston Wharf Company Warehouse	47-55 Thomson Pl	Boston	1924
BOS.12972	Boston Army Supply Base - Building 54	7 Tide St	Boston	c 1940
BOS.7103		5 Vinton St	Boston	c 1919
BOS.7113	Saints Peter and Paul Roman Catholic Church	45 West Broadway	Boston	1844
BOS.7104	Cardinal Cushing Central High School for Girls	50-72 West Broadway	Boston	c 1868
BOS.7114	Saints Peter and Paul Roman Catholic Rectory	55-59 West Broadway	Boston	c 1868
BOS.15331	Devine Block	72 West Broadway	Boston	c 1890
BOS.7105	Casey, Thomas Building	82 West Broadway	Boston	1896
BOS.7106	Collins, James Liquor Import and Wholesale Dealers	262-270 West Broadway	Boston	r 1860
BOS.9251	Street Clock	342 West Broadway	Boston	c 1870
BOS.7115	Greene, Gardiner Row House	363 West Broadway	Boston	c 1824
BOS.7116	Greene, Gardiner Row House	365 West Broadway	Boston	c 1824
BOS.7107	Monks and Company Flour and Grain Building	366 West Broadway	Boston	1873
BOS.7117	Greene, Gardiner Row House	367 West Broadway	Boston	c 1824
BOS.7108	South Boston Savings Bank	368-372 West Broadway	Boston	r 1870
BOS.7118	Greene, Gardiner Row House	369 West Broadway	Boston	c 1824
BOS.7120	Nickerson Apartment Building	397-401 West Broadway	Boston	r 1895
BOS.7121	Bethesda Hall - Baker Building	403-415 West Broadway	Boston	1890
BOS.7090		409 West Broadway	Boston	c 1900
BOS.7109	Saint Matthew's Episcopal Church	410 West Broadway	Boston	1860
BOS.7110	U. S. Post Office - South Boston Branch	420-426 West Broadway	Boston	1919
BOS.7111	South Boston Savings Bank	460-462 West Broadway	Boston	1948
BOS.7112	South Boston Market	464-468 West Broadway	Boston	1935
BOS.7173	King, Augustus Double House	197-199 West Eighth St	Boston	c 1874
BOS.9239	West Fifth Street Bridge over Conrail	West Fifth St	Boston	1918
BOS.7160	Minot, William Row House	261 West Fifth St	Boston	c 1868
BOS.7161	Minot, William Row House	263 West Fifth St	Boston	c 1868
BOS.7162	Minot, William Row House	265 West Fifth St	Boston	c 1868
BOS.7163	Burrage, J. Row House	267 West Fifth St	Boston	c 1868

Inv. No.	Property Name	Street	Town	Year
BOS.7164	Frothingham, Nathaniel D. Row House	269 West Fifth St	Boston	c 1868
BOS.7165	Connor, James Row House	271 West Fifth St	Boston	c 1868
BOS.7166	Minot, William Row House	273 West Fifth St	Boston	c 1868
BOS.7167	Minot, William Row House	275 West Fifth St	Boston	c 1868
BOS.7168	Minot, William Row House	277 West Fifth St	Boston	c 1868
BOS.7169	Connor, James Row House	279 West Fifth St	Boston	c 1868
BOS.7170	Minot, William Row House	281 West Fifth St	Boston	c 1868
BOS.7171	Minot, William Row House	283 West Fifth St	Boston	c 1868
BOS.12990	Estabrook's, Rufus Sons Building	202 West First St	Boston	c 1890
BOS.9007	West Fourth Street Bridge - Dover Street Bridge	West Fourth St	Boston	1893
BOS.9245	West Fourth Street Bridge over MBTA	West Fourth St	Boston	1917
BOS.7146	York House - South Boston Hotel	99-101 West Fourth St	Boston	c 1830
BOS.7147	Wood, William W. Double House	123-125 West Fourth St	Boston	c 1845
BOS.7139	Hausman, Harry and Joseph Building	142 West Fourth St	Boston	c 1919
BOS.7140	Hausman, Harry and Joseph Building	150-154 West Fourth St	Boston	1904
BOS.7141	Bigelow School	350 West Fourth St	Boston	1901
BOS.7148	Homer, Henry House	361 West Fourth St	Boston	c 1843
BOS.7149	Thing, Joseph House	375 West Fourth St	Boston	c 1852
BOS.7150	Conley, Charles C. - Safford, Daniel House	377 West Fourth St	Boston	c 1844
BOS.7142	Nickerson, Capt. Jonathan S. House	380 West Fourth St	Boston	c 1870
BOS.7143	Murphy, Mary E. House	388 West Fourth St	Boston	c 1852
BOS.7151	Smith, Horace - Driscoll, J. Double House	389-391 West Fourth St	Boston	c 1852
BOS.7144	Winch, Mary - Lovett, George L. Double House	392-394 West Fourth St	Boston	c 1868
BOS.7152	Miles - Smith, James F. Double House	397-399 West Fourth St	Boston	c 1852
BOS.7153	Hughes, Joshua House	401 West Fourth St	Boston	c 1852
BOS.7154	Atwood, Charles House	411 West Fourth St	Boston	c 1852
BOS.7155	James, Benjamin Row House	417 West Fourth St	Boston	r 1860
BOS.7156	Smith, Freeman Row House	419 West Fourth St	Boston	r 1860
BOS.7157	Brown, Solon F. Row House	421 West Fourth St	Boston	r 1860
BOS.7158	Howard, Samuel Row House	423 West Fourth St	Boston	r 1860
BOS.7159	James, Francis Row House	425 West Fourth St	Boston	r 1860
BOS.6874	South Boston Community Health Center	453 West Fourth St	Boston	1926
BOS.7145	Boston Hook and Ladder Fire House #5	456 West Fourth St	Boston	r 1870
BOS.7122	Ipswich Hosiery Mill	154 West Second St	Boston	1912
BOS.7124	Lawrence, William R. Row House	161 West Second St	Boston	c 1852
BOS.7125	Lawrence, William R. Row House	163 West Second St	Boston	c 1852
BOS.7126	Lawrence, William R. Row House	165 West Second St	Boston	c 1852
BOS.7127	Lawrence, William R. Row House	167 West Second St	Boston	c 1852

Inv. No.	Property Name	Street	Town	Year
BOS.6848	Boston Beer Company	249 West Second St	Boston	c 1882
BOS.7123	Hersey Brothers Machinery Manufacturing Company	314-330 West Second St	Boston	c 1899
BOS.7172	Cunningham, Mary - Furber, Benjamin Double House	190-192 West Seventh St	Boston	c 1868
BOS.9232	West Sixth Street Bridge over Conrail	West Sixth St	Boston	1918
BOS.9238	West Third Street Bridge over Conrail	West Third St	Boston	1918
BOS.7137	Foley, John House	117 West Third St	Boston	c 1868
BOS.7128	Saint Vincent de Paul Roman Catholic Church	212 West Third St	Boston	1872
BOS.7129	Weston, Alden B. House	236 West Third St	Boston	c 1874
BOS.7130	Connors, Ann Double Three Decker	242-244 West Third St	Boston	r 1895
BOS.7131	Lanergan, Richard House	256 West Third St	Boston	c 1852
BOS.7138	Williams, Rev. J. J. House	267 West Third St	Boston	r 1880
BOS.7132	McCarthy, Ellen House	310 West Third St	Boston	c 1852
BOS.7133	Souther, Henry P. Row House	346 West Third St	Boston	c 1868
BOS.7134	Souther, Henry P. Row House	348 West Third St	Boston	c 1868
BOS.7135	Souther, Henry P. Row House	350 West Third St	Boston	c 1868
BOS.7136	Souther, Henry P. Row House	352 West Third St	Boston	c 1868
BOS.7175	Columbus Park Building	William J. Day Blvd	Boston	
BOS.7176	Columbus Park Building	William J. Day Blvd	Boston	
BOS.7177	Carson Beach Bath and Field House	William J. Day Blvd	Boston	c 1922
BOS.7178	Carson Beach Concession Stand	William J. Day Blvd	Boston	
BOS.9253	Columbus Park	William J. Day Blvd	Boston	c 1897
BOS.9254	Carson Beach	William J. Day Blvd	Boston	c 1897
BOS.9255	Strandway, The	William J. Day Blvd	Boston	c 1897
BOS.9579	South Boston Boat Clubs Granite Retaining Wall	William J. Day Blvd	Boston	r 1920
BOS.9580	South Boston Boat Clubs Iron Fence	William J. Day Blvd	Boston	r 1920
BOS.6851	L Street Bath House	1663-1685 William J. Day Blvd	Boston	1931
BOS.7174	Richmond, Augustus C. House	52-54 Woodward St	Boston	c 1874
BOS.15361	Factory Buildings Trust Industrial Building #2	21 Wormwood St	Boston	c 1896
BOS.15365	Factory Buildings Trust Industrial Building #3	23-27 Wormwood St	Boston	c 1896
BOS.15362	Factory Buildings Trust Industrial Building #4	33-37 Wormwood St	Boston	c 1897
BOS.9515	Factory Buildings Trust Chimney Stack	41-45 Wormwood St	Boston	c 1896
BOS.15363	Factory Buildings Trust Industrial Building #5	41-45 Wormwood St	Boston	c 1896

Inventory No:	BOS.12965
Historic Name:	Boston Army Supply Base - Building 16
Common Name:	Boston Army Supply Base - Fabrication Plant
Address:	25 FID Kennedy Way
City/Town:	Boston
Village/Neighborhood:	South Boston; South Boston West
Local No:	
Year Constructed:	c 1940
Architect(s):	Fehlaber Pile Company; Hughes - Foulkrod Company
Architectural Style(s):	Art Deco
Use(s):	Administration Office; Mill Unspecified; Other Manufacturing; Warehouse
Significance:	Architecture; Industry; Military
Area(s):	BOS.RT: Boston Army Supply Base
Designation(s):	
Building Materials(s):	Roof: Synthetic Other Wall: Brick; Cast Stone; Concrete Cinderblock; Sheet Metal; Steel Foundation: Brick; Granite; Timber; Stone, Cut

FORM B – BUILDING

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

Assessor's Number	USGS Quad	Area(s)	Form Number
0602674000	Boston South	BOS.RT	12965

Town/City: Boston

Place: South Boston

Address: 25 Fid Kennedy Avenue

Historic Name: Building 16

Uses: Present: Vacant

Original: U.S. Navy machine shop

Date of Construction: 1940-1941

Source: Plans / Cornerstone

Style/Form: Utilitarian / Art Deco

Architect/Builder: Hughes-Foulkrod Company

Exterior Material:

Foundation: Brick

Wall/Trim: Brick, Metal Panel, Cast Stone

Roof: Membrane

Outbuildings/Secondary Structures: None

Major Alterations *(with dates):*
Wooden barracks, added ca. 1942, removed 1950s-1960s
Concrete block addition, late 20th century

Condition: Good

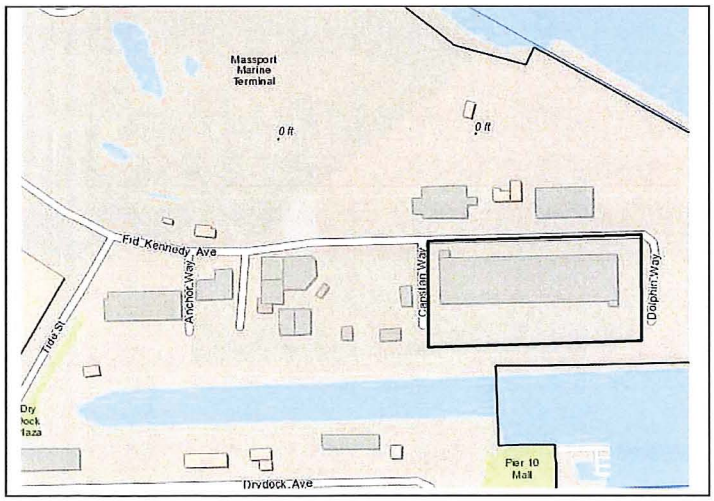
Moved: no ☒ yes ☐ **Date:**

Acreage: approximately 3.21

Setting: Located on the waterfront in an industrial complex. The property is level consisting of filled land with a concrete sidewalk on its north and eastern ends and an asphalt access drive at the southern end as well as a parking lot at its eastern end.

Photograph

Locus Map



Recorded by: Brian Lever

Organization: Epsilon Associates

Date (*month / year*): November 2015

☒ Recommended for listing in the National Register of Historic Places.

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.

25 Fid Kennedy Avenue (Building 16) is located within the Marine Industrial Park in South Boston also addressed as 600 Summer Street. 25 Fid Kennedy Avenue (also known as Parcel N) consists of approximately 3.21 acres with an existing building measuring 159,323 SF. In addition to the building, the property consists of a paved parking lot along the eastern end and a paved access drive along the southern end. The Fehlaber Pile Company constructed the wood pilings which support the building, with the building constructed in 1941-1942 by the Hughes-Foulkrod Company following a design used at other U.S. Navy Yards.

25 Fid Kennedy Avenue measures roughly 500-feet long and 130-feet wide with a rectangular footprint. The building has a tall (81-92-feet) asbestos coated corrugated sheet metal main block with brick one-story (13-feet tall) sections along the north and south elevations. At the east and west ends of the building are stairtowers which project above the roofline. The main block (excluding stairtowers and one-story wings) is 81-feet in height with the stairtowers 92-feet in height. Supported by steel I-beams, the exterior is clad in yellow brick, asbestos coated corrugated sheet metal panels and trimmed in cast stone.

At the four one-story wings along the north and south elevations, the brickwork features bands of recessed header courses and is topped with a cast stone band. At stairtower entrances are bands of cast stone with vertical groves and triangular inlay design reminiscent of Art Deco style. The northwest stairtower entrance contains the building's number "16" as well as the cornerstone with "1940" both in cast stone. The building retains wood panel doors as well as later steel doors with double leaf wood doors at stairtower entrances. Wood doors retain heavy metal strap hinges. Throughout the building are also large steel rollup overhead doors. Windows at the first story are a mixture of steel awning windows with corrugated glass, steel hopper windows and tripartite steel windows with center operable hopper panels flanked by sidelights. Windows have wire embedded within the glass for additional support. Window openings are singular, paired or in ganged sets of three or four with some openings infilled with metal panels. At the upper stories, the windows run the length of the building (except stairtowers) predominantly consisting of corrugated glass with one band of tripartite steel windows matching those on the first story. At each stairtower are vertical bands of corrugated glass windows above the first story running up the towers, another Art Deco feature. Scatted throughout the exterior are round metal light fixtures similar to those seen ships. Large metal vents and a metal ladder also adorn the exterior. The flat roof is covered in membrane roofing and contains ten clerestory sections, including one at each end of the building that incorporate each stairtower. The clerestories contain corrugated glass windows running their length allowing light to penetrate the interior.

The interior of the building is divided into the one-story brick wings and the voluminous main block, which is open floor to ceiling. The building has a brick and concrete floor with two rows of heavy riveted steel I-beams providing structural support running lengthwise through the building and one at the building's center. The heavy I-beams are braced with steel trusses and extend up 2/3^{rds} of the building's height. Atop the heavy I-beams are the overhead cranes accessing the length of the building including the large overhead doors at the east and west ends. Smaller I-beams atop the heavy and their accompanying truss work support the roof. Elevators are located within the stairtowers. Wood panel and metal doors are located in office areas.

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.

The property including what is now 25 Fid Kennedy was purchased from the Commonwealth of Massachusetts by the United States Navy in 1920. The purchase was borne out of a need for additional repair and refit space for the Navy as the space at the Charlestown Navy Yard was limited and its dry dock too small for the newer and larger naval vessels. The Commonwealth of Massachusetts had begun work on a dry dock known as the Commonwealth Dry Dock or later Dry Dock #3 in 1915 along

what is now Drydock Avenue as a venture to spur maritime industry in the area. While the dry dock was under construction the Navy agreed to purchase the property upon completion later naming it the South Boston Naval Annex. After purchase by the Navy, commercial use of the dry dock was allowed as the site was ancillary to the Charlestown facility. Small temporary steel buildings and marine construction equipment were erected by the Navy, but with sporadic use of the property it remained largely undeveloped for almost 20 years.

With the increase in military development prior to the United States' entry into WWII, naval facilities were in demand for ship repair and construction. By 1939, the South Boston Naval Annex was chosen as a site for expansion. As part of the expansion portions of the harbor including area in and around 25 Fid Kennedy were filled in and/or provided with additional support with pilings by the Fehlaber Pile Company. With the area suitably supported, construction of 25 Fid Kennedy began in 1940 by the Hughes-Foulkrod Company. The Hughes-Foulkrod Company used a similar design for 25 Fid Kennedy as used at other navy yards. The Navy Bureau of Yards and Docks had standard specifications that governed the design of the machine shops. The Hughes-Foulkrod Company constructed a similar but smaller building at the Philadelphia Navy Yard in 1938. Similar buildings would also later be erected at navy yards in Norfolk VA, Bayonne NY, Hunters Point CA and Terminal Island CA. The design of the building allowed it to be used by multiple trades/specialties or a single purpose. The building was completed in January 1941 at a cost of $857,145. Until other buildings were completed, 25 Fid Kennedy could accommodate the different trades at the Boston Naval Annex. 25 Fid Kennedy was the first building constructed as part of the expansion of the annex into a full-fledged shipyard.

During WWII additions were added on top of the one-story wings and roof by the William Bailey Company for barracks. Anti-aircraft gun platforms were also added to the roof. Throughout the war over 600 vessels were serviced in the Boston Naval Annex with 25 Fid Kennedy providing vital machine shop and metal fabrication services. After the War, the Annex became home to the Boston Group of the Atlantic Reserve fleet as vessels were either mothballed or retrofitted. In particular escort aircraft carriers were housed at the Annex.

Throughout the post WWII era, 25 Fid Kennedy continued to provide essential machine shop services for ship repair, but with less demand. The outbreak of the Korean War in 1950 provided an increase repair and retrofit work, but it was short-lived. In the 1950s the rooftop barracks were removed from the building as the Annex downsized. By 1960 with the decrease in ship repair activities, 25 Fid Kennedy again became the center of ship repair activities as various trades were consolidated within this one building. The Boston Group was discontinued in 1961, but inactive vessels continued to be berthed at the Annex in smaller numbers during the 1960s and commercial repair work persisted. During the 1960s, the barracks on top of the one-story wings were removed. As the demand for the Boston Naval Annex diminished and the cost of modernization was deemed too high, the Annex closed in 1974.

After closure of the Annex, the Commonwealth of Massachusetts again became owner of the property and 25 Fid Kennedy became home to PX Engineering in 1979 and operated as a steel fabrication plant until 1992. Afterward in the mid-1990s, the building housed Boston Sand and Gravel and was used as a concrete batch plant in support of the construction of the Central Artery Tunnel.

BIBLIOGRAPHY and/or REFERENCES:

Bargmann Hendrie + Archetype, Inc. Existing Conditions Survey.

Carlson, P. (2010). *Charlestown Navy Yard Historic Resource Study*. U.S. Department of the Interior. Boston: MA.

City of Boston Building Permits

Parkman, A. (1978). *Army engineers in New England: the military and civil work of the Corps of Engineers in New England, 1775-1975*. U.S. Army Corps of Engineers, Waltham: MA.

Public Archaeology Laboratory. (1997). Boston Army Supply Base Massachusetts Historical Commission Inventory Form.

United States Shipping Board. (1923). *Seventh Annual Report*.

Continuation sheet 2

ADDITIONAL PHOTOGRAPHS:

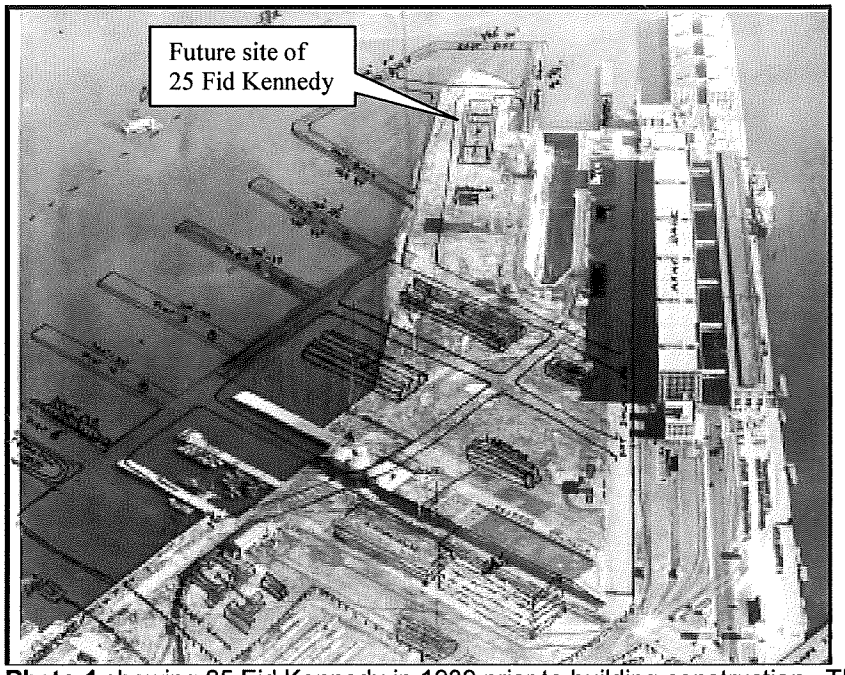


Photo 1 showing 25 Fid Kennedy in 1939 prior to building construction. The Boston Army Supply Base is labeled at the right as a separate facility. This photograph has future development including 25 Fid Kennedy sketched on it, courtesy National Park Service.

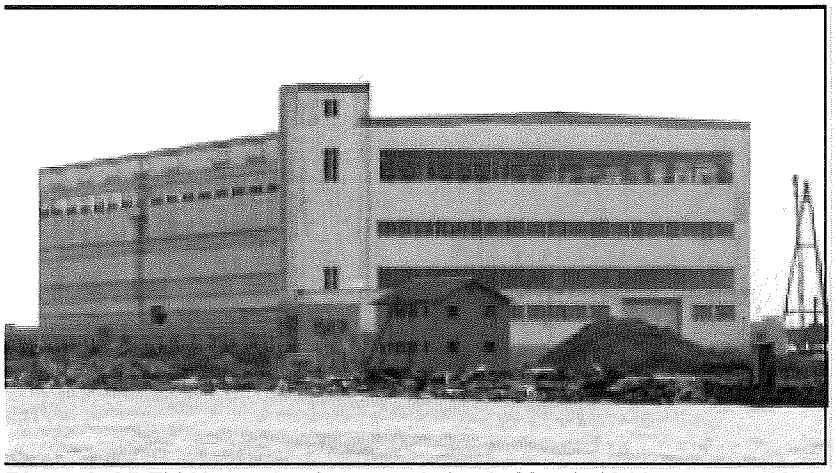


Photo 2, 25 Fid Kennedy after completion in March 1941, courtesy National Park Service.

Photo 3, view southeast of 25 Fid Kennedy, note round light fixtures above first story, courtesy Bargmann Hendrie + Archetype, Inc.

Photo 4, detail of northwest stairtower entrance, courtesy Bargmann Hendrie + Archetype, Inc.

Photo 5, view southwest of 25 Fid Kennedy, courtesy Bargmann Hendrie + Archetype, Inc.

Photo 6, view southwest of 25 Fid Kennedy, courtesy Bargmann Hendrie + Archetype, Inc.

Photo 7, view northeast of 25 Fid Kennedy, courtesy Bargmann Hendrie + Archetype, Inc.

Photo 8, view northeast of 25 Fid Kennedy, courtesy Bargmann Hendrie + Archetype, Inc.

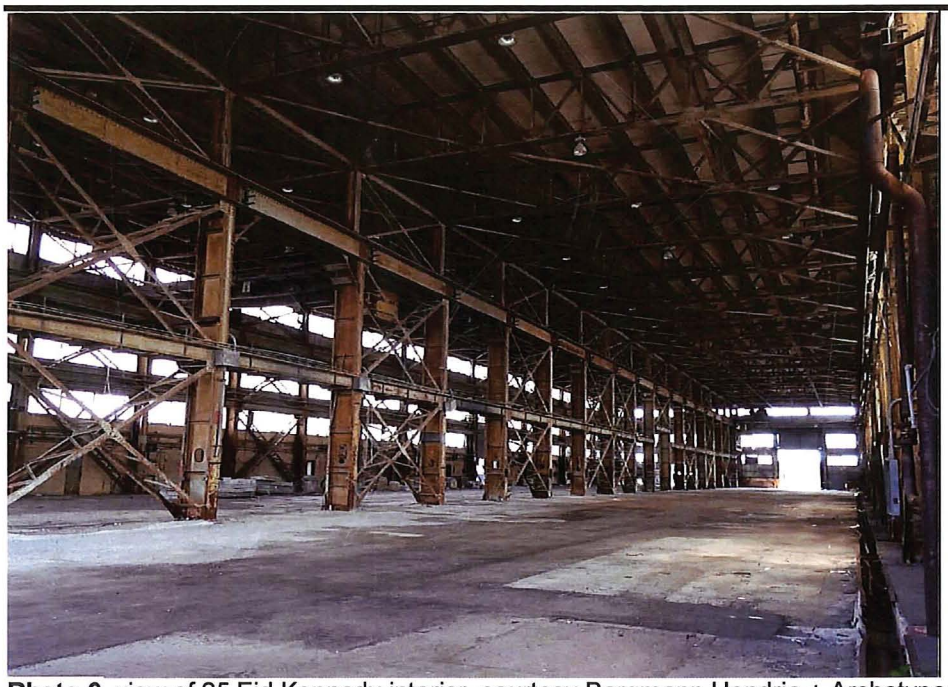


Photo 9, view of 25 Fid Kennedy interior, courtesy Bargmann Hendrie + Archetype, Inc.

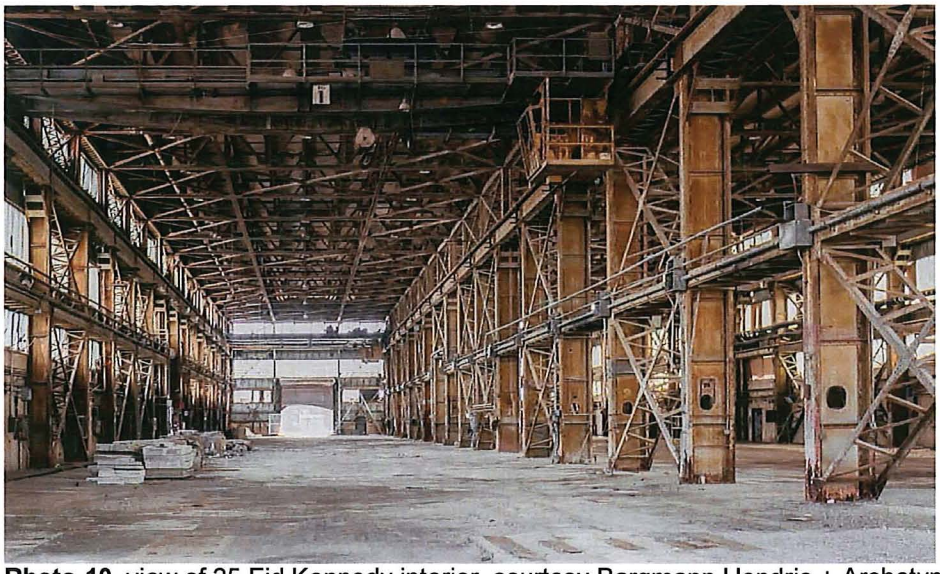


Photo 10, view of 25 Fid Kennedy interior, courtesy Bargmann Hendrie + Archetype, Inc.

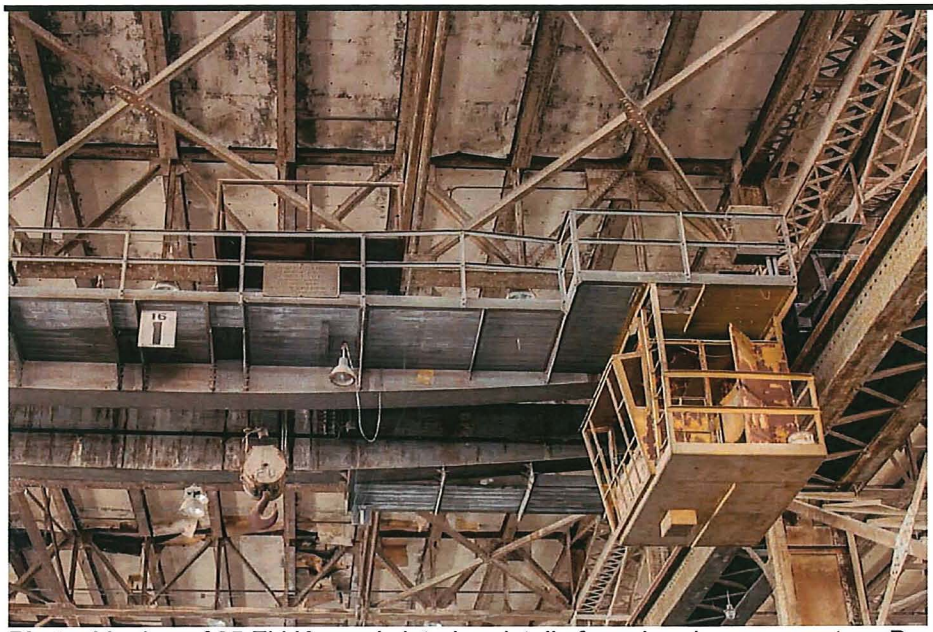


Photo 11, view of 25 Fid Kennedy interior, detail of overhead crane, courtesy Bargmann Hendrie + Archetype, Inc.

National Register of Historic Places Criteria Statement Form

Check all that apply:

☒ Individually eligible ☐ Eligible **only** in a historic district

☐ Contributing to a potential historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by Brian Lever
The criteria that are checked in the above sections must be justified here.

25 Fid Kennedy (Building 16) was the central building used for the repair and construction of vessels at the Boston Naval Annex from the development of the Annex as a fully operational shipyard in 1941 until its closure in 1974. The building is eligible under Criterion A for its association with the development and operation of the Boston Naval Annex during WWII until its closure. In particular, the building was constructed to house multiple tradespeople and functions in ship repair allowing the Annex to operate until other supporting buildings could be constructed and again served as the principal building as the base downsized. The building has a high degree of architectural integrity, especially for an industrial building, retaining original fabric including windows, doors, cladding and decorative cast stone features in Art Deco style. The building is also eligible under Criterion C as an uncommon local example of an Art Deco style industrial building within the City of Boston.

RECEIVED
DEC 24 2015
MASS. HIST. COMM

FOR MHC USE ONLY	
Original (pink) form to CLG file	
One copy to the following:	
Eligibility file	
Inventory form	
Town *file (with correspondence)*	
MACRIS Coordinator	
National Register Director	

Community:	South Boston

CLG OPINION: ELIGIBILITY FOR NATIONAL REGISTER

Date Received:	11/5/15	**Date Due:**		**Date Reviewed:**	11/20/2015
Type:	Individual	Yes/No	Y	District (attach map indicating boundaries)	
Property Name	Building 16			**MHC Inv Form #:**	BOS.12965, BOS.RT
Prop. Address	25 Fid Kennedy Avenue				

Action	**Honor**	Yes/No	N	**ITC**	Yes/No	Y	**Grant**	Yes/No	N
	CLGC initiated		Yes/No			N	**Other**		

INDIVIDUAL PROPERTIES		**DISTRICTS**	
Eligible	Yes	Eligible	Yes/No
Eligible, also in a district	No	Ineligible	Yes/No
Eligible only in a district	No	More Information Needed	Yes/No
Ineligible	No		
More Information Needed	No		

CRITERIA:	A- Yes	B- No	C- Yes	D- No
LEVEL:	Local- Yes	State- No		National- No

STATEMENT OF SIGNIFICANCE by:	Tonya Loveday, Assistant Survey Director, Boston Landmarks Commission

(Refer to criteria cited above in statement of significance. If more information is needed, use space to describe what is needed to finish eligibility opinion)

25 Fid Kennedy (Building 16) is located within the Marine Industrial Park in South Boston. It was built between 1941 and 1942 by the Hughes-Foulkrod Company and rests on wood pilings that were constructed by the Fehlaber Pile Company. The rectangular structure has a tall asbestos-coated corrugated sheet metal main block with one-story brick sections along the north and south elevations. At the east and west ends of the building are stairtowers that rise above the roofline. The building is supported by steel I-beams and is clad in asbestos coated corrugated sheet metal panels and yellow brick with cast stone trim. This utilitarian structure features Art Deco details at the stairtowers.

The building served as the primary location for the repair and construction of vessels at the Boston Naval Annex from its development as a fully operational shipyard in 1941 until it closed in 1974. It housed multiple operations related to the ship repair industry while other supporting buildings were under construction, and remained the principal building when the base eventually downsized.

25 Fid Kennedy Avenue is individually eligible for listing on the National Register of Historic Places at the local level under Criterion A for its association with the development and operation of the Boston Naval Annex during World War II through the 1970s. The building also satisfies Criterion C as a rare local example of an Art Deco style industrial building. 25 Fid Kennedy Avenue retains a high degree of architectural integrity with original fabric including windows, doors, cladding and decorative cast stone elements. The building possesses the location, design, setting, workmanship, materials, feeling, and

association that define integrity.
Use reverse side if necessary

MHC STAFF OPINION				
Date Received:	12/24/15	Date Reviewed:	1/13/16	
Opinion:	Concur	Disagree X		More Information Needed
Use Reverse for Comments				

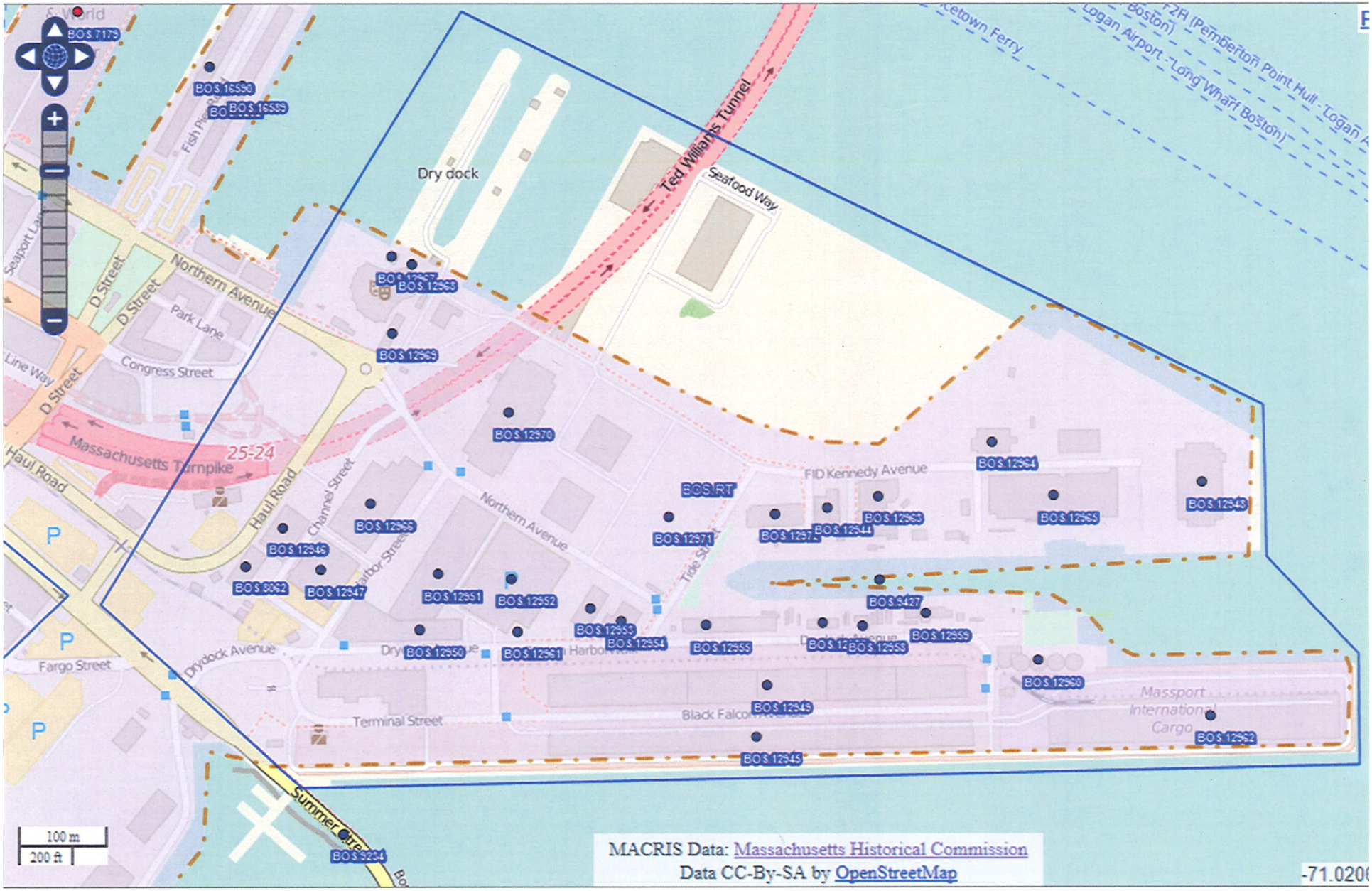
The MHC does not concur with the BLC's CLG opinion.

Building 16 is located at 25 Fid Kennedy Ave in South Boston, within the former South Boston Naval Annex, now the Boston Marine Industrial Park. The property was constructed in 1940-41 and was the first building developed as part of the expansion and development of the South Boston Naval Annex into a full-fledged shipyard. The site was selected in 1939 as an annex to the Charlestown Navy Yard and served as a main ship repair facility for the Navy Yard for over three decades, servicing over 600 ships in World War II alone. Following WWII, the annex was utilized in the mothballing of ships, housing the Reserve Fleet, and sonar testing, along with continued ship repair. Building 16 was constructed to serve as a multi-purpose facility as the shipyard was developed, and again became multi-use as the need for repairs declined in the post-war period. Following the closure of the Navy Yard in 1974, the building first housed a steel fabrication plant (1979-92) and later served as a concrete batch plant supporting the construction of the Central Artery Tunnel.

The property retains its original massing and most of its original materials. The main block measures approximately 500 feet by 130 feet and 81 feet in height, clad in asbestos coated corrugated sheet metal panels, and is flanked by 4 one-story lateral brick wings. Cast stone trim with Art Deco motifs are found at stair tower entrances. Most window openings retain their original steel sash, and bands of windows exhibit wired or corrugated glazing. The interior of the building remains a large open volume with an exposed steel structure and industrial crane. The building was constructed according to Navy plans, and similar buildings were built at Naval bases in Philadelphia, Norfolk, Bayonne, Hunters Point and Terminal Island.

The property is located within the former South Boston Naval Annex. The area retains a number of WWII-era Navy buildings, WWI-era buildings associated with the Navy as well as the adjacent Boston Army Supply Base, and more recent buildings associated with the redevelopment of the area as the Boston Marine Industrial Park. Notable extant structures include Dry Dock #3 and its Classical Revival-style Pump House (both 1918, BOS.9427 and 12959), Public Works Building (1940, BOS.12954), Administrative Offices at 24-26 Dry Dock (ca. 1940-42, BOS.12955), General Warehouse at 12 Channel Street (ca. 1940-42, BOS.12947), and the Army Marine Terminal Storehouse and Wharf Shed (1918, BOS.12949, 12945) among others.

It is the opinion of MHC staff that Building 16 at 25 Fid Kennedy Ave contributes to a potential National Register District under criteria A and C at the local level, the boundaries of which largely correspond to the Boston Army Supply Base survey area, BOS. RT. MHC staff find it may be appropriate, however, to omit the portion of filled land north of Fid Kennedy Ave east of Dry Dock #4 and west of the Subaru Distributors (BOS.12964), allowing for the inclusion of the extant North Jetty. The aforementioned filled land was formerly occupied by Navy piers and now contains large open lots and post-1980 structures; the infilling of this land took place outside of the likely period of significance.


BOS 7179
BOS 16590
BOS 16589
Dry dock
Ted Williams Tunnel
Seafood Way
Northern Avenue
D Street
Park Lane
Congress Street
Massachusetts Turnpike
25-24
Haul Road
Channel Street
Northern Avenue
FID Kennedy Avenue
Drydock Avenue
Fargo Street
Terminal Street
Massport International Cargo
Summer Street
BOS 12968
BOS 12969
BOS 12970
BOS 12966
BOS 12946
BOS 8062
BOS 12947
BOS 12951
BOS 12952
BOS 12950
BOS 12961
BOS 12953
BOS 12954
BOS 12955
BOS 12971
BOS 12963
BOS 12944
BOS 12964
BOS 12965
BOS 12943
BOS 9427
BOS 12959
BOS 12960
BOS 12962
BOS 12945
BOS 9264
100 m
200 ft
MACRIS Data: Massachusetts Historical Commission
Data CC-By-SA by OpenStreetMap

The Vertex Companies, Inc.
One Congress Street, 10th Floor
Boston, MA 02114
PHONE 617.275.5407 | FAX 617.830.0298
www.vertexeng.com

March 15, 2017

State Historic Preservation Officer
Massachusetts Historical Commission
220 Morrissey Boulevard
Boston, MA 02125
Attn: Brona Simon

Re: Fax Submittal of Notice of Intent (NOI) – Dewatering General Permit (DGP)

Dear Ms. Simon,

My Name is Ben Sivonen and I work for The Vertex Companies, Inc. I recently sent a submittal package to your office via mail in regards to a proposed NOI that will be filed with the National Pollutant Discharge Elimination System (NPDES) in regards to proposed dewatering practices for a site located at 25 Fid Kennedy Avenue in Boston Massachusetts.

The letter was sent in accordance with NPDES requirements to notify your office of anticipated dewatering activities at the site based on the fact that the facility is eligible for listing on the National Register of Historic Places. I spoke with a representative of your office earlier today and learned that the office had not yet received a copy of the submittal. As such, it was recommended that a copy faxed to your/ your office's attention in order help expedite the review process. The fax includes this cover letter and the attached 22-page submittal.

Please do not hesitate to contact me with any questions you may have. If necessary, I can deliver a complete copy of the submittal in person if it may help expedite the review process or if your office will require a more formal submittal.

I appreciate your assistance in this matter.

Best regards

Benjamin Sivonen
Assistant Project Manager

The Vertex Companies, Inc.
One Congress Street – 10th Flr | Boston, MA 02109 | USA

OFFICE 617.459.4957 | **MOBILE** 781.974.7595

The Vertex Companies, Inc.
One Congress Street, 10th Floor
Boston, MA 02114
PHONE 617.275.5407 | FAX 617.830.0298
www.vertexeng.com

March 1, 2017

State Historic Preservation Officer
Massachusetts Historical Commission
220 Morrissey Boulevard
Boston, MA 02125

RE: Proposed Notice of Intent –Dewatering General Permit
Boston Marine Industrial Park
Parcel N
25 Fid Kennedy Avenue
Boston, Massachusetts 02210

To whom it may Concern:

The Vertex Companies, Inc. (VERTEX) has prepared this statement on behalf of 25 Fid Kennedy, LLC regarding proposed construction activities at 25 Fid Kennedy Avenue, Boston Massachusetts (the Site).

The Site is currently eligible for listing on the National Register of Historic Places, as specified in the attached Massachusetts Cultural Resource Information System (MACRIS) record summary. In accordance with the United States Environmental Protection Agency (USEPA) National Pollutant Discharge Elimination System (NPDES) regulations, this statement is being made to notify your office of proposed construction activities at the Site and the intent to file a Notice of Intent (NOI) to the USEPA for application of a Dewatering General Permit (DGP). The proposed filing of the DGP is being made in relation to excavation dewatering that will be performed during the installation of proposed subsurface utility lines at the Site.

As specified in USEPA regulations, it is required that notification be made in accordance with National Historic Preservation Act (NHCA) and Advisory Council on Historic Preservation (ACHP) 36 CFR 800. This statement is being made to request that your office review the attached information on the Site to opine if the proposed construction of new subsurface utility lines and associated excavation dewatering have the potential to affect historic properties.

A United States Geologic Survey (USGS) map section which depicts the location of the project Site is provided in Figure 1. The location of existing and proposed Site features is depicted on Sheet C101 – Utility Site Plan which also specify the location of proposed dewatering systems and outfalls. Additionally, a copy of the Project Notification Form is attached to this statement. Copies of this statement and associated documents are also being provided to local Tribal Historic Preservation Offices.

Please do not hesitate to contact us should you have any questions or require additional information.

Sincerely,

The Vertex Companies, Inc.

Benjamin Sivonen
Assistant Project Manager

Frank Calandra, PE, LSP
Division Manager – Remediation

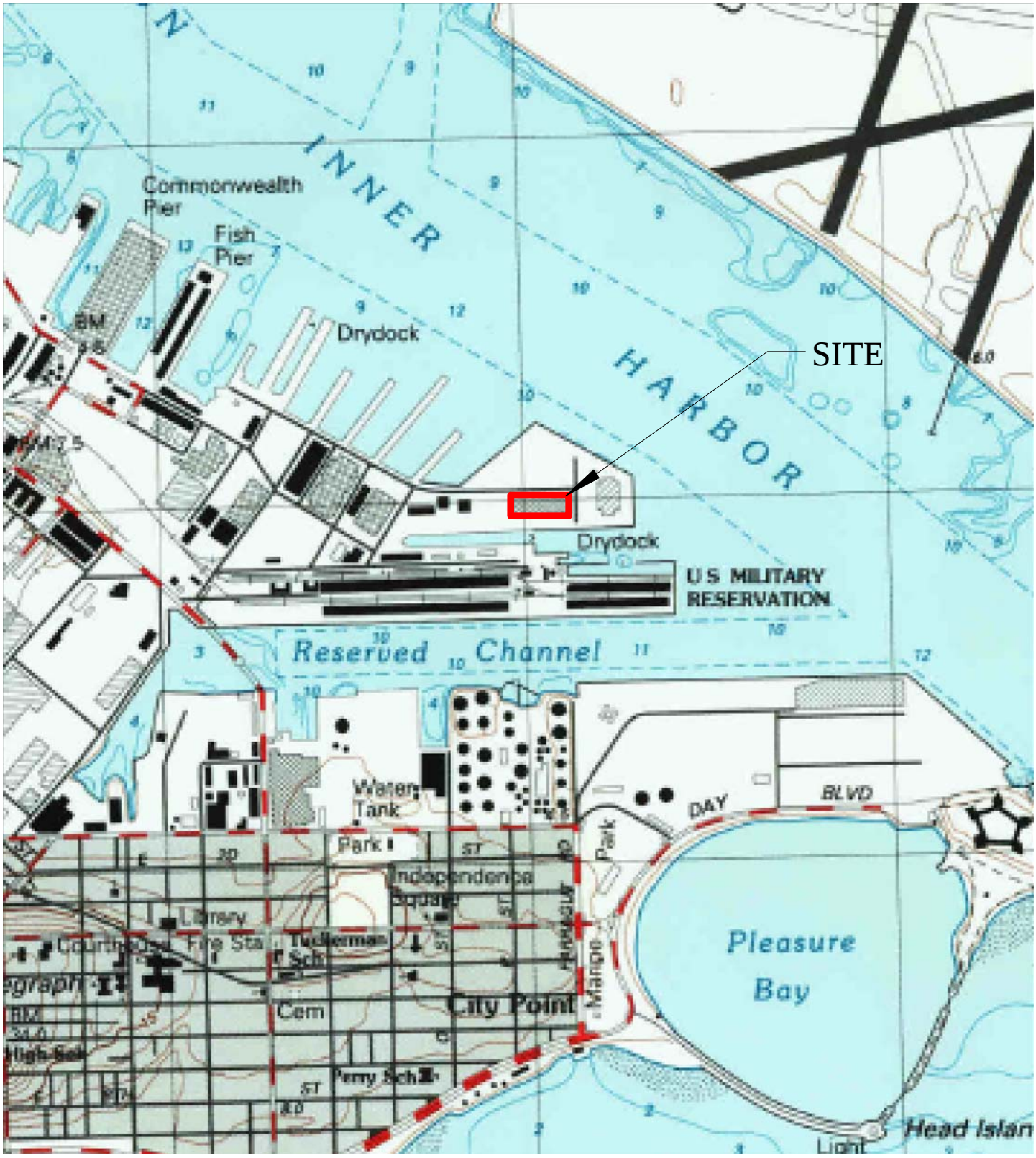
CC:
Wampanoag Tribe of Gay Head
Bettina Washington, Tribal Historic Preservation Officer
20 Black Brook Road
Aquinnah, MA 02535

Mashpee Wampanoag
Ramona Peters, Tribal Historic Preservation Officer
483 Great Neck Road S.
Mashpee, MA 02649

Narragansett Tribe
John Brown, Tribal Historic Preservation Officer
P.O. Box 268
Charlestown, RI 02813

Attachments:

- Figure 1 – Site Locus
- Sheet C101 – Utility Site Plan
- Water Treatment System Schematic
- Massachusetts Department of Environmental Protection Phase I Site Assessment Map
- Massachusetts Historical Commission – Project Notification Form
- Massachusetts Cultural Resource Information System Database Deliverables



USGS Topographic Map, 1987
Boston South, MA Quadrangle
Contour Interval: 5 Feet

SITE LOCUS MAP

Boston Marine Industrial Park
Parcel N
25 FID Kennedy Avenue
Boston, Massachusetts

SCALE: 1:24,000

March 2017

VERTEX Proj. No. 40717

VERTEX

FIGURE NO. 1

LEGEND

- 16 — CONTOUR
- 16.5 — HALF FOOT CONTOUR
- +17.1 — SPOT GRADE
- VERTICAL GRANITE CURB
- 12"D — DRAIN LINE
- CATCH BASIN (CB)
- WATER QUALITY CATCH BASIN (WQD)
- DRAIN MANHOLE (DMH)
- 8"S — SEWER LINE
- SEWER MANHOLE (SMH)
- 8"W — WATER LINE
- GATE VALVE & TEE
- CONCRETE WALK
- EROSION CONTROL TUBE
- GAS LINE
- GAS/OIL/SAND SEPARATOR
- BOLLARD

NOTES:

1. LOCATIONS AND ELEVATIONS OF UNDERGROUND PIPES AND CONDUITS HAVE BEEN DETERMINED FROM THE REFERENCED PLAN AND SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. H.W. MOORE ASSOCIATES, INC. ASSUMES NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES INACCURATELY SHOWN OR OMITTED. BEFORE PLANNING FUTURE CONNECTIONS, THE PROPER UTILITY DEPARTMENT SHALL BE NOTIFIED AND THE ACTUAL LOCATIONS OF SUBSURFACE STRUCTURES SHALL BE VERIFIED IN THE FIELD. CALL THE BWSC, (617)989-7000 AND DIG-SAFE CALL CENTER, (888)344-7233, 72 HOURS (3 WORKING DAYS) PRIOR TO EXCAVATION.
2. ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO BWSC REQUIREMENTS AND ALL OTHER APPLICABLE MUNICIPAL REGULATIONS.
3. ALL DISTURBANCES WITHIN THE TRAVELED WAYS SHALL CONFORM TO CITY AND BWSC STANDARDS.
4. THIS PLAN HAS BEEN PREPARED FOR APPROVAL OF THE WATER, DRAIN AND SEWER CONNECTIONS TO THE BWSC FACILITIES. IT IS UNDERSTOOD THAT THE RESPONSIBILITY OF OWNERSHIP AND MAINTENANCE OF THE SEWER CONNECTIONS ON PRIVATE PROPERTY AND/OR PRIVATE AND PUBLIC WAYS SHALL BE THE RESPONSIBILITY OF THE DEVELOPER AND/OR OWNERS. IT IS ALSO UNDERSTOOD THAT THE WATER CONNECTIONS ON PRIVATE PROPERTY INCLUDING PRIVATE WAYS ARE ALSO THE RESPONSIBILITY OF THE DEVELOPER AND/OR OWNERS. IF THE CONNECTIONS CROSS, OR ARE NEAR INDIVIDUAL PROPERTY LINES, PROVISIONS MUST BE MADE TO ALLOW EACH OWNER TO MAINTAIN OR RECONSTRUCT THEIR RESPECTIVE CONNECTIONS. THIS FACT MUST BE INCORPORATED INTO ANY PURCHASE AND SALES AGREEMENT AND DEEDS RELATED TO THE TRANSFER OF OWNERSHIP OF THE PROPERTIES.
5. THE PROPOSED BUILDING CONNECTIONS (BY PLUMBER) SHALL BE 10' OUTSIDE THE FOUNDATION WALL.
6. SITE CONTRACTOR TO PROVIDE ALL EXCAVATION, INSTALLATION, BACK FILLING, PAVEMENT PATCHING, ETC. FOR THE INSTALLATION OF UNDERGROUND GAS, ELECTRIC, TELEPHONE, FIRE ALARM, WATER, SEWER, DRAIN AND SIMILAR SERVICES.
7. IF EXISTING ABANDONED BWSC SERVICES ARE ENCOUNTERED THEY SHALL BE CUT AND CAPPED AT THE MAIN PER BWSC STANDARDS.
8. THE SEWER GRAVITY PIPE SHALL BE POLYVINYL CHLORIDE (PVC) PIPE SDR 35 CONFORMING TO ASTM STANDARD SPECIFICATIONS D3034 UNLESS OTHERWISE NOTED.
9. STORM DRAIN PIPES SHALL BE POLYVINYL CHLORIDE (PVC) PIPE SDR 35 CONFORMING TO ASTM STANDARD SPECIFICATIONS D3034.
10. CONTRACTOR IS TO OBTAIN THE ROUGH CONSTRUCTION SIGN OFF DOCUMENT FROM THE CITY OF BOSTON INSPECTIONAL SERVICES DEPARTMENT PRIOR TO FILING A GENERAL SERVICES APPLICATION WITH BWSC.
11. CONTRACTOR WILL BE RESPONSIBLE FOR PREPARING AS-BUILT PLANS IN ACCORDANCE WITH BWSC REQUIREMENTS.
12. CONTRACTOR TO CONFIRM THE LOCATIONS AND INVERTS OF THE EXISTING UTILITIES IN THE STREET PRIOR TO THE INSTALLATION OF NEW SERVICE CONNECTIONS. SERVICES SHALL BE FIELD VERIFIED BEFORE BEGINNING CONSTRUCTION.
13. ANY CONSTRUCTION DEWATERING SHALL EMPLOY MEASURES TO FILTER OUT SEDIMENT PRIOR TO ITS DISCHARGE AND SHALL CONFORM WITH BWSC REQUIREMENTS. CONTRACTOR TO SUBMIT A SKETCH OF THESE TO THE ARCHITECT FOR APPROVAL.
14. CONTRACTOR TO EMPLOY MEASURES TO CONTROL DUST DURING CONSTRUCTION.
15. RIM ELEVATIONS OF DRAINAGE STRUCTURES ARE APPROXIMATE. FINAL ELEVATIONS ARE TO BE SET FLUSH. ADJUST ALL OTHER RIM ELEVATIONS OF EXISTING MANHOLES, WATER GATES, GAS GATES AND OTHER UTILITIES TO FINISHED GRADE WITHIN LIMITS OF SITE WORK.
16. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE, FIRE ALARM AND OTHER PRIVATE COMPANIES, AS REQUIRED.
17. COORDINATE CATV, TELEPHONE AND GAS INSTALLATION WITH THE UTILITY COMPANIES.
18. LOCATIONS OF 'CUT & CAPS' FOR THE EXISTING BUILDINGS UTILITY SERVICES ARE APPROXIMATE ONLY. CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING SERVICES TO BE CUT & CAPPED PRIOR TO START OF WORK.
19. FIRE SERVICE SHALL BE DUCTILE IRON, MANUFACTURED IN ACCORDANCE WITH THE REQUIREMENTS OF ANSI/AWWA C151/A21.51 AND SHALL BE CLASS 56. JOINTS SHALL BE INSTALLED WITH MEGALUG MECHANICAL JOINTS OR EQUAL, DUE TO CORROSIVE SOILS IN THIS AREA. ALL NEW WATER PIPE TO HAVE POLYWRAP ENCASEMENT PER BWSC SPECIFICATIONS.
20. SEE PLUMBING PLANS FOR ALL PIPE WORK WITHIN BUILDING.
21. SEE ARCHITECTURAL PLANS FOR PROPOSED SITE LAYOUT. THESE PLANS ARE FOR BWSC PERMITTING PURPOSES ONLY.
22. SEE ARCHITECTURAL PLANS FOR COMPONENTS OF EXISTING BUILDING TO BE DEMOLISHED AND/OR SALVAGED.
23. ALL EXISTING STORM DRAINS AND SEWERS SHALL BE VIDEO INSPECTED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF CONSTRUCTION TO VERIFY LOCATIONS, SIZES AND CONDITIONS OF PIPES.
24. THE RIM ELEVATIONS OF ALL UTILITY STRUCTURES WITHIN THE LIMITS OF WORK SHALL BE ADJUSTED TO FINISHED GRADE.
25. CONTRACTOR TO REMOVE AND PROPERLY DISPOSE OF ALL SITE DEBRIS, SEE NOTE ON C102.
26. PRIOR TO CONSTRUCTION OF THE CRUSHED STONE INFILTRATION TRENCH CONTRACTOR TO DETERMINE ACTUAL LOCATION OF EXISTING NEARBY GAS LINE, IF CONFLICT(S) EXIST CONTRACTOR TO COORDINATE WITH SITE ENGINEER FOR REQUIRED MODIFICATIONS.
27. CONTRACTOR TO COORDINATE A PRECONSTRUCTION MEETING WITH THE BWSC CONSTRUCTION DIVISION PRIOR TO ANY WORK ON THE PROPOSED NEW 8" SEWERS.
28. CONTRACTOR TO SAWCUT EXISTING PAVEMENT WITHIN FID KENNEDY AVENUE, CAPSTAN WAY AND DOLPHIN WAY FOR PROPOSED UTILITY TRENCHES.

STORMWATER INFILTRATION SYSTEM

DESIGN RUNOFF VOLUME

USE 1/2 INCH RAINFALL EVENT
IMPERVIOUS AREA = 3.247 AC.

RUNOFF VOLUME = 3.247 AC. x 1/2 INCH x (43,560 FT²/AC.) x (1 FT./12 INCH)= 5,893.3 C.F.

DESIGN VOLUME = 5,893.3 C.F.

STORM WATER VOLUME CALCULATIONS

INFILTRATION TRENCH "S2A"

INFILTRATION TRENCH WITH CRUSHED STONE

TRENCH VOLUME BELOW OUTLET = (EL. 15.8-EL.15.5) x (6.0+4.2)/2) x (349)) = 534.0 C.F.

CRUSHED STONE VOLUME = [(349' x 6.0) x (EL. 15.8-EL. 13.5) - 534.0]' x 0.3 VOIDS = 1,284.7 C.F.

SUBTOTAL = 534.0 C.F. + 1,284.7 C.F. = 1,818.7 C.F.

INFILTRATION SYSTEM "S3A"

18" PERFORATED PIPE INFILTRATION SYSTEM WITH CRUSHED STONE.

PIPE VOLUME = (7 x 135.5' + 19.5) x π (0.75)² = 1,710.6 C.F.

CRUSHED STONE VOLUME = [(139' x 21.5' x 2') - 1710.6 C.F.] x 0.3 VOIDS = 1,279.9 C.F.

SUBTOTAL = 1,710.6 C.F. + 1,279.9 C.F. = 2,990.5 C.F.

INFILTRATION SYSTEM "S3B"

12" PERFORATED PIPE INFILTRATION SYSTEM WITH CRUSHED STONE

PIPE VOLUME = (6 x 46 +11) x π (0.5)² = 225.4 C.F.

CRUSHED STONE VOLUME = [(49' x 13' x 1.5') - 225.4 C.F.] x 0.3 VOIDS = 219.1 C.F.

SUBTOTAL = 225.4 C.F. + 219.1 C.F. = 444.5 C.F.

INFILTRATION SYSTEM "S3C"

ROOF INFILTRATION SYSTEMS - USE 18" PERFORATED PIPE WITH CRUSHED STONE.

PIPE VOLUME = (6 x 38.5 +16.5') x π (0.75)² = 437.4 C.F.

CRUSHED STONE VOLUME = [(42' x 18.5' x 2.0') -437.4 C.F.] x 0.3 VOIDS = 335.0 C.F.

SUBTOTAL = 437.4 C.F. + 335.0 C.F. = 772.4 C.F.

TOTAL VOLUME PROVIDED = SYSTEMS "S2A" + "S3A" + "S3B" + "S3C"
= 1,818.7 + 2,990.5 C.F. + 444.5 C.F. + 772.4 C.F. = 6026.1 C.F.

TOTAL VOLUME PROVIDED = 6,026.1 C.F.

STORMWATER STORAGE VOLUME = 6,026.1 C.F. > 5,893.3 C.F. (FROM A 1/2 INCH RAINFALL EVENT)

SERVICE CONNECTION TABLE

ITEM		QTY	BWSC INSPECTOR/DATE
A1	4" SEWER SERVICE	1	
A2	4" SEWER SERVICE	1	
A3	4" SEWER SERVICE	1	
B1	6" SEWER SERVICE	1	
B2	6" SEWER SERVICE	1	
B3	6" SEWER SERVICE	1	
C1	SEWER MANHOLE	1	
SMH 17	SEWER MANHOLE	1	
SMH 18	SEWER MANHOLE	1	
C2	SEWER MANHOLE	1	
SMH 24	SEWER MANHOLE	1	
SMH 19	SEWER MANHOLE	1	
D1	GAS/OIL/SAND SEPARATOR	1	
D2	GAS/OIL/SAND SEPARATOR	1	
D3	GAS/OIL/SAND SEPARATOR	1	
E1	8" SEWER CONNECTION SMH 18	2	
E2	8" SEWER CONNECTION SMH 20	2	
F	4" DOMESTIC WATER SERVICE	1	
G	8" FIRE SERVICE	1	
H1	INFILTRATION SYSTEM S3A	1	
H2	INFILTRATION SYSTEM S3B	1	
H3	INFILTRATION SYSTEM S3C	1	
I	INFILTRATION TRENCH	1	
J1	DRAIN MANHOLE	1	
J2	DRAIN MANHOLE	1	
K1	OUTLET CONTROL MANHOLE S3A	1	
K2	OUTLET CONTROL MANHOLE S3B	1	
K3	OUTLET CONTROL MANHOLE S3C	1	
L1	WQD CB1	1	
L2	WQD CB2	1	
L3	WQD CB3	1	
L4	WQD CB4	1	
M	DRAIN CONNECTION	1	
N	DYE TEST - SEWER	1	
O	DYE TEST - DRAIN	1	
P	DON'T DUMP PLAQUE	4	
Q	CUT & CAP WATER	2	
R	CUT & CAP SEWER	3	

SPECIAL CONDITIONS

ITEM	BWSC INSPECTOR/DATE
AS-BUILT PLAN	
CONDITIONS LETTER	

Account Number X Parcel Number 2674 Ward 6

Property Location 25 FID KENNEDY AVENUE

Project Name 25 FID KENNEDY

Neighborhood SOUTH BOSTON Extended Zip Code 02210

Owner (SEE BELOW)

Type of Premise I Meter Size 1.5" Inside X Outside

Owner's Mailing Address
ECONOMIC DEVELOPMENT AND INDUSTRIAL CORPORATION
Name c/o BOSTON REDEVELOPMENT AUTHORITY
Street ONE CITY HALL SQUARE
City BOSTON State MA Zip 02201-1007
Home Phone N/A Work Phone 617-741-4464

BOSTON LAND USE CODE: "I"
INDUSTRIAL

WARD No.: 6 PARCEL No.: 2674

WATER METER INFORMATION

PROPOSED WATER ACCOUNT No. :

MTU (METER TRANSMISSION UNIT) TO BE INSTALLED BY BWSC
(PROPOSED WATER METER SIZE = 1.5 INCHES)

ANTICIPATED SEWAGE FLOW

INDUSTRIAL PLANT WITHOUT CAFETERIA :

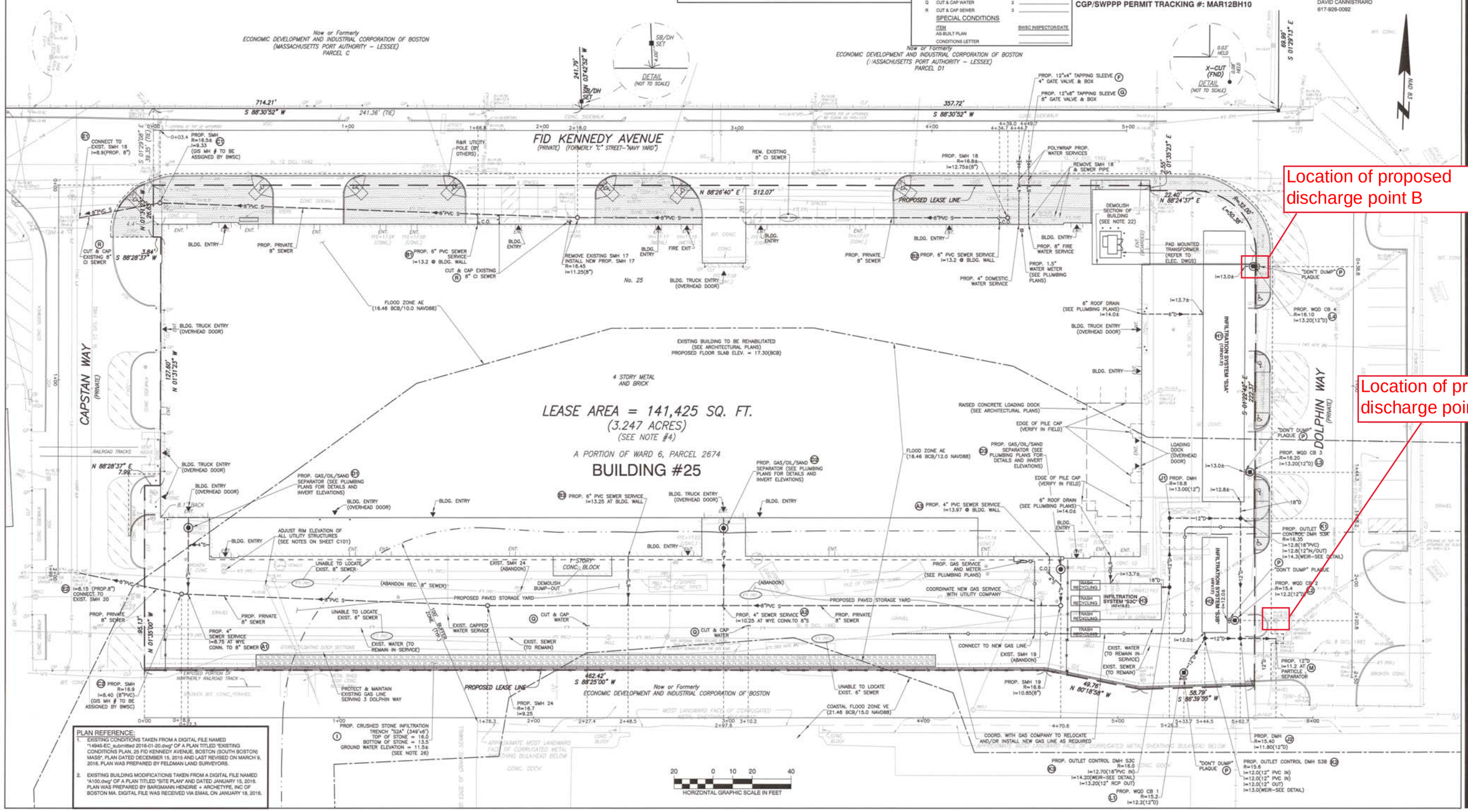
100 PERSONS x 15 GPD/PERSON = 1,500 GPD

CGP/SWPPP PERMIT TRACKING #: MAR12BH10

RESERVED FOR BWSC USE

OWNER
ECONOMIC DEVELOPMENT AND INDUSTRIAL CORPORATION
c/o BOSTON REDEVELOPMENT AUTHORITY
ONE CITY HALL SQUARE
BOSTON, MA 02201-1007
ATTN: MR. GARY UTER
617-742-4464

APPLICANT
J. C. CANNISTRARO, LLC
80 ROSEDALE ROAD
WATERTOWN, MA 02472
ATTN: JOHN CANNISTRARO
DAVID CANNISTRARO
617-926-0092



PLAN REFERENCE:

1. EXISTING CONDITIONS TAKEN FROM A DIGITAL FILE NAMED "14945-EC_submitted 2016-01-20.dwg" OF A PLAN TITLED "EXISTING CONDITIONS PLAN, 25 FID KENNEDY AVENUE, BOSTON (SOUTH BOSTON) MASS", PLAN DATED DECEMBER 15, 2015 AND LAST REVISED ON MARCH 9, 2016. PLAN WAS PREPARED BY FELDMAN LAND SURVEYORS.
2. EXISTING BUILDING MODIFICATIONS TAKEN FROM A DIGITAL FILE NAMED 'A100.dwg' OF A PLAN TITLED "SITE PLAN" AND DATED JANUARY 15, 2016. PLAN WAS PREPARED BY BARGMANN HENDRIE + ARCHETYPE, INC OF BOSTON MA. DIGITAL FILE WAS RECEIVED VIA EMAIL ON JANUARY 18, 2016.

ARCHITECT
bh+a
Bargmann Hendrie + Archetype, Inc.
300 A Street
Boston, MA 02210
617 350-0450 Tel

PROJECT NAME
25 Fid Kennedy
25 Fid Kennedy Avenue
South Boston, MA 02210

CLIENT
J.C. Cannistraro, LLC
80 Rosedale Road
Watertown, MA 02472

PROJECT TEAM

Architect
Bargmann Hendrie + Archetype, Inc.
300 A Street
Boston, MA 02210
617-350-0450

Civil Engineer
H.W. Moore Associates, Inc.
112 Shawmut Avenue
Boston, MA 02118
617-357-8145

Structural Engineer
McNamara Salvia
101 Federal Street, 11'th Floor
Boston, MA 02110
617-737-0040

Mechanical, Electrical, Plumbing, Life Safety
AHA Consulting Engineers
24 Hartwell Avenue, Third Floor
Lexington, MA 02421
781-372-3000

Fire Protection
J.C. Cannistraro, LLC
80 Rosedale Road
Watertown, MA 02471
617-926-0092

REVISIONS

	DATE
1	
2	
3	
4	
5	

DRAWING TITLE
UTILITY SITE PLAN

DRAWING INFORMATION

JAMES A. WHITE CIVIL No. 22148 REGISTERED ENGINEER

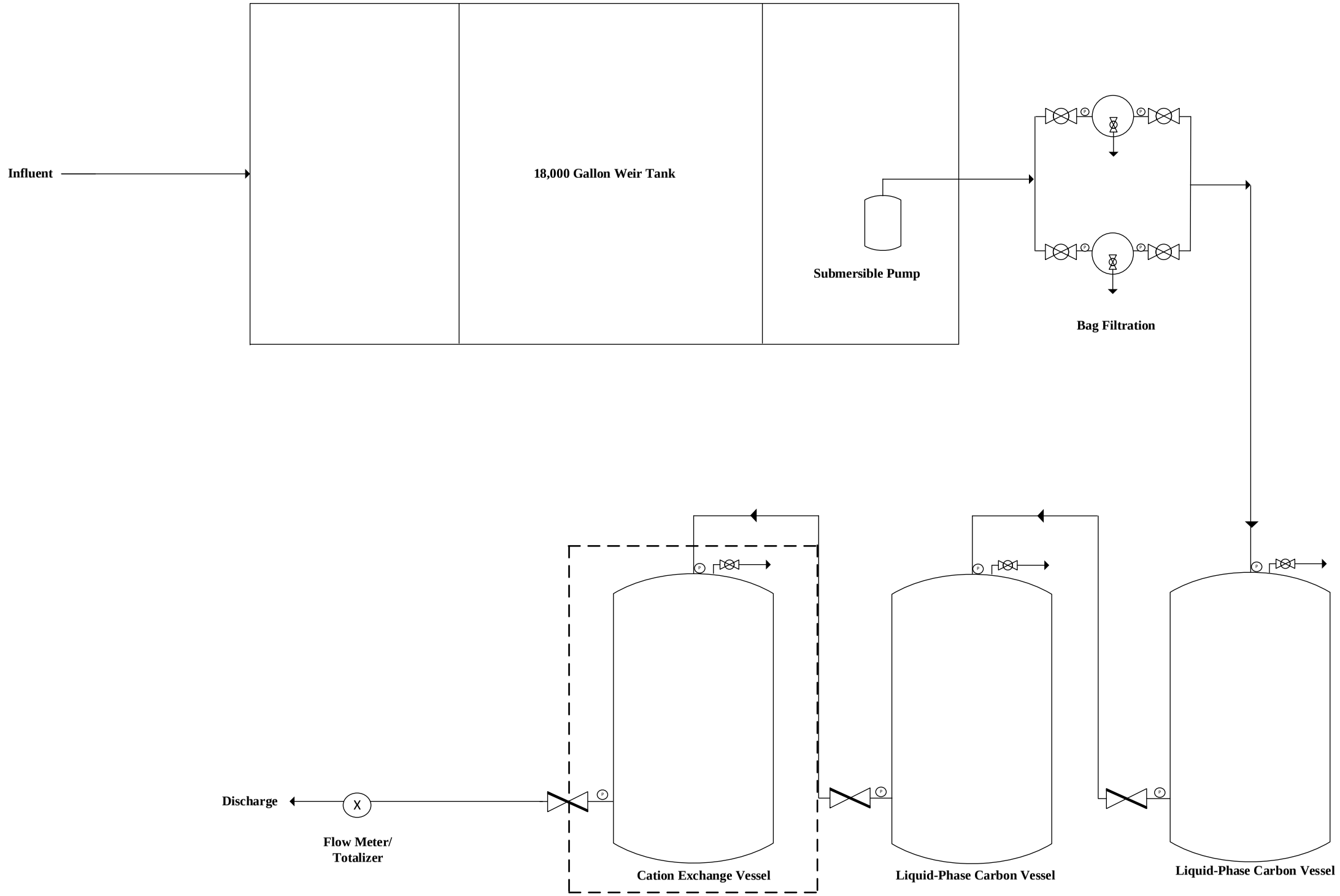
July 29, 2016
DATE OF ISSUE

DESCRIPTION

1" = 20'	SHI
SCALE	DRAWN BY
HWMA-3691	3691
PROJECT #	FILE NAME

DRAWING NUMBER
C101
BWSC # 16095

File Name: C:\3691\3691-S13.dwg Saved: 7/28/2016 10:17 AM Plotted: Jul 28, 2016 10:28 AM
File ID: 01 Pre-Submittal Plotted By: Ed Marlow



Notes:
1. Figure not drawn to scale
2. System rated for 50 GPM
3. Contingency — — — — .

Lockwood Remediation Technologies, LLC
89 Crawford Street
Leominster, MA 01453
Office: 774-450-7177

DESIGNED BY: LRT DRAWN BY: T. Hagie

DATE: 2/8/17 REVISION:

Water Treatment System Schematic

25 Fid Kennedy Avenue
Boston, Massachusetts

PROJECT No.

FIGURE No.

MassDEP - Bureau of Waste Site Cleanup

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

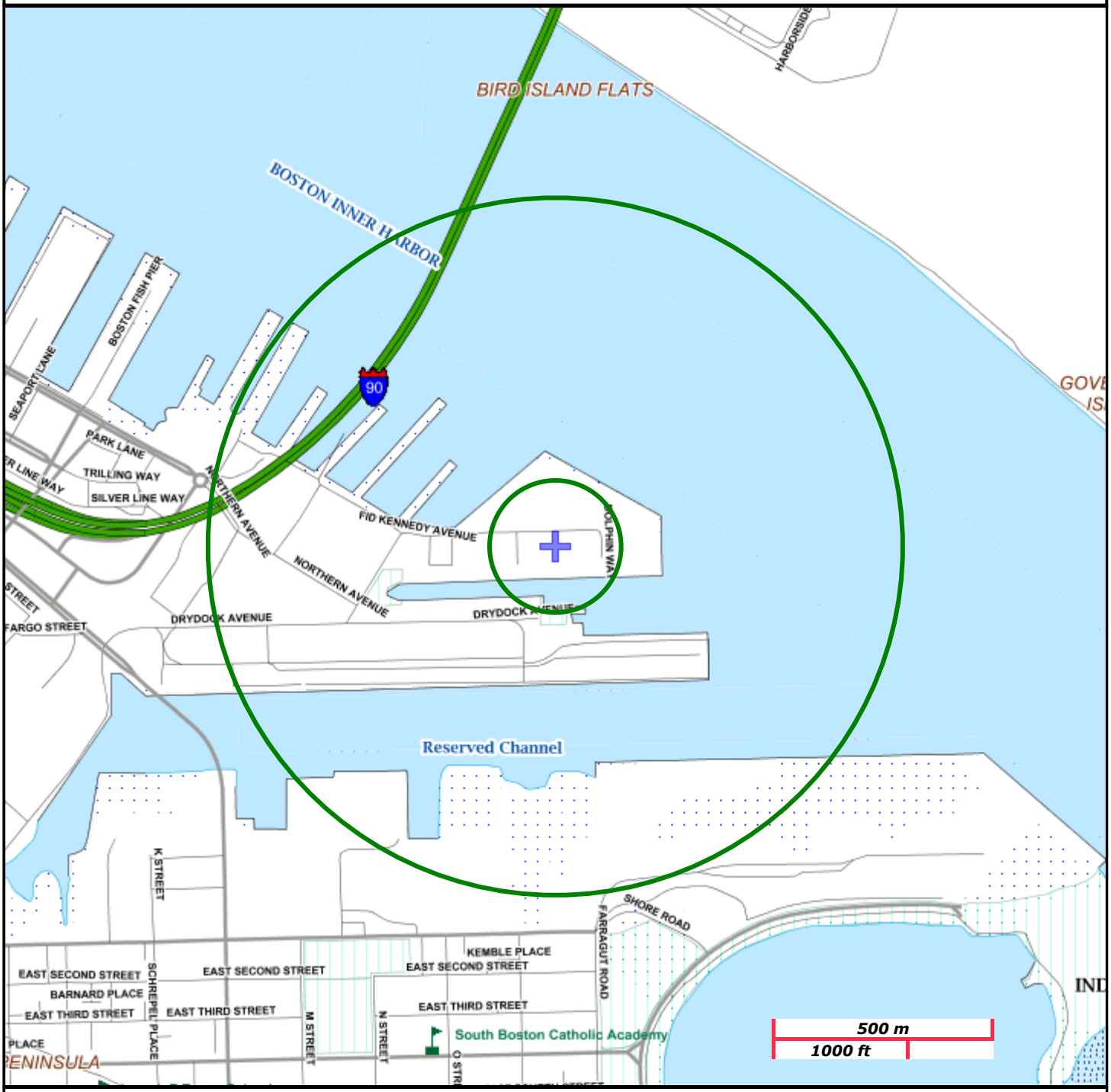
Site Information:

25 FID KENNEDY AVE BOSTON, MA

NAD83 UTM Meters:
4690216mN , 333100mE (Zone: 19)
February 13, 2017

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.

APPENDIX A

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD
BOSTON, MASS. 02125
617-727-8470, FAX: 617-727-5128

PROJECT NOTIFICATION FORM

Project Name: 25 Fid Kennedy Ave

Location / Address: 25 Fid Kennedy Avenue

City / Town: South Boston

Project Proponent

Name: 25 Fid Kennedy Ave, LLC

Address: 80 Rosedale Road

City/Town/Zip/Telephone: Watertown, MA 02472 617-926-0092

Agency license or funding for the project (list all licenses, permits, approvals, grants or other entitlements being sought from state and federal agencies).

Agency Name	Type of License or funding (specify)
USEPA NPDES	Dewatering General Permit

Project Description (narrative):

Installation of new subsurface utility lines (water, sewer, storm water, natural gas) and cutting/ capping of preexisting utility lines as necessary.

Does the project include demolition? If so, specify nature of demolition and describe the building(s) which are proposed for demolition.

No

Does the project include rehabilitation of any existing buildings? If so, specify nature of rehabilitation and describe the building(s) which are proposed for rehabilitation.

No

Does the project include new construction? If so, describe (attach plans and elevations if necessary).

Installation of new subsurface utility lines. See attached Sheet C101.

APPENDIX A (continued)

To the best of your knowledge, are any historic or archaeological properties known to exist within the project's area of potential impact? If so, specify.

The project site is eligible for listing on the National Historic Register. See attached MACRIS Search Results

What is the total acreage of the project area?

Woodland	0 acres	Productive Resources:	
Wetland	0 acres	Agriculture	0 acres
Floodplain	3.24 acres	Forestry	0 acres
Open space	0 acres	Mining/Extraction	0 acres
Developed	3.24 acres	Total Project Acreage	3.24 acres

What is the acreage of the proposed new construction? 0 acres

What is the present land use of the project area?

Vacant Commercial

Please attach a copy of the section of the USGS quadrangle map which clearly marks the project location.

See attached

This Project Notification Form has been submitted to the MHC in compliance with 950 CMR 71.00.

Signature of Person submitting this form: _____ Date: March 1st, 2017

Name: Benjamin Sivonen - The Vertex Companies, Inc.

Address: One Congress Street, 10th Floor

City/Town/Zip: Boston, MA 02114

Telephone: 781-952-6000

REGULATORY AUTHORITY

950 CMR 71.00: M.G.L. c. 9, §§ 26-27C as amended by St. 1988, c. 254.

Inventory No:	BOS.12965
Historic Name:	Boston Army Supply Base - Building 16
Common Name:	Boston Army Supply Base - Fabrication Plant
Address:	25 FID Kennedy Way
City/Town:	Boston
Village/Neighborhood:	South Boston; South Boston West
Local No:	
Year Constructed:	c 1940
Architect(s):	Fehlaber Pile Company; Hughes - Foulkrod Company
Architectural Style(s):	Art Deco
Use(s):	Administration Office; Mill Unspecified; Other Manufacturing; Warehouse
Significance:	Architecture; Industry; Military
Area(s):	BOS.RT: Boston Army Supply Base
Designation(s):	
Building Materials(s):	Roof: Synthetic Other Wall: Brick; Cast Stone; Concrete Cinderblock; Sheet Metal; Steel Foundation: Brick; Granite; Timber; Stone, Cut

FORM B – BUILDING

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

Assessor's Number	USGS Quad	Area(s)	Form Number
0602674000	Boston South	BOS.RT	12965

Town/City: Boston

Place: South Boston

Address: 25 Fid Kennedy Avenue

Historic Name: Building 16

Uses: Present: Vacant

Original: U.S. Navy machine shop

Date of Construction: 1940-1941

Source: Plans / Cornerstone

Style/Form: Utilitarian / Art Deco

Architect/Builder: Hughes-Foulkrod Company

Exterior Material:

Foundation: Brick

Wall/Trim: Brick, Metal Panel, Cast Stone

Roof: Membrane

Outbuildings/Secondary Structures: None

Major Alterations *(with dates):*
Wooden barracks, added ca. 1942, removed 1950s-1960s
Concrete block addition, late 20th century

Condition: Good

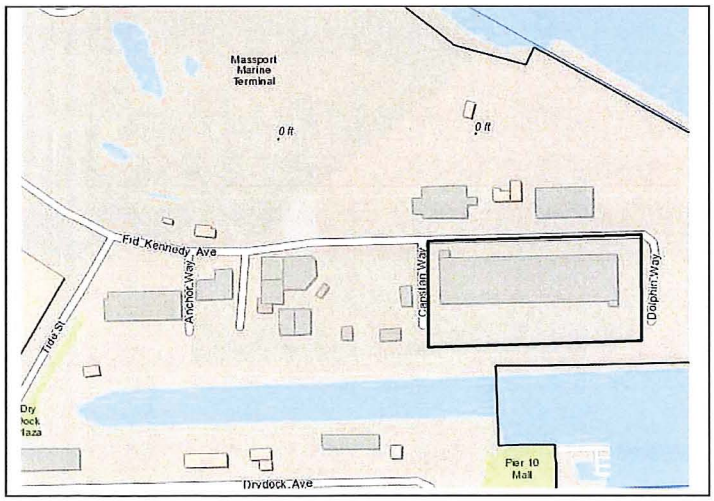
Moved: no ☒ yes ☐ **Date:**

Acreage: approximately 3.21

Setting: Located on the waterfront in an industrial complex. The property is level consisting of filled land with a concrete sidewalk on its north and eastern ends and an asphalt access drive at the southern end as well as a parking lot at its eastern end.

Photograph

Locus Map



Recorded by: Brian Lever

Organization: Epsilon Associates

Date (*month / year*): November 2015

☒ Recommended for listing in the National Register of Historic Places.

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.

25 Fid Kennedy Avenue (Building 16) is located within the Marine Industrial Park in South Boston also addressed as 600 Summer Street. 25 Fid Kennedy Avenue (also known as Parcel N) consists of approximately 3.21 acres with an existing building measuring 159,323 SF. In addition to the building, the property consists of a paved parking lot along the eastern end and a paved access drive along the southern end. The Fehlaber Pile Company constructed the wood pilings which support the building, with the building constructed in 1941-1942 by the Hughes-Foulkrod Company following a design used at other U.S. Navy Yards.

25 Fid Kennedy Avenue measures roughly 500-feet long and 130-feet wide with a rectangular footprint. The building has a tall (81-92-feet) asbestos coated corrugated sheet metal main block with brick one-story (13-feet tall) sections along the north and south elevations. At the east and west ends of the building are stairtowers which project above the roofline. The main block (excluding stairtowers and one-story wings) is 81-feet in height with the stairtowers 92-feet in height. Supported by steel I-beams, the exterior is clad in yellow brick, asbestos coated corrugated sheet metal panels and trimmed in cast stone.

At the four one-story wings along the north and south elevations, the brickwork features bands of recessed header courses and is topped with a cast stone band. At stairtower entrances are bands of cast stone with vertical groves and triangular inlay design reminiscent of Art Deco style. The northwest stairtower entrance contains the building's number "16" as well as the cornerstone with "1940" both in cast stone. The building retains wood panel doors as well as later steel doors with double leaf wood doors at stairtower entrances. Wood doors retain heavy metal strap hinges. Throughout the building are also large steel rollup overhead doors. Windows at the first story are a mixture of steel awning windows with corrugated glass, steel hopper windows and tripartite steel windows with center operable hopper panels flanked by sidelights. Windows have wire embedded within the glass for additional support. Window openings are singular, paired or in ganged sets of three or four with some openings infilled with metal panels. At the upper stories, the windows run the length of the building (except stairtowers) predominantly consisting of corrugated glass with one band of tripartite steel windows matching those on the first story. At each stairtower are vertical bands of corrugated glass windows above the first story running up the towers, another Art Deco feature. Scatted throughout the exterior are round metal light fixtures similar to those seen ships. Large metal vents and a metal ladder also adorn the exterior. The flat roof is covered in membrane roofing and contains ten clerestory sections, including one at each end of the building that incorporate each stairtower. The clerestories contain corrugated glass windows running their length allowing light to penetrate the interior.

The interior of the building is divided into the one-story brick wings and the voluminous main block, which is open floor to ceiling. The building has a brick and concrete floor with two rows of heavy riveted steel I-beams providing structural support running lengthwise through the building and one at the building's center. The heavy I-beams are braced with steel trusses and extend up 2/3^{rds} of the building's height. Atop the heavy I-beams are the overhead cranes accessing the length of the building including the large overhead doors at the east and west ends. Smaller I-beams atop the heavy and their accompanying truss work support the roof. Elevators are located within the stairtowers. Wood panel and metal doors are located in office areas.

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.

The property including what is now 25 Fid Kennedy was purchased from the Commonwealth of Massachusetts by the United States Navy in 1920. The purchase was borne out of a need for additional repair and refit space for the Navy as the space at the Charlestown Navy Yard was limited and its dry dock too small for the newer and larger naval vessels. The Commonwealth of Massachusetts had begun work on a dry dock known as the Commonwealth Dry Dock or later Dry Dock #3 in 1915 along

what is now Drydock Avenue as a venture to spur maritime industry in the area. While the dry dock was under construction the Navy agreed to purchase the property upon completion later naming it the South Boston Naval Annex. After purchase by the Navy, commercial use of the dry dock was allowed as the site was ancillary to the Charlestown facility. Small temporary steel buildings and marine construction equipment were erected by the Navy, but with sporadic use of the property it remained largely undeveloped for almost 20 years.

With the increase in military development prior to the United States' entry into WWII, naval facilities were in demand for ship repair and construction. By 1939, the South Boston Naval Annex was chosen as a site for expansion. As part of the expansion portions of the harbor including area in and around 25 Fid Kennedy were filled in and/or provided with additional support with pilings by the Fehlaber Pile Company. With the area suitably supported, construction of 25 Fid Kennedy began in 1940 by the Hughes-Foulkrod Company. The Hughes-Foulkrod Company used a similar design for 25 Fid Kennedy as used at other navy yards. The Navy Bureau of Yards and Docks had standard specifications that governed the design of the machine shops. The Hughes-Foulkrod Company constructed a similar but smaller building at the Philadelphia Navy Yard in 1938. Similar buildings would also later be erected at navy yards in Norfolk VA, Bayonne NY, Hunters Point CA and Terminal Island CA. The design of the building allowed it to be used by multiple trades/specialties or a single purpose. The building was completed in January 1941 at a cost of $857,145. Until other buildings were completed, 25 Fid Kennedy could accommodate the different trades at the Boston Naval Annex. 25 Fid Kennedy was the first building constructed as part of the expansion of the annex into a full-fledged shipyard.

During WWII additions were added on top of the one-story wings and roof by the William Bailey Company for barracks. Anti-aircraft gun platforms were also added to the roof. Throughout the war over 600 vessels were serviced in the Boston Naval Annex with 25 Fid Kennedy providing vital machine shop and metal fabrication services. After the War, the Annex became home to the Boston Group of the Atlantic Reserve fleet as vessels were either mothballed or retrofitted. In particular escort aircraft carriers were housed at the Annex.

Throughout the post WWII era, 25 Fid Kennedy continued to provide essential machine shop services for ship repair, but with less demand. The outbreak of the Korean War in 1950 provided an increase repair and retrofit work, but it was short-lived. In the 1950s the rooftop barracks were removed from the building as the Annex downsized. By 1960 with the decrease in ship repair activities, 25 Fid Kennedy again became the center of ship repair activities as various trades were consolidated within this one building. The Boston Group was discontinued in 1961, but inactive vessels continued to be berthed at the Annex in smaller numbers during the 1960s and commercial repair work persisted. During the 1960s, the barracks on top of the one-story wings were removed. As the demand for the Boston Naval Annex diminished and the cost of modernization was deemed too high, the Annex closed in 1974.

After closure of the Annex, the Commonwealth of Massachusetts again became owner of the property and 25 Fid Kennedy became home to PX Engineering in 1979 and operated as a steel fabrication plant until 1992. Afterward in the mid-1990s, the building housed Boston Sand and Gravel and was used as a concrete batch plant in support of the construction of the Central Artery Tunnel.

BIBLIOGRAPHY and/or REFERENCES:

Bargmann Hendrie + Archetype, Inc. Existing Conditions Survey.

Carlson, P. (2010). *Charlestown Navy Yard Historic Resource Study*. U.S. Department of the Interior. Boston: MA.

City of Boston Building Permits

Parkman, A. (1978). *Army engineers in New England: the military and civil work of the Corps of Engineers in New England, 1775-1975*. U.S. Army Corps of Engineers, Waltham: MA.

Public Archaeology Laboratory. (1997). Boston Army Supply Base Massachusetts Historical Commission Inventory Form.

United States Shipping Board. (1923). *Seventh Annual Report*.

Continuation sheet 2

ADDITIONAL PHOTOGRAPHS:

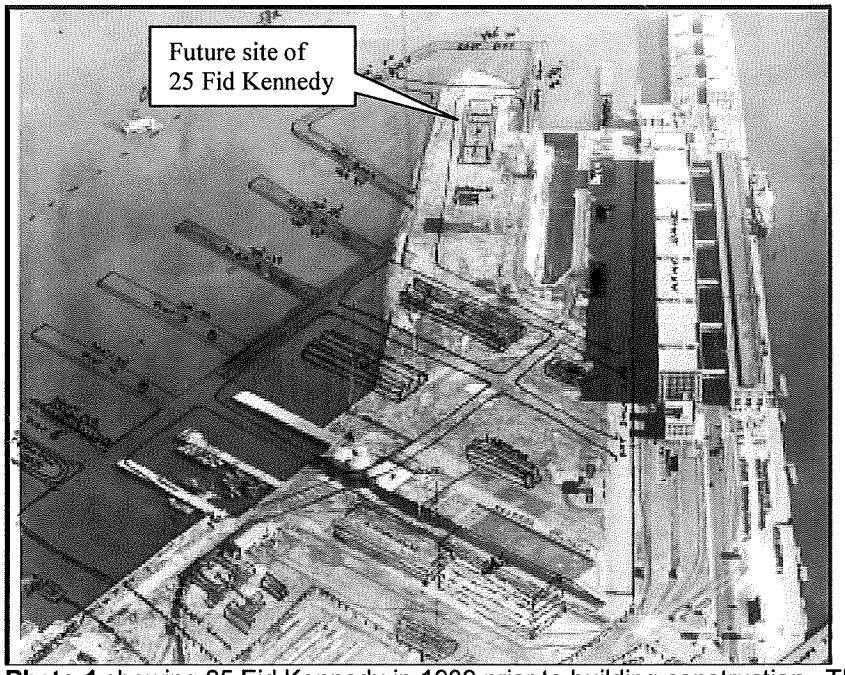


Photo 1 showing 25 Fid Kennedy in 1939 prior to building construction. The Boston Army Supply Base is labeled at the right as a separate facility. This photograph has future development including 25 Fid Kennedy sketched on it, courtesy National Park Service.

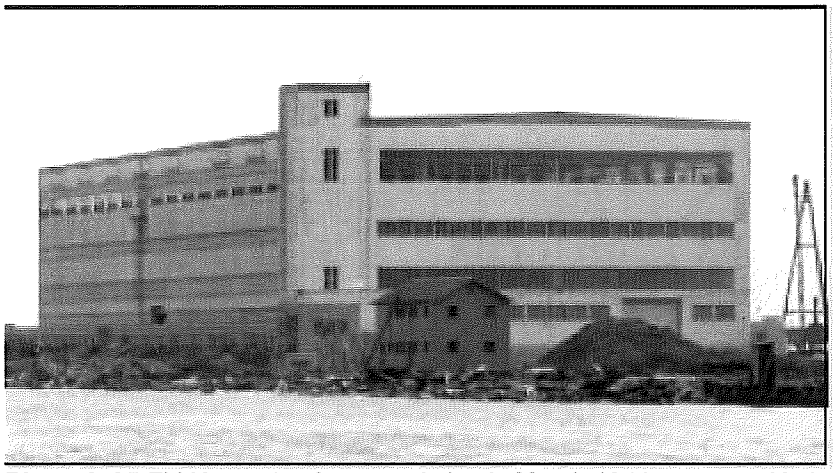


Photo 2, 25 Fid Kennedy after completion in March 1941, courtesy National Park Service.

Photo 3, view southeast of 25 Fid Kennedy, note round light fixtures above first story, courtesy Bargmann Hendrie + Archetype, Inc.

Photo 4, detail of northwest stairtower entrance, courtesy Bargmann Hendrie + Archetype, Inc.

Photo 5, view southwest of 25 Fid Kennedy, courtesy Bargmann Hendrie + Archetype, Inc.

Photo 6, view southwest of 25 Fid Kennedy, courtesy Bargmann Hendrie + Archetype, Inc.

Photo 7, view northeast of 25 Fid Kennedy, courtesy Bargmann Hendrie + Archetype, Inc.

Photo 8, view northeast of 25 Fid Kennedy, courtesy Bargmann Hendrie + Archetype, Inc.

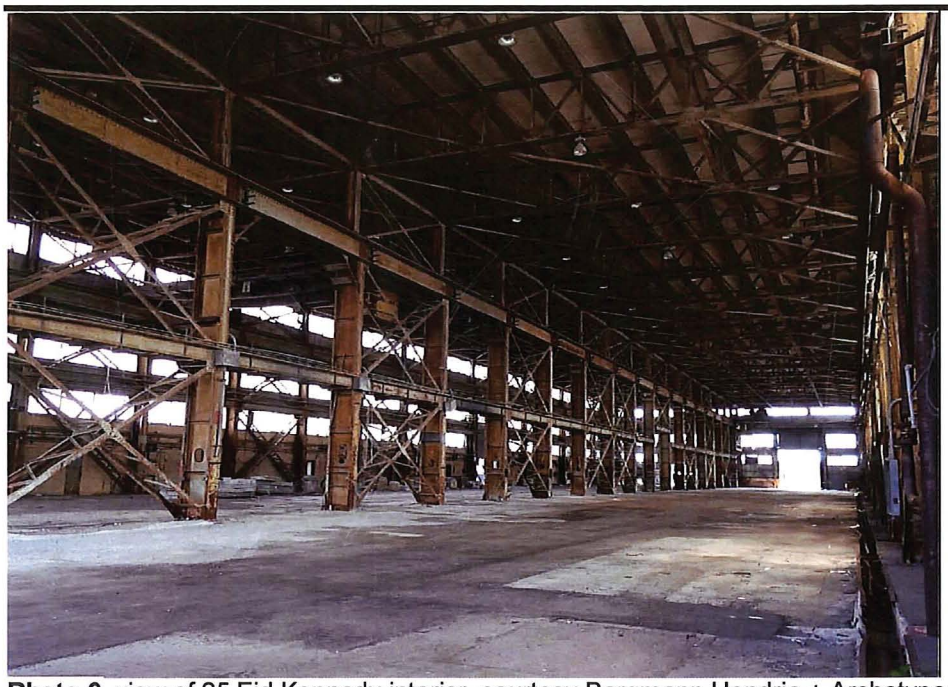


Photo 9, view of 25 Fid Kennedy interior, courtesy Bargmann Hendrie + Archetype, Inc.

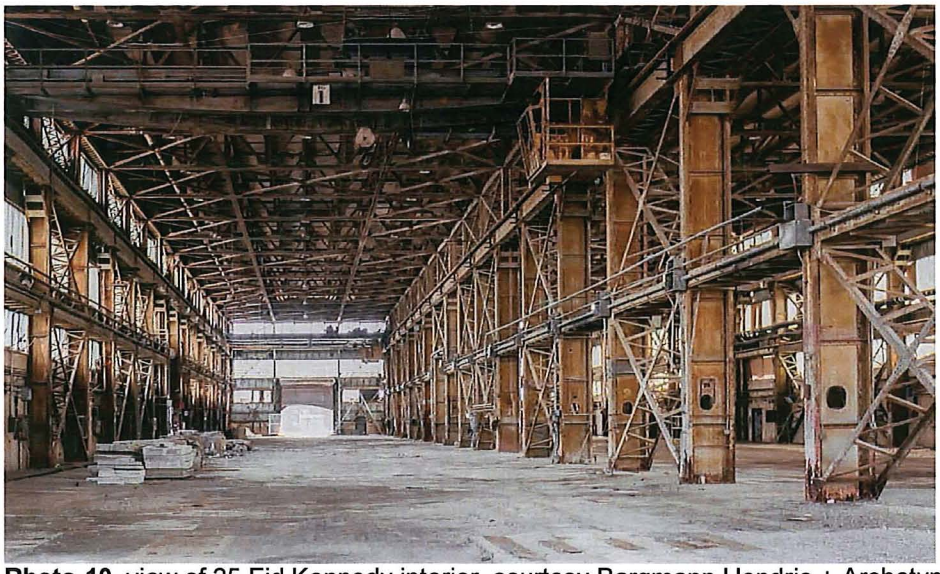


Photo 10, view of 25 Fid Kennedy interior, courtesy Bargmann Hendrie + Archetype, Inc.

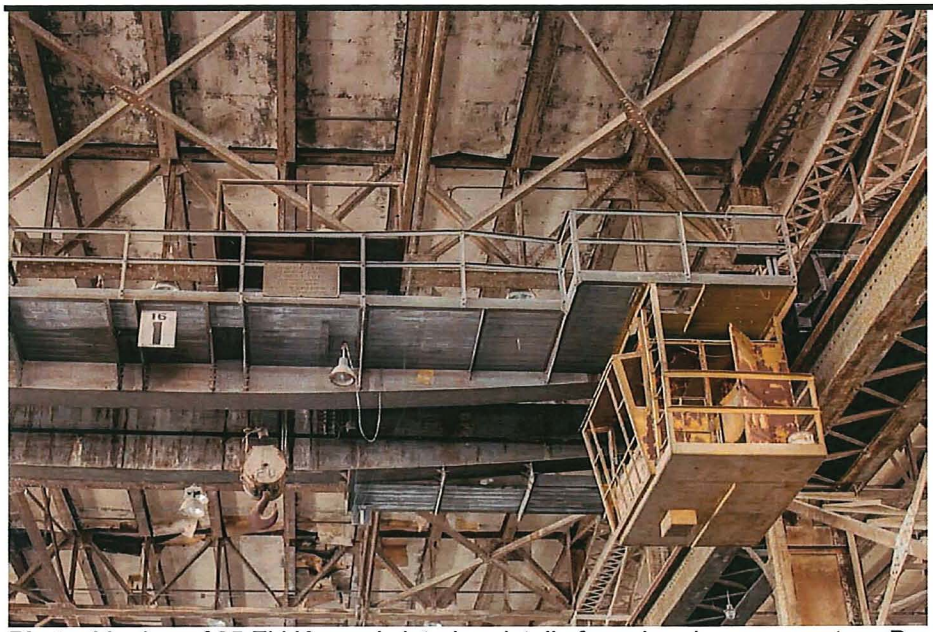


Photo 11, view of 25 Fid Kennedy interior, detail of overhead crane, courtesy Bargmann Hendrie + Archetype, Inc.

National Register of Historic Places Criteria Statement Form

Check all that apply:

☒ Individually eligible ☐ Eligible **only** in a historic district

☐ Contributing to a potential historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by Brian Lever
The criteria that are checked in the above sections must be justified here.

25 Fid Kennedy (Building 16) was the central building used for the repair and construction of vessels at the Boston Naval Annex from the development of the Annex as a fully operational shipyard in 1941 until its closure in 1974. The building is eligible under Criterion A for its association with the development and operation of the Boston Naval Annex during WWII until its closure. In particular, the building was constructed to house multiple tradespeople and functions in ship repair allowing the Annex to operate until other supporting buildings could be constructed and again served as the principal building as the base downsized. The building has a high degree of architectural integrity, especially for an industrial building, retaining original fabric including windows, doors, cladding and decorative cast stone features in Art Deco style. The building is also eligible under Criterion C as an uncommon local example of an Art Deco style industrial building within the City of Boston.

RECEIVED
DEC 24 2015
MASS. HIST. COMM

FOR MHC USE ONLY	
Original (pink) form to CLG file	
One copy to the following:	
Eligibility file	
Inventory form	
Town *file (with correspondence)*	
MACRIS Coordinator	
National Register Director	

Community:	South Boston

CLG OPINION: ELIGIBILITY FOR NATIONAL REGISTER

Date Received:	11/5/15	**Date Due:**		**Date Reviewed:**	11/20/2015
Type:	Individual	Yes/No	Y	District (attach map indicating boundaries)	
Property Name	Building 16			**MHC Inv Form #:**	BOS.12965, BOS.RT
Prop. Address	25 Fid Kennedy Avenue				

Action	**Honor**	Yes/No	N	**ITC**	Yes/No	Y	**Grant**	Yes/No	N
	CLGC initiated		Yes/No			N	**Other**		

INDIVIDUAL PROPERTIES		**DISTRICTS**	
Eligible	Yes	Eligible	Yes/No
Eligible, also in a district	No	Ineligible	Yes/No
Eligible only in a district	No	More Information Needed	Yes/No
Ineligible	No		
More Information Needed	No		

CRITERIA:	A- Yes	B- No	C- Yes	D- No
LEVEL:	Local- Yes	State- No		National- No

STATEMENT OF SIGNIFICANCE by:	Tonya Loveday, Assistant Survey Director, Boston Landmarks Commission

(Refer to criteria cited above in statement of significance. If more information is needed, use space to describe what is needed to finish eligibility opinion)

25 Fid Kennedy (Building 16) is located within the Marine Industrial Park in South Boston. It was built between 1941 and 1942 by the Hughes-Foulkrod Company and rests on wood pilings that were constructed by the Fehlaber Pile Company. The rectangular structure has a tall asbestos-coated corrugated sheet metal main block with one-story brick sections along the north and south elevations. At the east and west ends of the building are stairtowers that rise above the roofline. The building is supported by steel I-beams and is clad in asbestos coated corrugated sheet metal panels and yellow brick with cast stone trim. This utilitarian structure features Art Deco details at the stairtowers.

The building served as the primary location for the repair and construction of vessels at the Boston Naval Annex from its development as a fully operational shipyard in 1941 until it closed in 1974. It housed multiple operations related to the ship repair industry while other supporting buildings were under construction, and remained the principal building when the base eventually downsized.

25 Fid Kennedy Avenue is individually eligible for listing on the National Register of Historic Places at the local level under Criterion A for its association with the development and operation of the Boston Naval Annex during World War II through the 1970s. The building also satisfies Criterion C as a rare local example of an Art Deco style industrial building. 25 Fid Kennedy Avenue retains a high degree of architectural integrity with original fabric including windows, doors, cladding and decorative cast stone elements. The building possesses the location, design, setting, workmanship, materials, feeling, and

association that define integrity.
Use reverse side if necessary

MHC STAFF OPINION				
Date Received:	12/24/15	Date Reviewed:	1/13/16	
Opinion:	Concur	Disagree X		More Information Needed
Use Reverse for Comments				

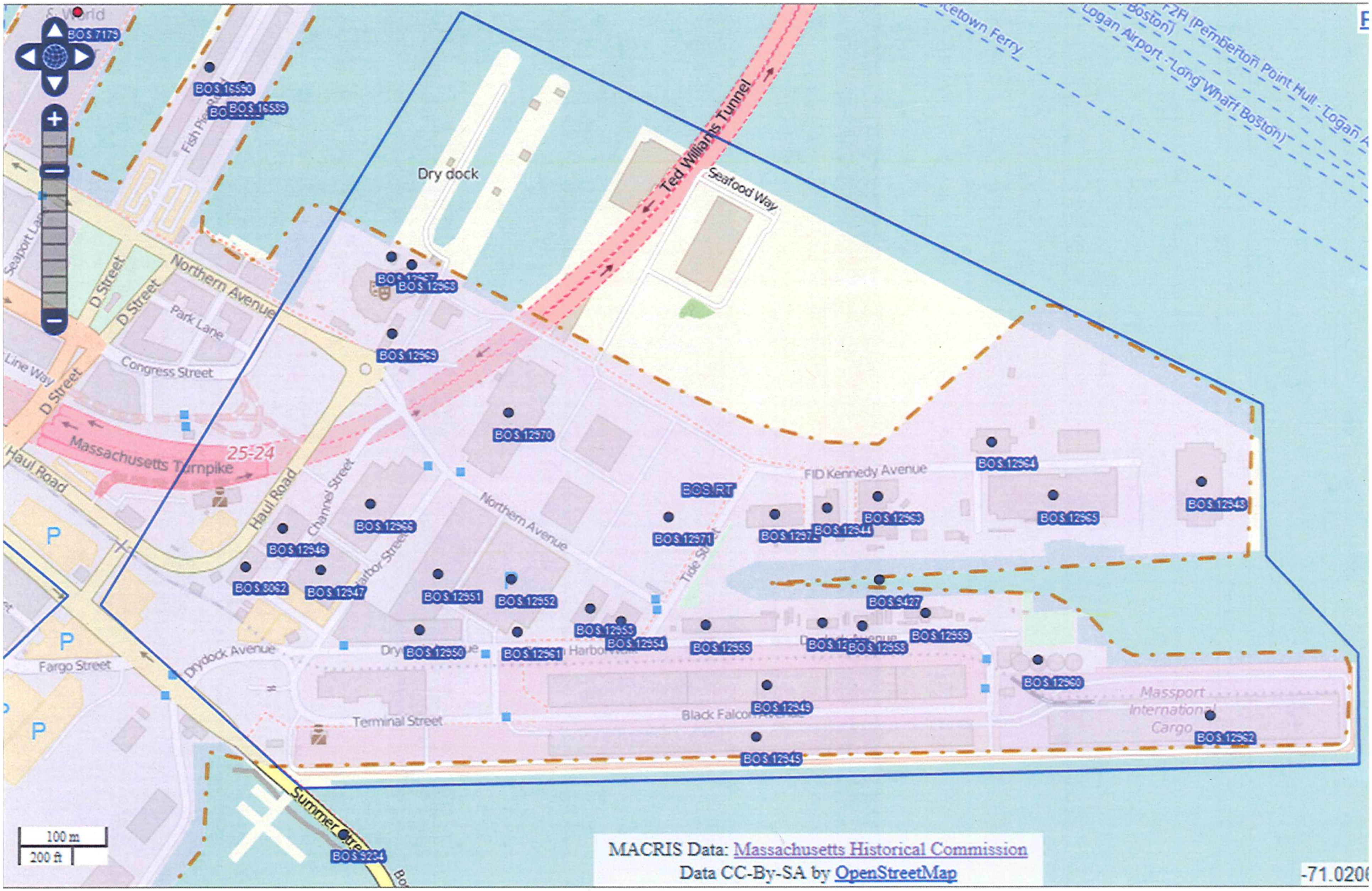
The MHC does not concur with the BLC's CLG opinion.

Building 16 is located at 25 Fid Kennedy Ave in South Boston, within the former South Boston Naval Annex, now the Boston Marine Industrial Park. The property was constructed in 1940-41 and was the first building developed as part of the expansion and development of the South Boston Naval Annex into a full-fledged shipyard. The site was selected in 1939 as an annex to the Charlestown Navy Yard and served as a main ship repair facility for the Navy Yard for over three decades, servicing over 600 ships in World War II alone. Following WWII, the annex was utilized in the mothballing of ships, housing the Reserve Fleet, and sonar testing, along with continued ship repair. Building 16 was constructed to serve as a multi-purpose facility as the shipyard was developed, and again became multi-use as the need for repairs declined in the post-war period. Following the closure of the Navy Yard in 1974, the building first housed a steel fabrication plant (1979-92) and later served as a concrete batch plant supporting the construction of the Central Artery Tunnel.

The property retains its original massing and most of its original materials. The main block measures approximately 500 feet by 130 feet and 81 feet in height, clad in asbestos coated corrugated sheet metal panels, and is flanked by 4 one-story lateral brick wings. Cast stone trim with Art Deco motifs are found at stair tower entrances. Most window openings retain their original steel sash, and bands of windows exhibit wired or corrugated glazing. The interior of the building remains a large open volume with an exposed steel structure and industrial crane. The building was constructed according to Navy plans, and similar buildings were built at Naval bases in Philadelphia, Norfolk, Bayonne, Hunters Point and Terminal Island.

The property is located within the former South Boston Naval Annex. The area retains a number of WWII-era Navy buildings, WWI-era buildings associated with the Navy as well as the adjacent Boston Army Supply Base, and more recent buildings associated with the redevelopment of the area as the Boston Marine Industrial Park. Notable extant structures include Dry Dock #3 and its Classical Revival-style Pump House (both 1918, BOS.9427 and 12959), Public Works Building (1940, BOS.12954), Administrative Offices at 24-26 Dry Dock (ca. 1940-42, BOS.12955), General Warehouse at 12 Channel Street (ca. 1940-42, BOS.12947), and the Army Marine Terminal Storehouse and Wharf Shed (1918, BOS.12949, 12945) among others.

It is the opinion of MHC staff that Building 16 at 25 Fid Kennedy Ave contributes to a potential National Register District under criteria A and C at the local level, the boundaries of which largely correspond to the Boston Army Supply Base survey area, BOS. RT. MHC staff find it may be appropriate, however, to omit the portion of filled land north of Fid Kennedy Ave east of Dry Dock #4 and west of the Subaru Distributors (BOS.12964), allowing for the inclusion of the extant North Jetty. The aforementioned filled land was formerly occupied by Navy piers and now contains large open lots and post-1980 structures; the infilling of this land took place outside of the likely period of significance.


Dry dock
Ted Williams Tunnel
Seafood Way
Logan Airport - Long Wharf Boston)
F2H (Pemberton Point Hull - Logan
Boston)
Northern Avenue
D Street
Park Lane
Congress Street
Line Way
Massachusetts Turnpike
25-24
Haul Road
Channel Street
Harbor Street
Tide Street
FID Kennedy Avenue
Drydock Avenue
Fargo Street
Terminal Street
Black Falcon Avenue
Massport
International
Cargo
Summer Street
BOS.7179
BOS.16550
BOS.16589
BOS.12963
BOS.12969
BOS.12970
BOS.12966
BOS.12946
BOS.8062
BOS.12947
BOS.12951
BOS.12952
BOS.12950
BOS.12961
BOS.12953
BOS.12954
BOS.12955
BOS.RT
BOS.12971
BOS.12944
BOS.12964
BOS.12965
BOS.12943
BOS.9427
BOS.12959
BOS.12958
BOS.12960
BOS.12949
BOS.12945
BOS.12962
BOS.9234
100 m
200 ft
MACRIS Data: Massachusetts Historical Commission
Data CC-By-SA by OpenStreetMap
-71.020

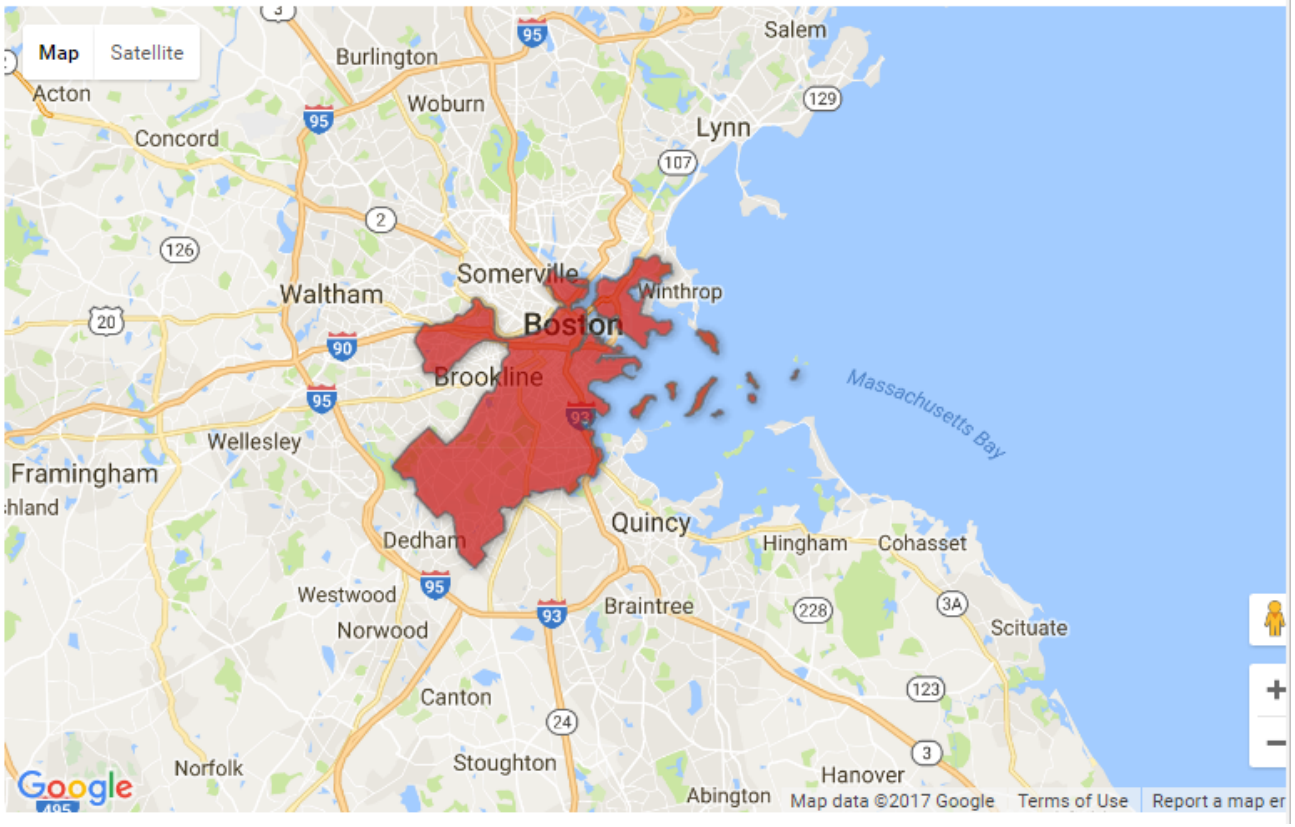
APPENDIX I

Town Species Viewer

The Natural Heritage & Endangered Species Program maintains a list of all documented MESA-listed species observations in the Commonwealth. Please select a town if you would like to see a table showing which listed species have been observed in that town. The selected town will also be highlighted on the map. Alternatively you can specify either the Common Name or Scientific Name of a species to see it's distribution on the map and table showing the towns it has been observed in. Clicking on a column header in the table will sort the column. Clicking again on the same column heading will reverse the sort order.

The Town List and Species Viewer will be updated at regular intervals as new data is accepted and entered into the NHESP database.

Town: BOSTON or Species (Common Name): or Species (Scientific Name):



Town	Taxonomic Group	ScientificName	CommonName	MESA Status	Federal Status	Most Recent Observation
BOSTON	Butterfly/Moth	Abagrotis nefascia	Coastal Heathland Cutworm	SC		2001
BOSTON	Bird	Accipiter striatus	Sharp-shinned Hawk	SC		1898
BOSTON	Vascular Plant	Ageratina aromatica	Lesser Snakeroot	E		1896
BOSTON	Amphibian	Ambystoma laterale	Blue-spotted Salamander	SC		2015
BOSTON	Bird	Ammodramus savannarum	Grasshopper Sparrow	T		1993
BOSTON	Butterfly/Moth	Apodrepanulatrix liberaria	New Jersey Tea Inchworm	E		Historic
BOSTON	Vascular Plant	Aristida purpurascens	Purple Needlegrass	T		1800s
BOSTON	Vascular Plant	Aristida tuberculosa	Seabeach Needlegrass	T		1877
BOSTON	Vascular Plant	Asclepias verticillata	Linear-leaved Milkweed	T		1878
BOSTON	Bird	Bartramia longicauda	Upland Sandpiper	E		1993
BOSTON	Vascular Plant	Boechera missouriensis	Green Rock-cress	T		1930
BOSTON	Vascular Plant	Carex striata	Walter's Sedge	E		Historic
BOSTON	Bird	Charadrius melodus	Piping Plover	T	T	2016
BOSTON	Beetle	Cicindela duodecimguttata	Twelve-spotted Tiger Beetle	SC		1910
BOSTON	Beetle	Cicindela purpurea	Cow Path Tiger Beetle	SC		1928
BOSTON	Beetle	Cicindela rufiventris hentzii	Eastern Red-bellied Tiger Beetle	T		1927
BOSTON	Vascular Plant	Desmodium cuspidatum	Large-bracted Tick-trefoil	T		1896
BOSTON	Vascular Plant	Eriophorum gracile	Slender Cottongrass	T		1885
BOSTON	Bird	Falco peregrinus	Peregrine Falcon	E		2014
BOSTON	Fish	Gasterosteus aculeatus	Threespine Stickleback	T		2014
BOSTON	Bird	Gavia immer	Common Loon	SC		1824
BOSTON	Vascular Plant	Houstonia longifolia	Long-leaved Bluet	E		1918
BOSTON	Vascular Plant	Liatris scariosa var. novae-angliae	New England Blazing Star	SC		1933
BOSTON	Mussel	Ligumia nasuta	Eastern Pondmussel	SC		1841
BOSTON	Vascular Plant	Linum medium var. texanum	Rigid Flax	T		1909
BOSTON	Vascular Plant	Lycopus rubellus	Gypsywort	E		1896
BOSTON	Butterfly/Moth	Metarranthis apiciaria	Barrens Metarranthis	E		1934
BOSTON	Vascular Plant	Myriophyllum alterniflorum	Alternate-flowered Water-milfoil	E		Historic
BOSTON	Vascular Plant	Ophioglossum pusillum	Adder's-tongue Fern	T		1884
BOSTON	Vascular Plant	Platanthera flava var. herbiola	Pale Green Orchis	T		1908
BOSTON	Bird	Pooecetes gramineus	Vesper Sparrow	T		1985
BOSTON	Butterfly/Moth	Pyrrhia aurantiago	Orange Sallow Moth	SC		1988
BOSTON	Vascular Plant	Ranunculus micranthus	Tiny-flowered Buttercup	E		1891
BOSTON	Vascular Plant	Rumex pallidus	Seabeach Dock	T		1984
BOSTON	Vascular Plant	Sanicula odorata	Long-styled Sanicle	T		Historic
BOSTON	Amphibian	Scaphiopus holbrookii	Eastern Spadefoot	T		1932
BOSTON	Vascular Plant	Scirpus longii	Long's Bulrush	T		1907
BOSTON	Vascular Plant	Setaria parviflora	Bristly Foxtail	SC		2001
BOSTON	Dragonfly/Damselfly	Somatochlora linearis	Mocha Emerald	SC		2009
BOSTON	Bird	Sterna hirundo	Common Tern	SC		2013
BOSTON	Bird	Sternula antillarum	Least Tern	SC		2014
BOSTON	Vascular Plant	Suaeda calceoliformis	American Sea-blite	SC		1909
BOSTON	Reptile	Terrapene carolina	Eastern Box Turtle	SC		1939
BOSTON	Bird	Tyto alba	Barn Owl	SC		1989
BOSTON	Bird	Vermivora chrysoptera	Golden-winged Warbler	E		Historic
BOSTON	Vascular Plant	Viola brittoniana	Britton's Violet	T		1909
BOURNE	Butterfly/Moth	Abagrotis nefascia	Coastal Heathland Cutworm	SC		1996

IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

Project information

NAME
25 Fid Kennedy Ave

LOCATION
Suffolk County, Massachusetts

DESCRIPTION
Installation of new subsurface utility lines (water, sewer, storm water, gas, electric).

Local office

New England Ecological Services Field Office

(603) 223-2541
(603) 223-0104

70 Commercial Street, Suite 300
Concord, NH 03301-5094

http://www.fws.gov/newengland

Endangered species

This resource list is for informational purposes only and should not be used for planning or analyzing project level impacts.

Section 7 of the Endangered Species Act **requires** Federal agencies to *"request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action"* for any project that is conducted, permitted, funded, or licensed by any Federal agency.

A letter from the local office and a species list which fulfills this requirement can only be obtained by requesting an official species list either from the Regulatory Review section in IPaC or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by creating a project and making a request from the Regulatory Review section.

Listed species[1] are managed by the Endangered Species Program of the U.S. Fish and Wildlife Service.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.

The following species are potentially affected by activities in this location:

Birds

NAME	STATUS
Red Knot *Calidris canutus rufa*	Threatened

Red Knot Calidris canutus rufa — Threatened
No critical habitat has been designated for this species.
http://ecos.fws.gov/ecp/species/1864

Roseate Tern Sterna dougallii dougallii — Endangered
No critical habitat has been designated for this species.
http://ecos.fws.gov/ecp/species/2083

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any activity that results in the take (to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct) of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service[3]. There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Conservation measures for birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Year-round bird occurrence data http://www.birdscanada.org/birdmon/default/datasummaries.jsp

The migratory birds species listed below are species of particular conservation concern (e.g. Birds of Conservation Concern) that may be potentially affected by activities in this location, not a list of every bird species you may find in this location. Although it is important to try to avoid and minimize impacts to all birds, special attention should be made to avoid and minimize impacts to birds of priority concern. To view available data on other bird species that may occur in your project area, please visit the AKN Histogram Tools and Other Bird Data Resources.

NAME	SEASON(S)
American Oystercatcher Haematopus palliatus http://ecos.fws.gov/ecp/species/8935	On Land: Breeding
Bald Eagle Haliaeetus leucocephalus http://ecos.fws.gov/ecp/species/1626	On Land: Year-round
Black-billed Cuckoo Coccyzus erythropthalmus http://ecos.fws.gov/ecp/species/9399	On Land: Breeding
Hudsonian Godwit Limosa haemastica	At Sea: Migrating
Olive-sided Flycatcher Contopus cooperi http://ecos.fws.gov/ecp/species/3914	On Land: Breeding
Peregrine Falcon Falco peregrinus http://ecos.fws.gov/ecp/species/8831	On Land: Wintering
Purple Sandpiper Calidris maritima	On Land: Wintering
Short-eared Owl Asio flammeus	On Land: Wintering

http://ecos.fws.gov/ecp/species/9295

Willow Flycatcher Empidonax traillii http://ecos.fws.gov/ecp/species/3482	On Land: Breeding
Wood Thrush Hylocichla mustelina	On Land: Breeding
Worm Eating Warbler Helmitheros vermivorum	On Land: Breeding

What does IPaC use to generate the list of migratory bird species potentially occurring in my specified location?

Landbirds:

Migratory birds that are displayed on the IPaC species list are based on ranges in the latest edition of the National Geographic Guide, Birds of North America (6th Edition, 2011 by Jon L. Dunn, and Jonathan Alderfer). Although these ranges are coarse in nature, a number of U.S. Fish and Wildlife Service migratory bird biologists agree that these maps are some of the best range maps to date. These ranges were clipped to a specific Bird Conservation Region (BCR) or USFWS Region/Regions, if it was indicated in the 2008 list of Birds of Conservation Concern (BCC) that a species was a BCC species only in a particular Region/Regions. Additional modifications have been made to some ranges based on more local or refined range information and/or information provided by U.S. Fish and Wildlife Service biologists with species expertise. All migratory birds that show in areas on land in IPaC are those that appear in the 2008 Birds of Conservation Concern report.

Atlantic Seabirds:

Ranges in IPaC for birds off the Atlantic coast are derived from species distribution models developed by the National Oceanic and Atmospheric Association (NOAA) National Centers for Coastal Ocean Science (NCCOS) using the best available seabird survey data for the offshore Atlantic Coastal region to date. NOAANCCOS assisted USFWS in developing seasonal species ranges from their models for specific use in IPaC. Some of these birds are not BCC species but were of interest for inclusion because they may occur in high abundance off the coast at different times throughout the year, which potentially makes them more susceptible to certain types of development and activities taking place in that area. For more refined details about the abundance and richness of bird species within your project area off the Atlantic Coast, see the Northeast Ocean Data Portal. The Portal also offers data and information about other types of taxa that may be helpful in your project review.

About the NOAANCCOS models: the models were developed as part of the NOAANCCOS project: Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf. The models resulting from this project are being used in a number of decision-support/mapping products in order to help guide decision-making on activities off the Atlantic Coast with the goal of reducing impacts to migratory birds. One such product is the Northeast Ocean Data Portal, which can be used to explore details about the relative occurrence and abundance of bird species in a particular area off the Atlantic Coast.

All migratory bird range maps within IPaC are continuously being updated as new and better information becomes available.

Can I get additional information about the levels of occurrence in my project area of specific birds or groups of birds listed in IPaC?

Landbirds:

The Avian Knowledge Network (AKN) provides a tool currently called the "Histogram Tool", which draws from the data within the AKN (latest,survey, point count, citizen science datasets) to create a view of relative abundance of species within a particular location over the course of the year. The results of the tool depict the frequency of detection of a species in survey events, averaged between multiple datasets within AKN in a particular week of the year. You may access the histogram tools through the Migratory Bird Programs AKN Histogram Tools webpage.

The tool is currently available for 4 regions (California, Northeast U.S., Southeast U.S. and Midwest), which encompasses the following 32 states: Alabama, Arkansas, California, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, New Hampshire, New Jersey, New York, North, Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Vermont, Virginia, West Virginia, and Wisconsin.

In the near future, there are plans to expand this tool nationwide within the AKN, and allow the graphs produced to appear with the list of trust resources generated by IPaC, providing you with an additional level of detail about the level of occurrence of the species of particular concern potentially occurring in your project area throughout the course of the year.

Atlantic Seabirds:

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAANCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Facilities

Wildlife refuges

Any activity proposed on National Wildlife Refuge lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGES AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

THERE ARE NO KNOWN WETLANDS AT THIS LOCATION.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 COMMERCIAL STREET, SUITE 300
CONCORD, NH 03301
PHONE: (603)223-2541 FAX: (603)223-0104
URL: www.fws.gov/newengland

Consultation Code: 05E1NE00-2017-SLI-0965 March 03, 2017
Event Code: 05E1NE00-2017-E-01767
Project Name: 25 Fid Kennedy Ave

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: 25 Fid Kennedy Ave

Official Species List

Provided by:

New England Ecological Services Field Office
70 COMMERCIAL STREET, SUITE 300
CONCORD, NH 03301
(603) 223-2541
http://www.fws.gov/newengland

Consultation Code: 05E1NE00-2017-SLI-0965
Event Code: 05E1NE00-2017-E-01767

Project Type: DEVELOPMENT

Project Name: 25 Fid Kennedy Ave
Project Description: Installation of new subsurface utility lines (water, sewer, stormwater, gas, electric).

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.

Project Location Map:

Project Coordinates: MULTIPOLYGON (((-71.02729797363283 42.34660321720246, -71.0249698162079 42.34663097046389, -71.02494299411775 42.34588162810465, -71.02727651596071 42.345853874512414, -71.02729797363283 42.34660321720246)))

Project Counties: Suffolk, MA

United States Department of Interior
Fish and Wildlife Service

Project name: 25 Fid Kennedy Ave

Endangered Species Act Species List

There are a total of 2 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.

Birds	Status	Has Critical Habitat	Condition(s)
Red Knot *(Calidris canutus rufa)* Population: Wherever found	Threatened		
Roseate tern *(Sterna dougallii dougallii)* Population: northeast U.S. nesting pop.	Endangered		

Critical habitats that lie within your project area

There are no critical habitats within your project area.

United States Department of the Interior

FISH AND WILDLIFE SERVICE

New England Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5087
http://www.fws.gov/newengland

January 20, 2017

To Whom It May Concern:

This project was reviewed for the presence of federally listed or proposed, threatened or endangered species or critical habitat per instructions provided on the U.S. Fish and Wildlife Service's New England Field Office website:

http://www.fws.gov/newengland/EndangeredSpec-Consultation.htm (accessed January 2017)

Based on information currently available to us, no federally listed or proposed, threatened or endangered species or critical habitat under the jurisdiction of the U.S. Fish and Wildlife Service are known to occur in the project area(s). Preparation of a Biological Assessment or further consultation with us under section 7 of the Endangered Species Act is not required. No further Endangered Species Act coordination is necessary for a period of one year from the date of this letter, unless additional information on listed or proposed species becomes available.

Thank you for your cooperation. Please contact Maria Tur of this office at 603-223-2541 if we can be of further assistance.

Sincerely yours,

Thomas R. Chapman
Supervisor
New England Field Office

APPENDIX J

ANALYTICAL REPORT

Lab Number:	L1708446
Client:	Vertex Environmental Services, Inc. One Congress Street 10th Floor Boston, MA 02114
ATTN:	Frank Calandra
Phone:	(781) 952-6000
Project Name:	25 FID-40717
Project Number:	40717
Report Date:	03/28/17

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

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

Project Name: 25 FID-40717
Project Number: 40717

Lab Number: L1708446
Report Date: 03/28/17

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1708446-01	VES-208-RGP	WATER	BOSTON, MA	03/21/17 10:30	03/21/17
L1708446-02	VES-102-RGP	WATER	BOSTON, MA	03/21/17 12:00	03/21/17

Project Name: 25 FID-40717 **Lab Number:** L1708446

Project Number: 40717 **Report Date:** 03/28/17

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?	NO
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)?	NO
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: 25 FID-40717
Project Number: 40717

Lab Number: L1708446
Report Date: 03/28/17

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. 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: 25 FID-40717 **Lab Number:** L1708446
Project Number: 40717 **Report Date:** 03/28/17

Case Narrative (continued)

MCP Related Narratives

Volatile Organics

In reference to question H:

The initial calibration, associated with L1708446-01 and -02, did not meet the method required minimum response factor on the lowest calibration standard for 1,4-dioxane (0.0015), as well as the average response factor for 1,4-dioxane.

The continuing calibration standard, associated with L1708446-01 and -02, 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 L1708446-01 and -02, did not meet the method required minimum response factor on the lowest calibration standard for 1,4-dioxane (0.0018), as well as the average response factor for 1,4-dioxane.

Semivolatile Organics by SIM

In reference to question G:

L1708446-01 and -02: The sample has elevated detection limits due to the dilution required by the sample matrix. One or more of the target analytes did not achieve the requested CAM reporting limits.

PCBs

In reference to question B:

At the client's request, the analytical method specified in the CAM protocol was not followed.

Metals

In reference to question I:

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

Project Name:	25 FID-40717	**Lab Number:**	L1708446
Project Number:	40717	**Report Date:**	03/28/17

Case Narrative (continued)

Total Cyanide

In reference to question B:

At the client's request, the analytical method specified in the CAM protocol was not followed.

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

Authorized Signature: Michelle M. Morris

Title: Technical Director/Representative Date: 03/28/17

ORGANICS

VOLATILES

Project Name: 25 FID-40717
Project Number: 40717

Lab Number: L1708446
Report Date: 03/28/17

SAMPLE RESULTS

Lab ID: L1708446-01
Client ID: VES-208-RGP
Sample Location: BOSTON, MA
Matrix: Water
Analytical Method: 1,8015D
Analytical Date: 03/24/17 15:46
Analyst: DP

Date Collected: 03/21/17 10:30
Date Received: 03/21/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Alcohol Analysis by GC/FID - Mansfield Lab						
Ethyl Alcohol	ND		mg/l	2.00	--	1

Project Name: 25 FID-40717
Project Number: 40717
Lab Number: L1708446
Report Date: 03/28/17

SAMPLE RESULTS

Lab ID: L1708446-01
Client ID: VES-208-RGP
Sample Location: BOSTON, MA
Matrix: Water
Analytical Method: 14,504.1
Analytical Date: 03/25/17 15:04
Analyst: NS

Date Collected: 03/21/17 10:30
Date Received: 03/21/17
Field Prep: Not Specified
Extraction Method: EPA 504.1
Extraction Date: 03/25/17 11:29

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

Project Name: 25 FID-40717 **Lab Number:** L1708446

Project Number: 40717 **Report Date:** 03/28/17

SAMPLE RESULTS

Lab ID: L1708446-01
Client ID: VES-208-RGP
Sample Location: BOSTON, MA
Matrix: Water
Analytical Method: 97,8260C
Analytical Date: 03/23/17 10:13
Analyst: KD

Date Collected: 03/21/17 10:30
Date Received: 03/21/17
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: 25 FID-40717 **Lab Number:** L1708446

Project Number: 40717 **Report Date:** 03/28/17

SAMPLE RESULTS

Lab ID: L1708446-01 Date Collected: 03/21/17 10:30

Client ID: VES-208-RGP Date Received: 03/21/17

Sample Location: BOSTON, 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
Xylenes, 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
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	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: 25 FID-40717 **Lab Number:** L1708446

Project Number: 40717 **Report Date:** 03/28/17

SAMPLE RESULTS

Lab ID: L1708446-01 Date Collected: 03/21/17 10:30

Client ID: VES-208-RGP Date Received: 03/21/17

Sample Location: BOSTON, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl 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
1,4-Dioxane	ND		ug/l	250	--	1
Tert-Butyl Alcohol	ND		ug/l	10	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	87		70-130
Dibromofluoromethane	94		70-130

Project Name: 25 FID-40717
Project Number: 40717

Lab Number: L1708446
Report Date: 03/28/17

SAMPLE RESULTS

Lab ID: L1708446-01
Client ID: VES-208-RGP
Sample Location: BOSTON, MA
Matrix: Water
Analytical Method: 97,8260C-SIM
Analytical Date: 03/23/17 10:13
Analyst: KD

Date Collected: 03/21/17 10:30
Date Received: 03/21/17
Field Prep: Not Specified

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

Project Name: 25 FID-40717 **Lab Number:** L1708446

Project Number: 40717 **Report Date:** 03/28/17

SAMPLE RESULTS

Lab ID: L1708446-02
Client ID: VES-102-RGP
Sample Location: BOSTON, MA
Matrix: Water
Analytical Method: 1,8015D
Analytical Date: 03/24/17 16:18
Analyst: DP

Date Collected: 03/21/17 12:00
Date Received: 03/21/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Alcohol Analysis by GC/FID - Mansfield Lab						
Ethyl Alcohol	ND		mg/l	2.00	--	1

Project Name: 25 FID-40717
Project Number: 40717
Lab Number: L1708446
Report Date: 03/28/17

SAMPLE RESULTS

Lab ID: L1708446-02
Client ID: VES-102-RGP
Sample Location: BOSTON, MA
Matrix: Water
Analytical Method: 14,504.1
Analytical Date: 03/25/17 15:21
Analyst: NS

Date Collected: 03/21/17 12:00
Date Received: 03/21/17
Field Prep: Not Specified
Extraction Method: EPA 504.1
Extraction Date: 03/25/17 11:29

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

Project Name: 25 FID-40717 **Lab Number:** L1708446

Project Number: 40717 **Report Date:** 03/28/17

SAMPLE RESULTS

Lab ID: L1708446-02
Client ID: VES-102-RGP
Sample Location: BOSTON, MA
Matrix: Water
Analytical Method: 97,8260C
Analytical Date: 03/23/17 10:46
Analyst: KD

Date Collected: 03/21/17 12:00
Date Received: 03/21/17
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: 25 FID-40717 **Lab Number:** L1708446

Project Number: 40717 **Report Date:** 03/28/17

SAMPLE RESULTS

Lab ID: L1708446-02 Date Collected: 03/21/17 12:00

Client ID: VES-102-RGP Date Received: 03/21/17

Sample Location: BOSTON, 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
Xylenes, 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
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	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: 25 FID-40717 **Lab Number:** L1708446

Project Number: 40717 **Report Date:** 03/28/17

SAMPLE RESULTS

Lab ID: L1708446-02 Date Collected: 03/21/17 12:00

Client ID: VES-102-RGP Date Received: 03/21/17

Sample Location: BOSTON, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl 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
1,4-Dioxane	ND		ug/l	250	--	1
Tert-Butyl Alcohol	ND		ug/l	10	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	87		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	86		70-130
Dibromofluoromethane	95		70-130

Project Name: 25 FID-40717
Project Number: 40717

Lab Number: L1708446
Report Date: 03/28/17

SAMPLE RESULTS

Lab ID: L1708446-02
Client ID: VES-102-RGP
Sample Location: BOSTON, MA
Matrix: Water
Analytical Method: 97,8260C-SIM
Analytical Date: 03/23/17 10:46
Analyst: KD

Date Collected: 03/21/17 12:00
Date Received: 03/21/17
Field Prep: Not Specified

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

Project Name: 25 FID-40717
Project Number: 40717

Lab Number: L1708446
Report Date: 03/28/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8015D
Analytical Date: 03/24/17 13:40
Analyst: DP

Parameter	Result	Qualifier	Units	RL	MDL
Alcohol Analysis by GC/FID - Mansfield Lab for sample(s): 01-02 Batch: WG987578-1					
Ethyl Alcohol	ND		mg/l	2.00	--

Project Name: 25 FID-40717 **Lab Number:** L1708446

Project Number: 40717 **Report Date:** 03/28/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 03/23/17 07:27
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-02 Batch: WG987619-5					
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: 25 FID-40717 **Lab Number:** L1708446

Project Number: 40717 **Report Date:** 03/28/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 03/23/17 07:27
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-02 Batch: WG987619-5					
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	--
Xylenes, 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	--
Methyl ethyl ketone	ND		ug/l	5.0	--
Methyl isobutyl ketone	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: 25 FID-40717 **Lab Number:** L1708446

Project Number: 40717 **Report Date:** 03/28/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 03/23/17 07:27
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-02 Batch: WG987619-5					
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	--
Diethyl ether	ND		ug/l	2.0	--
Diisopropyl Ether	ND		ug/l	2.0	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--
1,4-Dioxane	ND		ug/l	250	--
Tert-Butyl Alcohol	ND		ug/l	10	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	87		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	84		70-130
Dibromofluoromethane	93		70-130

Project Name: 25 FID-40717
Project Number: 40717

Lab Number: L1708446
Report Date: 03/28/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C-SIM
Analytical Date: 03/23/17 07:27
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics by SIM - Westborough Lab for sample(s): 01-02 Batch: WG987734-5					
1,4-Dioxane	ND		ug/l	3.0	--

Project Name: 25 FID-40717
Project Number: 40717

Lab Number: L1708446
Report Date: 03/28/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 14,504.1
Analytical Date: 03/25/17 14:13
Analyst: NS

Extraction Method: EPA 504.1
Extraction Date: 03/25/17 11:29

Parameter	Result	Qualifier	Units	RL	MDL	
Microextractables by GC - Westborough Lab for sample(s): 01-02 Batch: WG988274-1						
1,2-Dibromoethane	ND		ug/l	0.010	--	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: 25 FID-40717

Project Number: 40717

Lab Number: L1708446

Report Date: 03/28/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Alcohol Analysis by GC/FID - Mansfield Lab	Associated sample(s): 01-02		Batch: WG987578-2 WG987578-3					
Ethyl Alcohol	84		87		70-130	4		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 25 FID-40717

Project Number: 40717

Lab Number: L1708446

Report Date: 03/28/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02 Batch: WG987619-3 WG987619-4								
Methylene chloride	100		100		70-130	0		20
1,1-Dichloroethane	100		110		70-130	10		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	98		95		70-130	3		20
1,2-Dichloropropane	110		110		70-130	0		20
Dibromochloromethane	93		93		70-130	0		20
1,1,2-Trichloroethane	100		100		70-130	0		20
Tetrachloroethene	100		110		70-130	10		20
Chlorobenzene	100		100		70-130	0		20
Trichlorofluoromethane	100		100		70-130	0		20
1,2-Dichloroethane	100		100		70-130	0		20
1,1,1-Trichloroethane	100		100		70-130	0		20
Bromodichloromethane	100		98		70-130	2		20
trans-1,3-Dichloropropene	93		91		70-130	2		20
cis-1,3-Dichloropropene	99		98		70-130	1		20
1,1-Dichloropropene	110		110		70-130	0		20
Bromoform	88		84		70-130	5		20
1,1,2,2-Tetrachloroethane	100		96		70-130	4		20
Benzene	110		110		70-130	0		20
Toluene	110		110		70-130	0		20
Ethylbenzene	98		97		70-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 25 FID-40717

Project Number: 40717

Lab Number: L1708446

Report Date: 03/28/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02 Batch: WG987619-3 WG987619-4								
Chloromethane	100		100		70-130	0		20
Bromomethane	86		85		70-130	1		20
Vinyl chloride	120		110		70-130	9		20
Chloroethane	120		120		70-130	0		20
1,1-Dichloroethene	110		110		70-130	0		20
trans-1,2-Dichloroethene	100		100		70-130	0		20
Trichloroethene	100		100		70-130	0		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		95		70-130	5		20
1,4-Dichlorobenzene	100		99		70-130	1		20
Methyl tert butyl ether	94		93		70-130	1		20
p/m-Xylene	110		105		70-130	5		20
o-Xylene	100		100		70-130	0		20
cis-1,2-Dichloroethene	100		100		70-130	0		20
Dibromomethane	100		100		70-130	0		20
1,2,3-Trichloropropane	94		93		70-130	1		20
Styrene	90		90		70-130	0		20
Dichlorodifluoromethane	96		96		70-130	0		20
Acetone	90		96		70-130	6		20
Carbon disulfide	100		97		70-130	3		20
Methyl ethyl ketone	110		120		70-130	9		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 25 FID-40717

Project Number: 40717

Lab Number: L1708446

Report Date: 03/28/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02 Batch: WG987619-3 WG987619-4								
Methyl isobutyl ketone	90		89		70-130	1		20
2-Hexanone	84		85		70-130	1		20
Bromochloromethane	110		100		70-130	10		20
Tetrahydrofuran	110		110		70-130	0		20
2,2-Dichloropropane	95		93		70-130	2		20
1,2-Dibromoethane	100		100		70-130	0		20
1,3-Dichloropropane	100		100		70-130	0		20
1,1,1,2-Tetrachloroethane	91		91		70-130	0		20
Bromobenzene	99		98		70-130	1		20
n-Butylbenzene	110		110		70-130	0		20
sec-Butylbenzene	98		94		70-130	4		20
tert-Butylbenzene	98		94		70-130	4		20
o-Chlorotoluene	96		91		70-130	5		20
p-Chlorotoluene	96		90		70-130	6		20
1,2-Dibromo-3-chloropropane	86		86		70-130	0		20
Hexachlorobutadiene	84		82		70-130	2		20
Isopropylbenzene	98		93		70-130	5		20
p-Isopropyltoluene	98		96		70-130	2		20
Naphthalene	100		100		70-130	0		20
n-Propylbenzene	100		94		70-130	6		20
1,2,3-Trichlorobenzene	100		100		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 25 FID-40717

Project Number: 40717

Lab Number: L1708446

Report Date: 03/28/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02 Batch: WG987619-3 WG987619-4								
1,2,4-Trichlorobenzene	100		100		70-130	0		20
1,3,5-Trimethylbenzene	93		90		70-130	3		20
1,2,4-Trimethylbenzene	100		95		70-130	5		20
Diethyl ether	100		100		70-130	0		20
Diisopropyl Ether	110		110		70-130	0		20
Ethyl-Tert-Butyl-Ether	100		100		70-130	0		20
Tertiary-Amyl Methyl Ether	99		97		70-130	2		20
1,4-Dioxane	114		112		70-130	2		20
Tert-Butyl Alcohol	102		96		70-130	6		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	104		91		70-130
Toluene-d8	100		98		70-130
4-Bromofluorobenzene	96		93		70-130
Dibromofluoromethane	100		98		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: 25 FID-40717

Project Number: 40717

Lab Number: L1708446

Report Date: 03/28/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by SIM - Westborough Lab Associated sample(s): 01-02 Batch: WG987734-3 WG987734-4								
1,4-Dioxane	100		100		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 25 FID-40717

Project Number: 40717

Lab Number: L1708446

Report Date: 03/28/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Microextractables by GC - Westborough Lab	Associated sample(s): 01-02 Batch: WG988274-2								
1,2-Dibromoethane	91		-		70-130	-			A

Matrix Spike Analysis
Batch Quality Control

Project Name: 25 FID-40717
Project Number: 40717

Lab Number: L1708446
Report Date: 03/28/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Microextractables by GC - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG988274-3 QC Sample: L1708446-02 Client ID: VES-102-RGP													
1,2-Dibromoethane	ND	0.261	0.268	103		-	-		65-135	-		20	A

SEMIVOLATILES

Project Name: 25 FID-40717 **Lab Number:** L1708446

Project Number: 40717 **Report Date:** 03/28/17

SAMPLE RESULTS

Lab ID: L1708446-01
Client ID: VES-208-RGP
Sample Location: BOSTON, MA
Matrix: Water
Analytical Method: 97,8270D
Analytical Date: 03/24/17 15:13
Analyst: ALS

Date Collected: 03/21/17 10:30
Date Received: 03/21/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 03/22/17 13:22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Semivolatile Organics - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	--	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	--	1
1,2-Dichlorobenzene	ND		ug/l	2.0	--	1
1,3-Dichlorobenzene	ND		ug/l	2.0	--	1
1,4-Dichlorobenzene	ND		ug/l	2.0	--	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	--	1
2,4-Dinitrotoluene	ND		ug/l	5.0	--	1
2,6-Dinitrotoluene	ND		ug/l	5.0	--	1
Azobenzene	ND		ug/l	2.0	--	1
4-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
Isophorone	ND		ug/l	5.0	--	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
Aniline	ND		ug/l	2.0	--	1
4-Chloroaniline	ND		ug/l	5.0	--	1
Dibenzofuran	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

Project Name: 25 FID-40717 **Lab Number:** L1708446

Project Number: 40717 **Report Date:** 03/28/17

SAMPLE RESULTS

Lab ID: L1708446-01 Date Collected: 03/21/17 10:30

Client ID: VES-208-RGP Date Received: 03/21/17

Sample Location: BOSTON, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Semivolatile Organics - Westborough Lab						
2,4-Dinitrophenol	ND		ug/l	20	--	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	46		15-110
Phenol-d6	34		15-110
Nitrobenzene-d5	66		30-130
2-Fluorobiphenyl	72		30-130
2,4,6-Tribromophenol	82		15-110
4-Terphenyl-d14	69		30-130

Project Name: 25 FID-40717 **Lab Number:** L1708446

Project Number: 40717 **Report Date:** 03/28/17

SAMPLE RESULTS

Lab ID: L1708446-01 D
Client ID: VES-208-RGP
Sample Location: BOSTON, MA
Matrix: Water
Analytical Method: 97,8270D-SIM
Analytical Date: 03/23/17 14:46
Analyst: DV

Date Collected: 03/21/17 10:30
Date Received: 03/21/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 03/22/17 13:24

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Semivolatile Organics by SIM - Westborough Lab						
Acenaphthene	ND		ug/l	1.0	--	5
2-Chloronaphthalene	ND		ug/l	1.0	--	5
Fluoranthene	6.5		ug/l	1.0	--	5
Hexachlorobutadiene	ND		ug/l	2.5	--	5
Naphthalene	ND		ug/l	1.0	--	5
Benzo(a)anthracene	3.8		ug/l	1.0	--	5
Benzo(a)pyrene	3.7		ug/l	1.0	--	5
Benzo(b)fluoranthene	5.6		ug/l	1.0	--	5
Benzo(k)fluoranthene	1.9		ug/l	1.0	--	5
Chrysene	3.5		ug/l	1.0	--	5
Acenaphthylene	ND		ug/l	1.0	--	5
Anthracene	ND		ug/l	1.0	--	5
Benzo(ghi)perylene	2.8		ug/l	1.0	--	5
Fluorene	ND		ug/l	1.0	--	5
Phenanthrene	1.6		ug/l	1.0	--	5
Dibenzo(a,h)anthracene	ND		ug/l	1.0	--	5
Indeno(1,2,3-cd)pyrene	2.4		ug/l	1.0	--	5
Pyrene	5.4		ug/l	1.0	--	5
2-Methylnaphthalene	ND		ug/l	1.0	--	5
Pentachlorophenol	ND		ug/l	4.0	--	5
Hexachlorobenzene	ND		ug/l	4.0	--	5
Hexachloroethane	ND		ug/l	4.0	--	5

Project Name: 25 FID-40717 **Lab Number:** L1708446

Project Number: 40717 **Report Date:** 03/28/17

SAMPLE RESULTS

Lab ID: L1708446-01 D Date Collected: 03/21/17 10:30

Client ID: VES-208-RGP Date Received: 03/21/17

Sample Location: BOSTON, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

MCP Semivolatile Organics by SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	40		15-110
Phenol-d6	32		15-110
Nitrobenzene-d5	65		30-130
2-Fluorobiphenyl	78		30-130
2,4,6-Tribromophenol	69		15-110
4-Terphenyl-d14	74		30-130

Project Name: 25 FID-40717 **Lab Number:** L1708446

Project Number: 40717 **Report Date:** 03/28/17

SAMPLE RESULTS

Lab ID: L1708446-02
Client ID: VES-102-RGP
Sample Location: BOSTON, MA
Matrix: Water
Analytical Method: 97,8270D
Analytical Date: 03/24/17 15:40
Analyst: ALS

Date Collected: 03/21/17 12:00
Date Received: 03/21/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 03/22/17 13:22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Semivolatile Organics - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	--	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	--	1
1,2-Dichlorobenzene	ND		ug/l	2.0	--	1
1,3-Dichlorobenzene	ND		ug/l	2.0	--	1
1,4-Dichlorobenzene	ND		ug/l	2.0	--	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	--	1
2,4-Dinitrotoluene	ND		ug/l	5.0	--	1
2,6-Dinitrotoluene	ND		ug/l	5.0	--	1
Azobenzene	ND		ug/l	2.0	--	1
4-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
Isophorone	ND		ug/l	5.0	--	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
Aniline	ND		ug/l	2.0	--	1
4-Chloroaniline	ND		ug/l	5.0	--	1
Dibenzofuran	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

Project Name: 25 FID-40717 **Lab Number:** L1708446

Project Number: 40717 **Report Date:** 03/28/17

SAMPLE RESULTS

Lab ID: L1708446-02 Date Collected: 03/21/17 12:00

Client ID: VES-102-RGP Date Received: 03/21/17

Sample Location: BOSTON, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Semivolatile Organics - Westborough Lab						
2,4-Dinitrophenol	ND		ug/l	20	--	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	43		15-110
Phenol-d6	32		15-110
Nitrobenzene-d5	69		30-130
2-Fluorobiphenyl	76		30-130
2,4,6-Tribromophenol	79		15-110
4-Terphenyl-d14	71		30-130

Project Name: 25 FID-40717 **Lab Number:** L1708446

Project Number: 40717 **Report Date:** 03/28/17

SAMPLE RESULTS

Lab ID: L1708446-02 D
Client ID: VES-102-RGP
Sample Location: BOSTON, MA
Matrix: Water
Analytical Method: 97,8270D-SIM
Analytical Date: 03/23/17 15:10
Analyst: DV

Date Collected: 03/21/17 12:00
Date Received: 03/21/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 03/22/17 13:24

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Semivolatile Organics by SIM - Westborough Lab						
Acenaphthene	ND		ug/l	1.0	--	5
2-Chloronaphthalene	ND		ug/l	1.0	--	5
Fluoranthene	1.3		ug/l	1.0	--	5
Hexachlorobutadiene	ND		ug/l	2.5	--	5
Naphthalene	ND		ug/l	1.0	--	5
Benzo(a)anthracene	ND		ug/l	1.0	--	5
Benzo(a)pyrene	ND		ug/l	1.0	--	5
Benzo(b)fluoranthene	ND		ug/l	1.0	--	5
Benzo(k)fluoranthene	ND		ug/l	1.0	--	5
Chrysene	ND		ug/l	1.0	--	5
Acenaphthylene	ND		ug/l	1.0	--	5
Anthracene	ND		ug/l	1.0	--	5
Benzo(ghi)perylene	ND		ug/l	1.0	--	5
Fluorene	ND		ug/l	1.0	--	5
Phenanthrene	ND		ug/l	1.0	--	5
Dibenzo(a,h)anthracene	ND		ug/l	1.0	--	5
Indeno(1,2,3-cd)pyrene	ND		ug/l	1.0	--	5
Pyrene	1.3		ug/l	1.0	--	5
2-Methylnaphthalene	ND		ug/l	1.0	--	5
Pentachlorophenol	ND		ug/l	4.0	--	5
Hexachlorobenzene	ND		ug/l	4.0	--	5
Hexachloroethane	ND		ug/l	4.0	--	5

Project Name: 25 FID-40717 **Lab Number:** L1708446

Project Number: 40717 **Report Date:** 03/28/17

SAMPLE RESULTS

Lab ID: L1708446-02 D Date Collected: 03/21/17 12:00

Client ID: VES-102-RGP Date Received: 03/21/17

Sample Location: BOSTON, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

MCP Semivolatile Organics by SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	38		15-110
Phenol-d6	30		15-110
Nitrobenzene-d5	70		30-130
2-Fluorobiphenyl	79		30-130
2,4,6-Tribromophenol	66		15-110
4-Terphenyl-d14	75		30-130

Project Name: 25 FID-40717
Project Number: 40717

Lab Number: L1708446
Report Date: 03/28/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D
Analytical Date: 03/23/17 11:03
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 03/22/17 13:22

Parameter	Result	Qualifier	Units	RL	MDL
MCP Semivolatile Organics - Westborough Lab for sample(s): 01-02 Batch: WG987298-1					
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: 25 FID-40717
Project Number: 40717

Lab Number: L1708446
Report Date: 03/28/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D
Analytical Date: 03/23/17 11:03
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 03/22/17 13:22

Parameter	Result	Qualifier	Units	RL	MDL
MCP Semivolatile Organics - Westborough Lab for sample(s): 01-02 Batch: WG987298-1					
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: 25 FID-40717
Project Number: 40717

Lab Number: L1708446
Report Date: 03/28/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D
Analytical Date: 03/23/17 11:03
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 03/22/17 13:22

Parameter	Result	Qualifier	Units	RL	MDL
MCP Semivolatile Organics - Westborough Lab for sample(s): 01-02 Batch: WG987298-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	49		15-110
Phenol-d6	32		15-110
Nitrobenzene-d5	72		30-130
2-Fluorobiphenyl	77		30-130
2,4,6-Tribromophenol	94		15-110
4-Terphenyl-d14	76		30-130

Project Name: 25 FID-40717
Project Number: 40717

Lab Number: L1708446
Report Date: 03/28/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D-SIM
Analytical Date: 03/23/17 08:38
Analyst: KL

Extraction Method: EPA 3510C
Extraction Date: 03/22/17 13:24

Parameter	Result	Qualifier	Units	RL	MDL
MCP Semivolatile Organics by SIM - Westborough Lab for sample(s): 01-02 Batch: WG987299-1					
Acenaphthene	ND		ug/l	0.20	--
2-Chloronaphthalene	ND		ug/l	0.20	--
Fluoranthene	ND		ug/l	0.20	--
Hexachlorobutadiene	ND		ug/l	0.50	--
Naphthalene	ND		ug/l	0.20	--
Benzo(a)anthracene	ND		ug/l	0.20	--
Benzo(a)pyrene	ND		ug/l	0.20	--
Benzo(b)fluoranthene	ND		ug/l	0.20	--
Benzo(k)fluoranthene	ND		ug/l	0.20	--
Chrysene	ND		ug/l	0.20	--
Acenaphthylene	ND		ug/l	0.20	--
Anthracene	ND		ug/l	0.20	--
Benzo(ghi)perylene	ND		ug/l	0.20	--
Fluorene	ND		ug/l	0.20	--
Phenanthrene	ND		ug/l	0.20	--
Dibenzo(a,h)anthracene	ND		ug/l	0.20	--
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.20	--
Pyrene	ND		ug/l	0.20	--
2-Methylnaphthalene	ND		ug/l	0.20	--
Pentachlorophenol	ND		ug/l	0.80	--
Hexachlorobenzene	ND		ug/l	0.80	--
Hexachloroethane	ND		ug/l	0.80	--

Project Name: 25 FID-40717
Project Number: 40717

Lab Number: L1708446
Report Date: 03/28/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D-SIM
Analytical Date: 03/23/17 08:38
Analyst: KL

Extraction Method: EPA 3510C
Extraction Date: 03/22/17 13:24

Parameter	Result	Qualifier	Units	RL	MDL
MCP Semivolatile Organics by SIM - Westborough Lab for sample(s): 01-02 Batch: WG987299-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	42		15-110
Phenol-d6	34		15-110
Nitrobenzene-d5	77		30-130
2-Fluorobiphenyl	72		30-130
2,4,6-Tribromophenol	98		15-110
4-Terphenyl-d14	71		30-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: 25 FID-40717
Project Number: 40717

Lab Number: L1708446
Report Date: 03/28/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Semivolatile Organics - Westborough Lab Associated sample(s): 01-02 Batch: WG987298-2 WG987298-3								
Acenaphthene	71		81		40-140	13		20
1,2,4-Trichlorobenzene	65		79		40-140	19		20
Hexachlorobenzene	84		92		40-140	9		20
Bis(2-chloroethyl)ether	62		74		40-140	18		20
2-Chloronaphthalene	75		83		40-140	10		20
1,2-Dichlorobenzene	60		73		40-140	20		20
1,3-Dichlorobenzene	59		72		40-140	20		20
1,4-Dichlorobenzene	60		73		40-140	20		20
3,3'-Dichlorobenzidine	**39**	Q	49		40-140	**23**	Q	20
2,4-Dinitrotoluene	81		88		40-140	8		20
2,6-Dinitrotoluene	82		89		40-140	8		20
Azobenzene	76		85		40-140	11		20
Fluoranthene	74		82		40-140	10		20
4-Bromophenyl phenyl ether	83		93		40-140	11		20
Bis(2-chloroisopropyl)ether	56		68		40-140	19		20
Bis(2-chloroethoxy)methane	71		79		40-140	11		20
Hexachlorobutadiene	63		80		40-140	**24**	Q	20
Hexachloroethane	61		74		40-140	19		20
Isophorone	72		80		40-140	11		20
Naphthalene	67		78		40-140	15		20
Nitrobenzene	66		78		40-140	17		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 25 FID-40717

Project Number: 40717

Lab Number: L1708446

Report Date: 03/28/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Semivolatile Organics - Westborough Lab Associated sample(s): 01-02 Batch: WG987298-2 WG987298-3								
Bis(2-ethylhexyl)phthalate	83		94		40-140	12		20
Butyl benzyl phthalate	69		77		40-140	11		20
Di-n-butylphthalate	78		87		40-140	11		20
Di-n-octylphthalate	84		93		40-140	10		20
Diethyl phthalate	79		88		40-140	11		20
Dimethyl phthalate	82		87		40-140	6		20
Benzo(a)anthracene	76		84		40-140	10		20
Benzo(a)pyrene	76		83		40-140	9		20
Benzo(b)fluoranthene	74		83		40-140	11		20
Benzo(k)fluoranthene	73		80		40-140	9		20
Chrysene	74		83		40-140	11		20
Acenaphthylene	79		87		40-140	10		20
Anthracene	74		81		40-140	9		20
Benzo(ghi)perylene	72		80		40-140	11		20
Fluorene	77		85		40-140	10		20
Phenanthrene	72		78		40-140	8		20
Dibenzo(a,h)anthracene	73		81		40-140	10		20
Indeno(1,2,3-cd)pyrene	76		85		40-140	11		20
Pyrene	72		79		40-140	9		20
Aniline	**29**	Q	**34**	Q	40-140	16		20
4-Chloroaniline	**38**	Q	43		40-140	12		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: 25 FID-40717
Project Number: 40717

Lab Number: L1708446
Report Date: 03/28/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Semivolatile Organics - Westborough Lab Associated sample(s): 01-02 Batch: WG987298-2 WG987298-3								
Dibenzofuran	75		83		40-140	10		20
2-Methylnaphthalene	71		82		40-140	14		20
Acetophenone	71		84		40-140	17		20
2,4,6-Trichlorophenol	84		93		30-130	10		20
2-Chlorophenol	65		78		30-130	18		20
2,4-Dichlorophenol	79		88		30-130	11		20
2,4-Dimethylphenol	80		86		30-130	7		20
2-Nitrophenol	73		86		30-130	16		20
4-Nitrophenol	63		66		30-130	5		20
2,4-Dinitrophenol	77		86		30-130	11		20
Pentachlorophenol	85		95		30-130	11		20
Phenol	31		36		30-130	15		20
2-Methylphenol	65		74		30-130	13		20
3-Methylphenol/4-Methylphenol	63		72		30-130	13		20
2,4,5-Trichlorophenol	87		91		30-130	4		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 25 FID-40717

Project Number: 40717

Lab Number: L1708446

Report Date: 03/28/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Semivolatile Organics - Westborough Lab Associated sample(s): 01-02 Batch: WG987298-2 WG987298-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	45		54		15-110
Phenol-d6	33		38		15-110
Nitrobenzene-d5	66		78		30-130
2-Fluorobiphenyl	74		81		30-130
2,4,6-Tribromophenol	88		98		15-110
4-Terphenyl-d14	67		73		30-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: 25 FID-40717

Project Number: 40717

Lab Number: L1708446

Report Date: 03/28/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Semivolatile Organics by SIM - Westborough Lab Associated sample(s): 01-02 Batch: WG987299-2 WG987299-3								
Acenaphthene	75		72		40-140	4		20
2-Chloronaphthalene	79		76		40-140	4		20
Fluoranthene	76		75		40-140	1		20
Hexachlorobutadiene	82		79		40-140	4		20
Naphthalene	74		71		40-140	4		20
Benzo(a)anthracene	82		81		40-140	1		20
Benzo(a)pyrene	82		83		40-140	1		20
Benzo(b)fluoranthene	92		85		40-140	8		20
Benzo(k)fluoranthene	71		73		40-140	3		20
Chrysene	68		67		40-140	1		20
Acenaphthylene	82		80		40-140	2		20
Anthracene	76		76		40-140	0		20
Benzo(ghi)perylene	84		82		40-140	2		20
Fluorene	79		76		40-140	4		20
Phenanthrene	72		70		40-140	3		20
Dibenzo(a,h)anthracene	84		81		40-140	4		20
Indeno(1,2,3-cd)pyrene	83		81		40-140	2		20
Pyrene	75		74		40-140	1		20
2-Methylnaphthalene	82		79		40-140	4		20
Pentachlorophenol	72		71		30-130	1		20
Hexachlorobenzene	87		85		40-140	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 25 FID-40717

Project Number: 40717

Lab Number: L1708446

Report Date: 03/28/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Semivolatile Organics by SIM - Westborough Lab Associated sample(s): 01-02 Batch: WG987299-2 WG987299-3								
Hexachloroethane	76		72		40-140	5		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	44		45		15-110
Phenol-d6	36		37		15-110
Nitrobenzene-d5	73		71		30-130
2-Fluorobiphenyl	71		70		30-130
2,4,6-Tribromophenol	96		95		15-110
4-Terphenyl-d14	65		64		30-130

PCBS

Project Name: 25 FID-40717 **Lab Number:** L1708446

Project Number: 40717 **Report Date:** 03/28/17

SAMPLE RESULTS

Lab ID: L1708446-01
Client ID: VES-208-RGP
Sample Location: BOSTON, MA
Matrix: Water
Analytical Method: 5,608
Analytical Date: 03/23/17 00:56
Analyst: HT

Date Collected: 03/21/17 10:30
Date Received: 03/21/17
Field Prep: Not Specified
Extraction Method: EPA 608
Extraction Date: 03/22/17 10:10
Cleanup Method: EPA 3665A
Cleanup Date: 03/22/17
Cleanup Method: EPA 3660B
Cleanup Date: 03/22/17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.278	--	1	A
Aroclor 1221	ND		ug/l	0.278	--	1	A
Aroclor 1232	ND		ug/l	0.278	--	1	A
Aroclor 1242	ND		ug/l	0.278	--	1	A
Aroclor 1248	ND		ug/l	0.278	--	1	A
Aroclor 1254	ND		ug/l	0.278	--	1	A
Aroclor 1260	ND		ug/l	0.222	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	95		30-150	A
Decachlorobiphenyl	51		30-150	A

Project Name: 25 FID-40717 **Lab Number:** L1708446

Project Number: 40717 **Report Date:** 03/28/17

SAMPLE RESULTS

Lab ID: L1708446-02
Client ID: VES-102-RGP
Sample Location: BOSTON, MA
Matrix: Water
Analytical Method: 5,608
Analytical Date: 03/23/17 01:08
Analyst: HT

Date Collected: 03/21/17 12:00
Date Received: 03/21/17
Field Prep: Not Specified
Extraction Method: EPA 608
Extraction Date: 03/22/17 10:10
Cleanup Method: EPA 3665A
Cleanup Date: 03/22/17
Cleanup Method: EPA 3660B
Cleanup Date: 03/22/17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.266	--	1	A
Aroclor 1221	ND		ug/l	0.266	--	1	A
Aroclor 1232	ND		ug/l	0.266	--	1	A
Aroclor 1242	ND		ug/l	0.266	--	1	A
Aroclor 1248	ND		ug/l	0.266	--	1	A
Aroclor 1254	ND		ug/l	0.266	--	1	A
Aroclor 1260	0.217		ug/l	0.213	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	99		30-150	A
Decachlorobiphenyl	75		30-150	A

Project Name: 25 FID-40717
Project Number: 40717

Lab Number: L1708446
Report Date: 03/28/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,608
Analytical Date: 03/23/17 01:20
Analyst: HT

Extraction Method: EPA 608
Extraction Date: 03/22/17 10:10
Cleanup Method: EPA 3665A
Cleanup Date: 03/22/17
Cleanup Method: EPA 3660B
Cleanup Date: 03/22/17

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-02 Batch: WG987239-1						
Aroclor 1016	ND		ug/l	0.250	--	A
Aroclor 1221	ND		ug/l	0.250	--	A
Aroclor 1232	ND		ug/l	0.250	--	A
Aroclor 1242	ND		ug/l	0.250	--	A
Aroclor 1248	ND		ug/l	0.250	--	A
Aroclor 1254	ND		ug/l	0.250	--	A
Aroclor 1260	ND		ug/l	0.200	--	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	88		30-150	A
Decachlorobiphenyl	85		30-150	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: 25 FID-40717

Project Number: 40717

Lab Number: L1708446

Report Date: 03/28/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-02 Batch: WG987239-2									
Aroclor 1016	91		-		40-140	-		50	A
Aroclor 1260	94		-		40-140	-		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	91				30-150	A
Decachlorobiphenyl	88				30-150	A

Matrix Spike Analysis
Batch Quality Control

Project Name: 25 FID-40717
Project Number: 40717

Lab Number: L1708446
Report Date: 03/28/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG987239-3 QC Sample: L1708446-01 Client ID: VES-208-RGP													
Aroclor 1016	ND	1	0.924	92		-	-		40-140	-		50	A
Aroclor 1260	ND	1	0.892	89		-	-		40-140	-		50	A

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	92				30-150	A
Decachlorobiphenyl	59				30-150	A

Lab Duplicate Analysis
Batch Quality Control

Project Name: 25 FID-40717
Project Number: 40717

Lab Number: L1708446
Report Date: 03/28/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits	
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG987239-4 QC Sample: L1708446-02 Client ID: VES-102-RGP							
Aroclor 1016	ND	ND	ug/l	NC		50	A
Aroclor 1221	ND	ND	ug/l	NC		50	A
Aroclor 1232	ND	ND	ug/l	NC		50	A
Aroclor 1242	ND	ND	ug/l	NC		50	A
Aroclor 1248	ND	ND	ug/l	NC		50	A
Aroclor 1254	ND	ND	ug/l	NC		50	A
Aroclor 1260	0.217	ND	ug/l	NC		50	A

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	99		100		30-150	A
Decachlorobiphenyl	75		45		30-150	A

METALS

Project Name: 25 FID-40717
Project Number: 40717
Lab Number: L1708446
Report Date: 03/28/17

SAMPLE RESULTS

Lab ID: L1708446-01
Client ID: VES-208-RGP
Sample Location: BOSTON, MA
Matrix: Water
Date Collected: 03/21/17 10:30
Date Received: 03/21/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Total Metals - Mansfield Lab											
Antimony, Total	0.0132		mg/l	0.0040	--	1	03/24/17 09:48	03/24/17 14:46	EPA 3005A	97,6020A	AM
Arsenic, Total	0.0150		mg/l	0.0005	--	1	03/24/17 09:48	03/24/17 14:46	EPA 3005A	97,6020A	AM
Cadmium, Total	0.0009		mg/l	0.0005	--	1	03/24/17 09:48	03/24/17 14:46	EPA 3005A	97,6020A	AM
Chromium, Total	0.0264		mg/l	0.0010	--	1	03/24/17 09:48	03/24/17 14:46	EPA 3005A	97,6020A	AM
Copper, Total	0.2748		mg/l	0.0010	--	1	03/24/17 09:48	03/24/17 14:46	EPA 3005A	97,6020A	AM
Iron, Total	40		mg/l	0.05	--	1	03/24/17 09:48	03/27/17 15:47	EPA 3005A	97,6010C	AB
Lead, Total	0.3290		mg/l	0.0010	--	1	03/24/17 09:48	03/24/17 14:46	EPA 3005A	97,6020A	AM
Mercury, Total	0.0002		mg/l	0.0002	--	1	03/22/17 10:07	03/22/17 19:04	EPA 7470A	97,7470A	EA
Nickel, Total	0.0380		mg/l	0.0020	--	1	03/24/17 09:48	03/24/17 14:46	EPA 3005A	97,6020A	AM
Selenium, Total	ND		mg/l	0.005	--	1	03/24/17 09:48	03/24/17 14:46	EPA 3005A	97,6020A	AM
Silver, Total	0.0015		mg/l	0.0005	--	1	03/24/17 09:48	03/24/17 14:46	EPA 3005A	97,6020A	AM
Zinc, Total	0.2571		mg/l	0.0100	--	1	03/24/17 09:48	03/24/17 14:46	EPA 3005A	97,6020A	AM

Project Name: 25 FID-40717
Project Number: 40717
Lab Number: L1708446
Report Date: 03/28/17

SAMPLE RESULTS

Lab ID: L1708446-02
Client ID: VES-102-RGP
Sample Location: BOSTON, MA
Matrix: Water
Date Collected: 03/21/17 12:00
Date Received: 03/21/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Total Metals - Mansfield Lab											
Antimony, Total	0.0053		mg/l	0.0040	--	1	03/24/17 09:48	03/24/17 14:49	EPA 3005A	97,6020A	AM
Arsenic, Total	0.0108		mg/l	0.0005	--	1	03/24/17 09:48	03/24/17 14:49	EPA 3005A	97,6020A	AM
Cadmium, Total	ND		mg/l	0.0005	--	1	03/24/17 09:48	03/24/17 14:49	EPA 3005A	97,6020A	AM
Chromium, Total	0.0174		mg/l	0.0010	--	1	03/24/17 09:48	03/24/17 14:49	EPA 3005A	97,6020A	AM
Copper, Total	0.0945		mg/l	0.0010	--	1	03/24/17 09:48	03/24/17 14:49	EPA 3005A	97,6020A	AM
Iron, Total	10		mg/l	0.05	--	1	03/24/17 09:48	03/27/17 15:52	EPA 3005A	97,6010C	AB
Lead, Total	0.1895		mg/l	0.0010	--	1	03/24/17 09:48	03/24/17 14:49	EPA 3005A	97,6020A	AM
Mercury, Total	0.0005		mg/l	0.0002	--	1	03/22/17 10:07	03/22/17 19:06	EPA 7470A	97,7470A	EA
Nickel, Total	0.0330		mg/l	0.0020	--	1	03/24/17 09:48	03/24/17 14:49	EPA 3005A	97,6020A	AM
Selenium, Total	ND		mg/l	0.005	--	1	03/24/17 09:48	03/24/17 14:49	EPA 3005A	97,6020A	AM
Silver, Total	ND		mg/l	0.0005	--	1	03/24/17 09:48	03/24/17 14:49	EPA 3005A	97,6020A	AM
Zinc, Total	0.1647		mg/l	0.0100	--	1	03/24/17 09:48	03/24/17 14:49	EPA 3005A	97,6020A	AM

Project Name: 25 FID-40717 **Lab Number:** L1708446

Project Number: 40717 **Report Date:** 03/28/17

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Total Metals - Mansfield Lab for sample(s): 01-02 Batch: WG987223-1										
Mercury, Total	ND		mg/l	0.0002	--	1	03/22/17 10:07	03/22/17 18:58	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 - Mansfield Lab for sample(s): 01-02 Batch: WG987931-1										
Iron, Total	ND		mg/l	0.05	--	1	03/24/17 09:48	03/27/17 15:12	97,6010C	AB

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Total Metals - Mansfield Lab for sample(s): 01-02 Batch: WG987932-1										
Antimony, Total	ND		mg/l	0.0040	--	1	03/24/17 09:48	03/24/17 14:35	97,6020A	AM
Arsenic, Total	ND		mg/l	0.0005	--	1	03/24/17 09:48	03/24/17 14:35	97,6020A	AM
Cadmium, Total	ND		mg/l	0.0005	--	1	03/24/17 09:48	03/24/17 14:35	97,6020A	AM
Chromium, Total	ND		mg/l	0.0010	--	1	03/24/17 09:48	03/24/17 14:35	97,6020A	AM
Copper, Total	ND		mg/l	0.0010	--	1	03/24/17 09:48	03/24/17 14:35	97,6020A	AM
Lead, Total	ND		mg/l	0.0010	--	1	03/24/17 09:48	03/24/17 14:35	97,6020A	AM
Nickel, Total	ND		mg/l	0.0020	--	1	03/24/17 09:48	03/24/17 14:35	97,6020A	AM
Selenium, Total	ND		mg/l	0.005	--	1	03/24/17 09:48	03/24/17 14:35	97,6020A	AM
Silver, Total	ND		mg/l	0.0005	--	1	03/24/17 09:48	03/24/17 14:35	97,6020A	AM
Zinc, Total	ND		mg/l	0.0100	--	1	03/24/17 09:48	03/24/17 14:35	97,6020A	AM

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: 25 FID-40717

Project Number: 40717

Lab Number: L1708446

Report Date: 03/28/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG987223-2 WG987223-3								
Mercury, Total	105		106		80-120	1		20
MCP Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG987931-2 WG987931-3								
Iron, Total	94		94		80-120	0		20
MCP Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG987932-2 WG987932-3								
Antimony, Total	105		107		80-120	2		20
Arsenic, Total	105		109		80-120	4		20
Cadmium, Total	112		113		80-120	1		20
Chromium, Total	104		105		80-120	1		20
Copper, Total	106		106		80-120	0		20
Lead, Total	104		104		80-120	0		20
Nickel, Total	109		108		80-120	1		20
Selenium, Total	107		111		80-120	4		20
Silver, Total	100		99		80-120	1		20
Zinc, Total	107		111		80-120	4		20

INORGANICS
&
MISCELLANEOUS

Project Name: 25 FID-40717
Project Number: 40717

Lab Number: L1708446
Report Date: 03/28/17

SAMPLE RESULTS

Lab ID: L1708446-01
Client ID: VES-208-RGP
Sample Location: BOSTON, MA
Matrix: Water

Date Collected: 03/21/17 10:30
Date Received: 03/21/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP General Chemistry - Westborough Lab										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	03/21/17 21:25	03/21/17 21:44	97,7196A	CW
General Chemistry - Westborough Lab										
Solids, Total Suspended	1700		mg/l	50	NA	10	-	03/24/17 13:15	121,2540D	SG
Cyanide, Total	ND		mg/l	0.005	--	1	03/21/17 21:47	03/22/17 13:34	121,4500CN-CE	JO
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	03/21/17 21:14	121,4500CL-D	AS
Nitrogen, Ammonia	ND		mg/l	0.075	--	1	03/22/17 09:31	03/22/17 22:44	44,350.1	AT
TPH, SGT-HEM	ND		mg/l	5.20	--	1.3	03/22/17 17:35	03/22/17 22:20	74,1664A	ML
Phenolics, Total	ND		mg/l	0.030	--	1	03/22/17 10:12	03/23/17 10:57	4,420.1	AW
Anions by Ion Chromatography - Westborough Lab										
Chloride	3440		mg/l	50.0	--	100	-	03/22/17 22:04	44,300.0	AU

Project Name: 25 FID-40717
Project Number: 40717

Lab Number: L1708446
Report Date: 03/28/17

SAMPLE RESULTS

Lab ID: L1708446-02
Client ID: VES-102-RGP
Sample Location: BOSTON, MA
Matrix: Water

Date Collected: 03/21/17 12:00
Date Received: 03/21/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP General Chemistry - Westborough Lab										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	03/21/17 21:25	03/21/17 22:05	97,7196A	CW
General Chemistry - Westborough Lab										
Solids, Total Suspended	300		mg/l	10	NA	2	-	03/24/17 13:15	121,2540D	SG
Cyanide, Total	ND		mg/l	0.005	--	1	03/21/17 21:47	03/22/17 13:35	121,4500CN-CE	JO
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	03/21/17 21:14	121,4500CL-D	AS
Nitrogen, Ammonia	0.156		mg/l	0.075	--	1	03/22/17 09:31	03/22/17 22:49	44,350.1	AT
TPH, SGT-HEM	ND		mg/l	4.00	--	1	03/22/17 17:35	03/22/17 22:20	74,1664A	ML
Phenolics, Total	ND		mg/l	0.030	--	1	03/22/17 10:12	03/23/17 10:14	4,420.1	AW
Anions by Ion Chromatography - Westborough Lab										
Chloride	724.		mg/l	12.5	--	25	-	03/22/17 22:16	44,300.0	AU

Project Name: 25 FID-40717 **Lab Number:** L1708446

Project Number: 40717 **Report Date:** 03/28/17

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): 01-02 Batch: WG987094-1										
Cyanide, Total	ND		mg/l	0.005	--	1	03/21/17 21:47	03/22/17 13:30	121,4500CN-CE	JO
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG987103-1										
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	03/21/17 21:14	121,4500CL-D	AS
MCP General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG987111-1										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	03/21/17 21:25	03/21/17 21:43	97,7196A	CW
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG987221-1										
Nitrogen, Ammonia	ND		mg/l	0.075	--	1	03/22/17 09:31	03/22/17 22:27	44,350.1	AT
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG987242-1										
Phenolics, Total	ND		mg/l	0.030	--	1	03/22/17 10:12	03/23/17 10:56	4,420.1	AW
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG987378-1										
TPH, SGT-HEM	ND		mg/l	4.00	--	1	03/22/17 17:35	03/22/17 22:20	74,1664A	ML
Anions by Ion Chromatography - Westborough Lab for sample(s): 01-02 Batch: WG987462-1										
Chloride	ND		mg/l	0.500	--	1	-	03/22/17 16:16	44,300.0	AU
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG987922-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	03/24/17 13:15	121,2540D	SG

Lab Control Sample Analysis

Batch Quality Control

Project Name: 25 FID-40717

Project Number: 40717

Lab Number: L1708446

Report Date: 03/28/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG987094-2								
Cyanide, Total	99		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG987103-2								
Chlorine, Total Residual	97		-		90-110	-		
MCP General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG987111-2 WG987111-3								
Chromium, Hexavalent	96		97		49-151	1		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG987221-2								
Nitrogen, Ammonia	92		-		90-110	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG987242-2								
Phenolics, Total	98		-		70-130	-		
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG987378-2								
TPH	85		-		64-132	-		34
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01-02 Batch: WG987462-2								
Chloride	104		-		90-110	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: 25 FID-40717
Project Number: 40717

Lab Number: L1708446
Report Date: 03/28/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG987103-4 QC Sample: L1708446-02 Client ID: VES-102-RGP												
Chlorine, Total Residual	ND	0.248	0.24	97		-	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG987221-4 QC Sample: L1708446-01 Client ID: VES-208-RGP												
Nitrogen, Ammonia	ND	4	3.78	94		-	-		90-110	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: 25 FID-40717
Project Number: 40717

Lab Number: L1708446
Report Date: 03/28/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG987103-3 QC Sample: L1708446-01 Client ID: VES-208-RGP						
Chlorine, Total Residual	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG987221-3 QC Sample: L1708446-01 Client ID: VES-208-RGP						
Nitrogen, Ammonia	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG987922-2 QC Sample: L1708446-01 Client ID: VES-208-RGP						
Solids, Total Suspended	1700	1800	mg/l	6		29

Project Name: 25 FID-40717
Project Number: 40717

Lab Number: L1708446
Report Date: 03/28/17

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information Custody Seal

Cooler	
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1708446-01A	Vial HCl preserved	B	N/A	3.2	Y	Absent	MCP-8260SIM-10(14),MCP-8260-10(14)
L1708446-01B	Vial HCl preserved	B	N/A	3.2	Y	Absent	MCP-8260SIM-10(14),MCP-8260-10(14)
L1708446-01C	Vial HCl preserved	B	N/A	3.2	Y	Absent	MCP-8260SIM-10(14),MCP-8260-10(14)
L1708446-01D	Vial Na2S2O3 preserved	B	N/A	3.2	Y	Absent	504(14)
L1708446-01E	Vial Na2S2O3 preserved	B	N/A	3.2	Y	Absent	504(14)
L1708446-01F	Plastic 250ml HNO3 preserved	B	<2	3.2	Y	Absent	MCP-FE-6010T-10(180),MCP-CR-6020T-10(180),MCP-7470T-10(28),MCP-CU-6020T-10(180),MCP-ZN-6020T-10(180),MCP-AS-6020T-10(180),MCP-NI-6020T-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)
L1708446-01G	Plastic 250ml NaOH preserved	B	>12	3.2	Y	Absent	TCN-4500(14)
L1708446-01H	Plastic 500ml H2SO4 preserved	B	<2	3.2	Y	Absent	NH3-350(28)
L1708446-01J	Plastic 950ml unpreserved	B	7	3.2	Y	Absent	CL-300(28),TRC-4500(1),MCP-HEXCR7196-10(1)
L1708446-01K	Plastic 950ml unpreserved	B	7	3.2	Y	Absent	TSS-2540(7)
L1708446-01L	Amber 950ml H2SO4 preserved	B	<2	3.2	Y	Absent	TPHENOL-420(28)
L1708446-01M	Amber 1000ml HCl preserved	B	N/A	3.2	Y	Absent	TPH-1664(28)
L1708446-01N	Amber 1000ml HCl preserved	B	N/A	3.2	Y	Absent	TPH-1664(28)
L1708446-01P	Vial unpreserved	B	N/A	3.2	Y	Absent	A2-ALCOHOL(14)
L1708446-01Q	Amber 1000ml Na2S2O3	B	7	3.2	Y	Absent	PCB-608(7)
L1708446-01R	Amber 1000ml Na2S2O3	B	7	3.2	Y	Absent	PCB-608(7)
L1708446-01S	Amber 1000ml unpreserved	B	7	3.2	Y	Absent	MCP-8270-10(7),MCP-8270SIM-10(7)
L1708446-01T	Amber 1000ml unpreserved	B	7	3.2	Y	Absent	MCP-8270-10(7),MCP-8270SIM-10(7)
L1708446-02A	Vial HCl preserved	A	N/A	2.2	Y	Absent	MCP-8260SIM-10(14),MCP-8260-10(14)

*Values in parentheses indicate holding time in days

Project Name: 25 FID-40717
Project Number: 40717

Lab Number: L1708446
Report Date: 03/28/17

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1708446-02B	Vial HCl preserved	A	N/A	2.2	Y	Absent	MCP-8260SIM-10(14),MCP-8260-10(14)
L1708446-02C	Vial HCl preserved	A	N/A	2.2	Y	Absent	MCP-8260SIM-10(14),MCP-8260-10(14)
L1708446-02D	Vial Na2S2O3 preserved	A	N/A	2.2	Y	Absent	504(14)
L1708446-02E	Vial Na2S2O3 preserved	A	N/A	2.2	Y	Absent	504(14)
L1708446-02F	Plastic 250ml HNO3 preserved	A	<2	2.2	Y	Absent	MCP-FE-6010T-10(180),MCP-CR-6020T-10(180),MCP-7470T-10(28),MCP-CU-6020T-10(180),MCP-ZN-6020T-10(180),MCP-AS-6020T-10(180),MCP-NI-6020T-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)
L1708446-02G	Plastic 250ml NaOH preserved	A	>12	2.2	Y	Absent	TCN-4500(14)
L1708446-02H	Plastic 500ml H2SO4 preserved	A	<2	2.2	Y	Absent	NH3-350(28)
L1708446-02J	Plastic 950ml unpreserved	A	7	2.2	Y	Absent	CL-300(28),TRC-4500(1),MCP-HEXCR7196-10(1)
L1708446-02K	Plastic 950ml unpreserved	A	7	2.2	Y	Absent	TSS-2540(7)
L1708446-02L	Amber 950ml H2SO4 preserved	A	<2	2.2	Y	Absent	TPHENOL-420(28)
L1708446-02M	Amber 1000ml HCl preserved	A	N/A	2.2	Y	Absent	TPH-1664(28)
L1708446-02N	Amber 1000ml HCl preserved	A	N/A	2.2	Y	Absent	TPH-1664(28)
L1708446-02P	Vial unpreserved	A	N/A	2.2	Y	Absent	A2-ALCOHOL(14)
L1708446-02Q	Amber 1000ml Na2S2O3	A	7	2.2	Y	Absent	PCB-608(7)
L1708446-02R	Amber 1000ml Na2S2O3	A	7	2.2	Y	Absent	PCB-608(7)
L1708446-02S	Amber 1000ml unpreserved	A	7	2.2	Y	Absent	MCP-8270-10(7),MCP-8270SIM-10(7)
L1708446-02T	Amber 1000ml unpreserved	A	7	2.2	Y	Absent	MCP-8270-10(7),MCP-8270SIM-10(7)

*Values in parentheses indicate holding time in days

Project Name:	25 FID-40717	**Lab Number:**	L1708446
Project Number:	40717	**Report Date:**	03/28/17

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.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
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.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
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

Report Format: Data Usability Report

Project Name:	25 FID-40717	**Lab Number:**	L1708446
Project Number:	40717	**Report Date:**	03/28/17

Data Qualifiers

reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

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

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

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

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.

Report Format: Data Usability Report

Project Name:	25 FID-40717	**Lab Number:**	L1708446
Project Number:	40717	**Report Date:**	03/28/17

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

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

5 Methods for the Organic Chemical Analysis of Municipal and Industrial Wastewater. Appendix A, Part 136, 40 CFR (Code of Federal Regulations).

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

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

74 Method 1664,Revision A: N-Hexane Extractable Material (HEM; Oil & Grease) and Silica Gel Treated N-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry, EPA-821-R-98-002, February 1999.

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.

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

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility
EPA 624: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 300: DW: Bromide
EPA 6860: NPW and SCM: Perchlorate
EPA 9010: NPW and SCM: Amenable Cyanide Distillation
EPA 9012B: NPW: Total Cyanide
EPA 9050A: NPW: Specific Conductance
SM3500: NPW: Ferrous Iron
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.
SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility
SM 2540D: TSS
EPA 3005A NPW
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

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

Westborough Facility:

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

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 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, SM9221E.**

Mansfield Facility:

Drinking Water
EPA 200.7: Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. **EPA 200.8:** Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. **EPA 245.1** Hg.

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

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

Vertex

Serial_No:03281716:32

CHAIN OF CUSTODY

PAGE ____ OF ____

ALPHA ANALYTICAL

8 Walkup Drive
Westboro, MA 01581
Tel: 508-898-9220

320 Forbes Blvd
Mansfield, MA 02048
Tel: 508-822-9300

Date Rec'd in Lab: 03/21/17

ALPHA Job #: L1708446

Project Information

Project Name: 25 Fid - 40717
Project Location: Boston, MA
Project #: 40717
Project Manager: F. Calandra
ALPHA Quote #:

Report Information - Data Deliverables

☒ ADEx ☒ EMAIL

Billing Information

☒ Same as Client info PO #:

Client Information

Client: VERTEX
Address: 1 Congress St, 10th Flr Boston MA
Phone: 781-974-7595
Email: bsivonen@vertexeng.com

Regulatory Requirements & Project Information Requirements

☒ Yes ☐ No MA MCP Analytical Methods ☐ Yes ☒ No CT RCP Analytical Methods
☐ Yes ☒ No Matrix Spike Required on this SDG? (Required for MCP Inorganics)
☒ Yes ☐ No GW1 Standards (Info Required for Metals & EPH with Targets)
☒ Yes ☐ No NPDES RGP
☐ Other State /Fed Program ____ Criteria ____

Turn-Around Time

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

Date Due:

Additional Project Information:

ANALYSIS

VOC: ☒ 8260 ☐ 624 ☐ 524.2 SIM
SVOC: ☐ ABN ☐ PAH
METALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15
METALS: ☐ RCRA5 ☐ RCRA8 ☐ PP13
EPH: ☐ Ranges & Targets ☐ Ranges Only
VPH: ☐ Ranges & Targets ☐ Ranges Only
☐ PCB ☐ PEST
TPH: ☐ Quant Only ☐ Fingerprint
Alcohols - EPA 8015D
Ammonia Nitrogen - SM 4500
NPDES RGP Plus - CL-300

SAMPLE INFO

Filtration
☐ Field
☐ Lab to do

Preservation
☐ Lab to do

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler Initials	VOC	SVOC	METALS	METALS	EPH	VPH	PCB/PEST	TPH	Alcohols - EPA 8015D	Ammonia Nitrogen - SM 4500	NPDES RGP Plus - CL-300				Sample Comments	Total # Bottles
08446-01	VES-208-RGP	3/21/17	10:30	GW	BS									X	X	X					KP
	VES-102-RGP	3/21/17	12:00	GW	BS									X	X	X					KP

	Alcohols	Ammonia	NPDES RGP
Container Type	PA	PA	PA
Preservative	O	O	O

Container Type	*Preservative*
P= Plastic	A= None
A= Amber glass	B= HCl
V= Vial	C= HNO_3
G= Glass	D= H_2SO_4
B= Bacteria cup	E= NaOH
C= Cube	F= MeOH
O= Other	G= $NaHSO_4$
E= Encore	H = $Na_2S_2O_3$
D= BOD Bottle	I= Ascorbic Acid
	J = NH_4Cl
	K= Zn Acetate
	O= Other

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	3/21/17 13:45	Rob Maesto AAL	3-21-17 13:45
Rob Maesto AAL	3/21/17 18:20	[signature]	3/21/17 1820

FORM NO: 01-01 (rev. 12-Mar-2012)

Method Blank Summary
Form 4

Client	: Vertex Environmental Services, Inc.	**Lab Number**	: L1708446
Project Name	: 25 FID-40717	**Project Number**	: 40717
Lab Sample ID	: WG987734-5	**Lab File ID**	: VJ170323A12
Instrument ID	: JACK		
Matrix	: WATER	**Analysis Date**	: 03/23/17 07:27

Client Sample No.	Lab Sample ID	Analysis Date
WG987734-3LCS	WG987734-3	03/23/17 04:40
WG987734-4LCSD	WG987734-4	03/23/17 05:13
VES-208-RGP	L1708446-01	03/23/17 10:13
VES-102-RGP	L1708446-02	03/23/17 10:46

Method Blank Summary
Form 4

Client	: Vertex Environmental Services, Inc.	**Lab Number**	: L1708446
Project Name	: 25 FID-40717	**Project Number**	: 40717
Lab Sample ID	: WG987619-5	**Lab File ID**	: VJ170323A12
Instrument ID	: JACK		
Matrix	: WATER	**Analysis Date**	: 03/23/17 07:27

Client Sample No.	Lab Sample ID	Analysis Date
WG987619-3LCS	WG987619-3	03/23/17 05:47
WG987619-4LCSD	WG987619-4	03/23/17 06:20
VES-208-RGP	L1708446-01	03/23/17 10:13
VES-102-RGP	L1708446-02	03/23/17 10:46

Continuing Calibration
Form 7

Client	: Vertex Environmental Services, Inc.	**Lab Number**	: L1708446	
Project Name	: 25 FID-40717	**Project Number**	: 40717	
Instrument ID	: JACK	**Calibration Date**	: 03/23/17 04:40	
Lab File ID	: VJ170323A02	**Init. Calib. Date(s)**	: 02/27/17	02/27/17
Sample No	: WG987734-2	**Init. Calib. Times**	: 08:16	11:36
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	78	0
1,4-Dioxane	0.0016	0.00165	-	-3.1	20	78	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	83	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Vertex Environmental Services, Inc.	**Lab Number**	: L1708446	
Project Name	: 25 FID-40717	**Project Number**	: 40717	
Instrument ID	: JACK	**Calibration Date**	: 03/23/17 05:47	
Lab File ID	: VJ170323A06	**Init. Calib. Date(s)**	: 02/28/17	02/28/17
Sample No	: WG987619-2	**Init. Calib. Times**	: 07:34	11:28
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	67	0
Dichlorodifluoromethane	0.467	0.449	-	3.9	20	64	0
Chloromethane	0.428	0.446	-	-4.2	20	72	.04
Vinyl chloride	0.444	0.515	-	-16	20	74	0
Bromomethane	0.229	0.197	-	14	20	64	0
Chloroethane	10	12.194	-	-21.9*	20	73	0
Trichlorofluoromethane	0.703	0.738	-	-5	20	68	-.02
Ethyl ether	0.18	0.185	-	-2.8	20	70	-.02
1,1-Dichloroethene	0.4	0.439	-	-9.7	20	73	-.02
Carbon disulfide	1.142	1.159	-	-1.5	20	69	-.02
Freon-113	0.378	0.392	-	-3.7	20	71	-.02
Methylene chloride	10	10.384	-	-3.8	20	69	-.02
Acetone	10	9.007	-	9.9	20	67	-.02
trans-1,2-Dichloroethene	0.424	0.443	-	-4.5	20	72	-.02
Methyl tert-butyl ether	0.91	0.855	-	6	20	68	0
tert-Butyl alcohol	50	50.948	-	-1.9	20	63	0
Diisopropyl ether	1.34	1.447	-	-8	20	72	0
1,1-Dichloroethane	0.843	0.883	-	-4.7	20	71	-.02
Ethyl tert-butyl ether	1.072	1.11	-	-3.5	20	70	0
cis-1,2-Dichloroethene	0.491	0.514	-	-4.7	20	73	-.02
2,2-Dichloropropane	0.717	0.681	-	5	20	61	0
Bromochloromethane	0.221	0.236	-	-6.8	20	75	-.02
Chloroform	0.808	0.834	-	-3.2	20	71	0
Carbon tetrachloride	0.658	0.643	-	2.3	20	69	-.02
Tetrahydrofuran	0.109	0.118	-	-8.3	20	80	0
Dibromofluoromethane	0.304	0.305	-	-0.3	20	69	0
1,1,1-Trichloroethane	0.735	0.775	-	-5.4	20	70	-.02
2-Butanone	0.117	0.127	-	-8.5	20	80	0
1,1-Dichloropropene	0.568	0.634	-	-11.6	20	74	0
Benzene	1.575	1.701	-	-8	20	72	0
tert-Amyl methyl ether	0.833	0.827	-	0.7	20	67	0
1,2-Dichloroethane-d4	0.326	0.338	-	-3.7	20	73	-.02
1,2-Dichloroethane	0.535	0.548	-	-2.4	20	71	0
Trichloroethene	0.436	0.457	-	-4.8	20	71	0
Dibromomethane	0.212	0.217	-	-2.4	20	70	-.02
1,2-Dichloropropane	0.395	0.422	-	-6.8	20	70	0
2-Chloroethyl vinyl ether	0.112	0.083	-	25.9*	20	52	0
Bromodichloromethane	0.522	0.526	-	-0.8	20	68	0
1,4-Dioxane	0.00145	0.00166*	-	-14.5	20	85	0
cis-1,3-Dichloropropene	0.603	0.597	-	1	20	66	0
Chlorobenzene-d5	1	1	-	0	20	77	0
Toluene-d8	1.338	1.337	-	0.1	20	73	0
Toluene	1.245	1.346	-	-8.1	20	76	0
4-Methyl-2-pentanone	0.134	0.121	-	9.7	20	67	0
Tetrachloroethene	0.646	0.683	-	-5.7	20	73	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Vertex Environmental Services, Inc.	**Lab Number**	: L1708446	
Project Name	: 25 FID-40717	**Project Number**	: 40717	
Instrument ID	: JACK	**Calibration Date**	: 03/23/17 05:47	
Lab File ID	: VJ170323A06	**Init. Calib. Date(s)**	: 02/28/17	02/28/17
Sample No	: WG987619-2	**Init. Calib. Times**	: 07:34	11:28
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
trans-1,3-Dichloropropene	0.807	0.753	-	6.7	20	65	0
1,1,2-Trichloroethane	0.372	0.378	-	-1.6	20	71	0
Chlorodibromomethane	0.573	0.531	-	7.3	20	67	0
1,3-Dichloropropane	0.781	0.799	-	-2.3	20	73	0
1,2-Dibromoethane	0.421	0.423	-	-0.5	20	70	-.01
2-Hexanone	0.245	0.207	-	15.5	20	65	0
Chlorobenzene	1.301	1.344	-	-3.3	20	75	0
Ethylbenzene	2.08	2.037	-	2.1	20	75	0
1,1,1,2-Tetrachloroethane	0.614	0.556	-	9.4	20	68	-.01
p/m Xylene	0.623	0.685	-	-10	20	89	0
o Xylene	0.655	0.667	-	-1.8	20	92	0
Styrene	1.295	1.152	-	11	20	76	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	79	0
Bromoform	0.624	0.548	-	12.2	20	64	0
Isopropylbenzene	5.499	5.413	-	1.6	20	72	-.01
4-Bromofluorobenzene	1.073	1.027	-	4.3	20	76	0
Bromobenzene	1.377	1.368	-	0.7	20	77	0
n-Propylbenzene	5.077	5.116	-	-0.8	20	74	-.01
1,1,2,2-Tetrachloroethane	0.991	0.992	-	-0.1	20	77	0
2-Chlorotoluene	3.328	3.179	-	4.5	20	73	0
1,3,5-Trimethylbenzene	2.276	2.117	-	7	20	72	0
1,2,3-Trichloropropane	0.753	0.711	-	5.6	20	72	0
4-Chlorotoluene	2.894	2.769	-	4.3	20	76	0
tert-Butylbenzene	3.398	3.32	-	2.3	20	69	0
1,2,4-Trimethylbenzene	2.467	2.592	-	-5.1	20	81	0
sec-Butylbenzene	4.84	4.765	-	1.5	20	67	0
p-Isopropyltoluene	3.433	3.351	-	2.4	20	67	0
1,3-Dichlorobenzene	2.1	2.1	-	0	20	74	0
1,4-Dichlorobenzene	1.989	1.985	-	0.2	20	76	0
n-Butylbenzene	2.872	3.152	-	-9.7	20	65	0
1,2-Dichlorobenzene	1.96	2.062	-	-5.2	20	77	0
1,2-Dibromo-3-chloropropan	10	8.61	-	13.9	20	72	-.01
Hexachlorobutadiene	10	8.389	-	16.1	20	57	-.01
1,2,4-Trichlorobenzene	0.686	0.704	-	-2.6	20	70	-.01
Naphthalene	1.075	1.075	-	0	20	72	-.02
1,2,3-Trichlorobenzene	0.557	0.576	-	-3.4	20	68	-.01

* Value outside of QC limits.

ANALYTICAL REPORT

Lab Number:	L1709923
Client:	Vertex Environmental Services, Inc. One Congress Street 10th Floor Boston, MA 02114
ATTN:	Frank Calandra
Phone:	(781) 952-6000
Project Name:	25 FID
Project Number:	40717
Report Date:	04/07/17

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

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

Project Name: 25 FID
Project Number: 40717

Lab Number: L1709923
Report Date: 04/07/17

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1709923-01	VES-102-RGP	WATER	BOSTON, MA	03/31/17 07:10	03/31/17
L1709923-02	VES-208-RGP	WATER	BOSTON, MA	03/31/17 08:15	03/31/17
L1709923-03	VES-REC	WATER	BOSTON, MA	03/31/17 07:45	03/31/17

Project Name: 25 FID
Project Number: 40717
Lab Number: L1709923
Report Date: 04/07/17

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?	NO
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)?	NO
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: 25 FID
Project Number: 40717

Lab Number: L1709923
Report Date: 04/07/17

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. 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: 25 FID
Project Number: 40717
Lab Number: L1709923
Report Date: 04/07/17

Case Narrative (continued)

MCP Related Narratives

Volatile Organics

The continuing calibration standard, associated with L1709923-03, is included as an addendum to this report.

In reference to question H:

The initial calibration, associated with L1709923-03, did not meet the method required minimum response factor on the lowest calibration standard for 2-butanone (0.0755), 1,4-dioxane (0.0010) and tert-butyl alcohol (0.0147), as well as the average response factor for 2-butanone, 1,4-dioxane and tert-butyl alcohol. The initial calibration verification is outside acceptance criteria for dichorodifluoromethane (147%), but within overall method criteria.

Volatile Organics by SIM

A copy of the continuing calibration standard is included as an addendum to this report.

In reference to question H:

The initial calibration, associated with L1709923-03, did not meet the method required minimum response factor on the lowest calibration standard for 1,4-dioxane (0.0343), as well as the average response factor for 1,4-dioxane.

Semivolatile Organics by SIM

The initial calibration, associated with L1709923-03, utilized a quadratic fit for Pentachlorophenol.

PCBs

In reference to question B:

At the client's request, the analytical method specified in the CAM protocol was not followed.

Metals

In reference to question G:

L1709923-03: The sample has an elevated detection limit for Lead due to the dilution required by matrix interferences encountered during analysis. Lead did not achieve the requested CAM reporting limit.

Project Name: 25 FID
Project Number: 40717

Lab Number: L1709923
Report Date: 04/07/17

Case Narrative (continued)

In reference to question I:

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

Total Cyanide

In reference to question B:

At the client's request, the analytical method specified in the CAM protocol was not followed.

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

Authorized Signature: Michelle M. Morris

Title: Technical Director/Representative Date: 04/07/17

ORGANICS

VOLATILES

Project Name: 25 FID
Project Number: 40717

Lab Number: L1709923
Report Date: 04/07/17

SAMPLE RESULTS

Lab ID: L1709923-03
Client ID: VES-REC
Sample Location: BOSTON, MA
Matrix: Water
Analytical Method: 1,8015D
Analytical Date: 04/04/17 19:47
Analyst: DP

Date Collected: 03/31/17 07:45
Date Received: 03/31/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Alcohol Analysis by GC/FID - Mansfield Lab						
Ethyl Alcohol	ND		mg/l	2.00	--	1

Project Name: 25 FID
Project Number: 40717
Lab Number: L1709923
Report Date: 04/07/17

SAMPLE RESULTS

Lab ID: L1709923-03
Client ID: VES-REC
Sample Location: BOSTON, MA
Matrix: Water
Analytical Method: 14,504.1
Analytical Date: 04/06/17 13:52
Analyst: NS

Date Collected: 03/31/17 07:45
Date Received: 03/31/17
Field Prep: Not Specified
Extraction Method: EPA 504.1
Extraction Date: 04/06/17 11:06

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

Project Name: 25 FID
Project Number: 40717
Lab Number: L1709923
Report Date: 04/07/17

SAMPLE RESULTS

Lab ID: L1709923-03
Client ID: VES-REC
Sample Location: BOSTON, MA
Matrix: Water
Analytical Method: 97,8260C
Analytical Date: 04/06/17 09:53
Analyst: MM

Date Collected: 03/31/17 07:45
Date Received: 03/31/17
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: 25 FID
Project Number: 40717
Lab Number: L1709923
Report Date: 04/07/17

SAMPLE RESULTS

Lab ID: L1709923-03
Client ID: VES-REC
Sample Location: BOSTON, MA
Date Collected: 03/31/17 07:45
Date Received: 03/31/17
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
Xylenes, 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
Methyl ethyl ketone	ND		ug/l	5.0	--	1
Methyl isobutyl ketone	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: 25 FID
Project Number: 40717
Lab Number: L1709923
Report Date: 04/07/17

SAMPLE RESULTS

Lab ID: L1709923-03
Client ID: VES-REC
Sample Location: BOSTON, MA
Date Collected: 03/31/17 07:45
Date Received: 03/31/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Diethyl ether	ND		ug/l	2.0	--	1
Diisopropyl 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
1,4-Dioxane	ND		ug/l	250	--	1
Tert-Butyl Alcohol	ND		ug/l	10	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	103		70-130

Project Name: 25 FID
Project Number: 40717
Lab Number: L1709923
Report Date: 04/07/17

SAMPLE RESULTS

Lab ID: L1709923-03
Client ID: VES-REC
Sample Location: BOSTON, MA
Matrix: Water
Analytical Method: 97,8260C-SIM
Analytical Date: 04/06/17 09:53
Analyst: MM

Date Collected: 03/31/17 07:45
Date Received: 03/31/17
Field Prep: Not Specified

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

Project Name: 25 FID
Project Number: 40717

Lab Number: L1709923
Report Date: 04/07/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8015D
Analytical Date: 04/04/17 15:31
Analyst: DP

Parameter	Result	Qualifier	Units	RL	MDL
Alcohol Analysis by GC/FID - Mansfield Lab for sample(s): 03 Batch: WG990927-1					
Ethyl Alcohol	ND		mg/l	2.00	--

Project Name: 25 FID
Project Number: 40717

Lab Number: L1709923
Report Date: 04/07/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 14,504.1
Analytical Date: 04/06/17 13:05
Analyst: NS

Extraction Method: EPA 504.1
Extraction Date: 04/06/17 11:06

Parameter	Result	Qualifier	Units	RL	MDL	
Microextractables by GC - Westborough Lab for sample(s): 03 Batch: WG991670-1						
1,2-Dibromoethane	ND		ug/l	0.010	--	A

Project Name: 25 FID
Project Number: 40717

Lab Number: L1709923
Report Date: 04/07/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 04/06/17 09:03
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 03 Batch: WG991897-5					
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: 25 FID
Project Number: 40717

Lab Number: L1709923
Report Date: 04/07/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 04/06/17 09:03
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 03 Batch: WG991897-5					
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	--
Xylenes, 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	--
Methyl ethyl ketone	ND		ug/l	5.0	--
Methyl isobutyl ketone	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: 25 FID
Project Number: 40717

Lab Number: L1709923
Report Date: 04/07/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 04/06/17 09:03
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 03 Batch: WG991897-5					
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	--
Diethyl ether	ND		ug/l	2.0	--
Diisopropyl Ether	ND		ug/l	2.0	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--
1,4-Dioxane	ND		ug/l	250	--
Tert-Butyl Alcohol	ND		ug/l	10	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	109		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	107		70-130

Project Name: 25 FID
Project Number: 40717

Lab Number: L1709923
Report Date: 04/07/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C-SIM
Analytical Date: 04/06/17 09:03
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics by SIM - Westborough Lab for sample(s): 03 Batch: WG991908-5					
1,4-Dioxane	ND		ug/l	3.0	--

Lab Control Sample Analysis

Batch Quality Control

Project Name: 25 FID

Project Number: 40717

Lab Number: L1709923

Report Date: 04/07/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Alcohol Analysis by GC/FID - Mansfield Lab	Associated sample(s): 03		Batch: WG990927-2		WG990927-3			
Ethyl Alcohol	86		90		70-130	5		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 25 FID

Project Number: 40717

Lab Number: L1709923

Report Date: 04/07/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Microextractables by GC - Westborough Lab	Associated sample(s): 03		Batch: WG991670-2						
1,2-Dibromoethane	108		-		70-130	-			A

Lab Control Sample Analysis

Batch Quality Control

Project Name: 25 FID

Project Number: 40717

Lab Number: L1709923

Report Date: 04/07/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 03 Batch: WG991897-3 WG991897-4								
Methylene chloride	98		100		70-130	2		20
1,1-Dichloroethane	96		98		70-130	2		20
Chloroform	96		99		70-130	3		20
Carbon tetrachloride	95		96		70-130	1		20
1,2-Dichloropropane	94		96		70-130	2		20
Dibromochloromethane	110		110		70-130	0		20
1,1,2-Trichloroethane	110		110		70-130	0		20
Tetrachloroethene	110		110		70-130	0		20
Chlorobenzene	110		110		70-130	0		20
Trichlorofluoromethane	95		99		70-130	4		20
1,2-Dichloroethane	96		98		70-130	2		20
1,1,1-Trichloroethane	95		96		70-130	1		20
Bromodichloromethane	92		92		70-130	0		20
trans-1,3-Dichloropropene	100		110		70-130	10		20
cis-1,3-Dichloropropene	89		92		70-130	3		20
1,1-Dichloropropene	95		97		70-130	2		20
Bromoform	100		110		70-130	10		20
1,1,2,2-Tetrachloroethane	110		110		70-130	0		20
Benzene	96		97		70-130	1		20
Toluene	110		110		70-130	0		20
Ethylbenzene	110		110		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 25 FID

Project Number: 40717

Lab Number: L1709923

Report Date: 04/07/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 03 Batch: WG991897-3 WG991897-4								
Chloromethane	100		100		70-130	0		20
Bromomethane	90		95		70-130	5		20
Vinyl chloride	95		99		70-130	4		20
Chloroethane	98		95		70-130	3		20
1,1-Dichloroethene	94		95		70-130	1		20
trans-1,2-Dichloroethene	94		97		70-130	3		20
Trichloroethene	95		96		70-130	1		20
1,2-Dichlorobenzene	110		110		70-130	0		20
1,3-Dichlorobenzene	110		110		70-130	0		20
1,4-Dichlorobenzene	110		110		70-130	0		20
Methyl tert butyl ether	94		99		70-130	5		20
p/m-Xylene	115		115		70-130	0		20
o-Xylene	100		100		70-130	0		20
cis-1,2-Dichloroethene	96		99		70-130	3		20
Dibromomethane	97		100		70-130	3		20
1,2,3-Trichloropropane	110		110		70-130	0		20
Styrene	115		115		70-130	0		20
Dichlorodifluoromethane	98		100		70-130	2		20
Acetone	85		88		70-130	3		20
Carbon disulfide	96		93		70-130	3		20
Methyl ethyl ketone	98		120		70-130	20		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 25 FID

Project Number: 40717

Lab Number: L1709923

Report Date: 04/07/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 03 Batch: WG991897-3 WG991897-4								
Methyl isobutyl ketone	93		98		70-130	5		20
2-Hexanone	89		97		70-130	9		20
Bromochloromethane	98		100		70-130	2		20
Tetrahydrofuran	96		98		70-130	2		20
2,2-Dichloropropane	93		95		70-130	2		20
1,2-Dibromoethane	110		110		70-130	0		20
1,3-Dichloropropane	110		110		70-130	0		20
1,1,1,2-Tetrachloroethane	110		110		70-130	0		20
Bromobenzene	110		110		70-130	0		20
n-Butylbenzene	110		110		70-130	0		20
sec-Butylbenzene	120		130		70-130	8		20
tert-Butylbenzene	110		110		70-130	0		20
o-Chlorotoluene	110		110		70-130	0		20
p-Chlorotoluene	110		110		70-130	0		20
1,2-Dibromo-3-chloropropane	99		100		70-130	1		20
Hexachlorobutadiene	100		110		70-130	10		20
Isopropylbenzene	110		110		70-130	0		20
p-Isopropyltoluene	97		99		70-130	2		20
Naphthalene	85		91		70-130	7		20
n-Propylbenzene	110		110		70-130	0		20
1,2,3-Trichlorobenzene	100		110		70-130	10		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 25 FID
Project Number: 40717

Lab Number: L1709923
Report Date: 04/07/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 03 Batch: WG991897-3 WG991897-4								
1,2,4-Trichlorobenzene	100		110		70-130	10		20
1,3,5-Trimethylbenzene	110		110		70-130	0		20
1,2,4-Trimethylbenzene	110		110		70-130	0		20
Diethyl ether	90		94		70-130	4		20
Diisopropyl Ether	94		97		70-130	3		20
Ethyl-Tert-Butyl-Ether	91		97		70-130	6		20
Tertiary-Amyl Methyl Ether	92		98		70-130	6		20
1,4-Dioxane	82		90		70-130	9		20
Tert-Butyl Alcohol	84		92		70-130	9		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	99		101		70-130
Toluene-d8	109		110		70-130
4-Bromofluorobenzene	101		99		70-130
Dibromofluoromethane	95		98		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: 25 FID

Project Number: 40717

Lab Number: L1709923

Report Date: 04/07/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by SIM - Westborough Lab Associated sample(s): 03 Batch: WG991908-3 WG991908-4								
1,4-Dioxane	98		110		70-130	12		20

Matrix Spike Analysis
Batch Quality Control

Project Name: 25 FID
Project Number: 40717

Lab Number: L1709923
Report Date: 04/07/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Microextractables by GC - Westborough Lab Associated sample(s): 03 QC Batch ID: WG991670-3 QC Sample: L1709923-03 Client ID: VES-REC													
1,2-Dibromoethane	ND	0.258	0.295	114		-	-		65-135	-		20	A

SEMIVOLATILES

Project Name: 25 FID
Project Number: 40717
Lab Number: L1709923
Report Date: 04/07/17

SAMPLE RESULTS

Lab ID: L1709923-03
Client ID: VES-REC
Sample Location: BOSTON, MA
Matrix: Water
Analytical Method: 97,8270D
Analytical Date: 04/06/17 22:28
Analyst: PS

Date Collected: 03/31/17 07:45
Date Received: 03/31/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 04/06/17 13:58

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Semivolatile Organics - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	4.9	--	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	--	1
1,2-Dichlorobenzene	ND		ug/l	2.0	--	1
1,3-Dichlorobenzene	ND		ug/l	2.0	--	1
1,4-Dichlorobenzene	ND		ug/l	2.0	--	1
3,3'-Dichlorobenzidine	ND		ug/l	4.9	--	1
2,4-Dinitrotoluene	ND		ug/l	4.9	--	1
2,6-Dinitrotoluene	ND		ug/l	4.9	--	1
Azobenzene	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	4.9	--	1
Isophorone	ND		ug/l	4.9	--	1
Nitrobenzene	ND		ug/l	2.0	--	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	--	1
Butyl benzyl phthalate	ND		ug/l	4.9	--	1
Di-n-butylphthalate	ND		ug/l	4.9	--	1
Di-n-octylphthalate	ND		ug/l	4.9	--	1
Diethyl phthalate	ND		ug/l	4.9	--	1
Dimethyl phthalate	ND		ug/l	4.9	--	1
Aniline	ND		ug/l	2.0	--	1
4-Chloroaniline	ND		ug/l	4.9	--	1
Dibenzofuran	ND		ug/l	2.0	--	1
Acetophenone	ND		ug/l	4.9	--	1
2,4,6-Trichlorophenol	ND		ug/l	4.9	--	1
2-Chlorophenol	ND		ug/l	2.0	--	1
2,4-Dichlorophenol	ND		ug/l	4.9	--	1
2,4-Dimethylphenol	ND		ug/l	4.9	--	1
2-Nitrophenol	ND		ug/l	9.9	--	1
4-Nitrophenol	ND		ug/l	9.9	--	1

Project Name: 25 FID
Project Number: 40717
Lab Number: L1709923
Report Date: 04/07/17

SAMPLE RESULTS

Lab ID: L1709923-03
Client ID: VES-REC
Sample Location: BOSTON, MA
Date Collected: 03/31/17 07:45
Date Received: 03/31/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Semivolatile Organics - Westborough Lab						
2,4-Dinitrophenol	ND		ug/l	20	--	1
Phenol	ND		ug/l	4.9	--	1
2-Methylphenol	ND		ug/l	4.9	--	1
3-Methylphenol/4-Methylphenol	ND		ug/l	4.9	--	1
2,4,5-Trichlorophenol	ND		ug/l	4.9	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	38		15-110
Phenol-d6	29		15-110
Nitrobenzene-d5	54		30-130
2-Fluorobiphenyl	62		30-130
2,4,6-Tribromophenol	69		15-110
4-Terphenyl-d14	71		30-130

Project Name: 25 FID
Project Number: 40717
Lab Number: L1709923
Report Date: 04/07/17

SAMPLE RESULTS

Lab ID: L1709923-03
Client ID: VES-REC
Sample Location: BOSTON, MA
Matrix: Water
Analytical Method: 97,8270D-SIM
Analytical Date: 04/05/17 18:46
Analyst: KL

Date Collected: 03/31/17 07:45
Date Received: 03/31/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 04/04/17 15:00

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

Project Name: 25 FID
Lab Number: L1709923
Project Number: 40717
Report Date: 04/07/17

SAMPLE RESULTS

Lab ID: L1709923-03
Client ID: VES-REC
Sample Location: BOSTON, MA
Date Collected: 03/31/17 07:45
Date Received: 03/31/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

MCP Semivolatile Organics by SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	49		15-110
Phenol-d6	41		15-110
Nitrobenzene-d5	84		30-130
2-Fluorobiphenyl	73		30-130
2,4,6-Tribromophenol	68		15-110
4-Terphenyl-d14	73		30-130

Project Name: 25 FID
Project Number: 40717

Lab Number: L1709923
Report Date: 04/07/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D-SIM
Analytical Date: 04/05/17 17:20
Analyst: KL

Extraction Method: EPA 3510C
Extraction Date: 04/04/17 15:00

Parameter	Result	Qualifier	Units	RL	MDL
MCP Semivolatile Organics by SIM - Westborough Lab for sample(s): 03 Batch: WG990950-1					
Acenaphthene	ND		ug/l	0.20	--
2-Chloronaphthalene	ND		ug/l	0.20	--
Fluoranthene	ND		ug/l	0.20	--
Hexachlorobutadiene	ND		ug/l	0.50	--
Naphthalene	ND		ug/l	0.20	--
Benzo(a)anthracene	ND		ug/l	0.20	--
Benzo(a)pyrene	ND		ug/l	0.20	--
Benzo(b)fluoranthene	ND		ug/l	0.20	--
Benzo(k)fluoranthene	ND		ug/l	0.20	--
Chrysene	ND		ug/l	0.20	--
Acenaphthylene	ND		ug/l	0.20	--
Anthracene	ND		ug/l	0.20	--
Benzo(ghi)perylene	ND		ug/l	0.20	--
Fluorene	ND		ug/l	0.20	--
Phenanthrene	ND		ug/l	0.20	--
Dibenzo(a,h)anthracene	ND		ug/l	0.20	--
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.20	--
Pyrene	ND		ug/l	0.20	--
2-Methylnaphthalene	ND		ug/l	0.20	--
Pentachlorophenol	ND		ug/l	0.80	--
Hexachlorobenzene	ND		ug/l	0.80	--
Hexachloroethane	ND		ug/l	0.80	--

Project Name: 25 FID
Project Number: 40717

Lab Number: L1709923
Report Date: 04/07/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D-SIM
Analytical Date: 04/05/17 17:20
Analyst: KL

Extraction Method: EPA 3510C
Extraction Date: 04/04/17 15:00

Parameter	Result	Qualifier	Units	RL	MDL
MCP Semivolatile Organics by SIM - Westborough Lab for sample(s): 03 Batch: WG990950-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	39		15-110
Phenol-d6	30		15-110
Nitrobenzene-d5	68		30-130
2-Fluorobiphenyl	65		30-130
2,4,6-Tribromophenol	86		15-110
4-Terphenyl-d14	79		30-130

Project Name: 25 FID
Project Number: 40717

Lab Number: L1709923
Report Date: 04/07/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D
Analytical Date: 04/06/17 19:55
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 04/06/17 06:54

Parameter	Result	Qualifier	Units	RL	MDL
MCP Semivolatile Organics - Westborough Lab for sample(s): 03 Batch: WG991586-1					
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: 25 FID
Project Number: 40717

Lab Number: L1709923
Report Date: 04/07/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D
Analytical Date: 04/06/17 19:55
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 04/06/17 06:54

Parameter	Result	Qualifier	Units	RL	MDL
MCP Semivolatile Organics - Westborough Lab for sample(s): 03 Batch: WG991586-1					
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: 25 FID
Project Number: 40717

Lab Number: L1709923
Report Date: 04/07/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D
Analytical Date: 04/06/17 19:55
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 04/06/17 06:54

Parameter	Result	Qualifier	Units	RL	MDL
MCP Semivolatile Organics - Westborough Lab for sample(s): 03 Batch: WG991586-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	38		15-110
Phenol-d6	26		15-110
Nitrobenzene-d5	55		30-130
2-Fluorobiphenyl	60		30-130
2,4,6-Tribromophenol	67		15-110
4-Terphenyl-d14	68		30-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: 25 FID
Project Number: 40717

Lab Number: L1709923
Report Date: 04/07/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Semivolatile Organics by SIM - Westborough Lab Associated sample(s): 03 Batch: WG990950-2 WG990950-3								
Acenaphthene	64		68		40-140	6		20
2-Chloronaphthalene	64		71		40-140	10		20
Fluoranthene	67		72		40-140	7		20
Hexachlorobutadiene	57		63		40-140	10		20
Naphthalene	62		69		40-140	11		20
Benzo(a)anthracene	66		71		40-140	7		20
Benzo(a)pyrene	73		72		40-140	1		20
Benzo(b)fluoranthene	70		77		40-140	10		20
Benzo(k)fluoranthene	72		77		40-140	7		20
Chrysene	63		68		40-140	8		20
Acenaphthylene	70		78		40-140	11		20
Anthracene	68		72		40-140	6		20
Benzo(ghi)perylene	61		68		40-140	11		20
Fluorene	67		72		40-140	7		20
Phenanthrene	61		66		40-140	8		20
Dibenzo(a,h)anthracene	64		72		40-140	12		20
Indeno(1,2,3-cd)pyrene	67		74		40-140	10		20
Pyrene	67		72		40-140	7		20
2-Methylnaphthalene	63		70		40-140	11		20
Pentachlorophenol	70		75		30-130	7		20
Hexachlorobenzene	63		67		40-140	6		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 25 FID
Project Number: 40717

Lab Number: L1709923
Report Date: 04/07/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Semivolatile Organics by SIM - Westborough Lab Associated sample(s): 03 Batch: WG990950-2 WG990950-3								
Hexachloroethane	60		66		40-140	10		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	42		46		15-110
Phenol-d6	32		34		15-110
Nitrobenzene-d5	69		77		30-130
2-Fluorobiphenyl	59		66		30-130
2,4,6-Tribromophenol	69		74		15-110
4-Terphenyl-d14	62		66		30-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: 25 FID

Project Number: 40717

Lab Number: L1709923

Report Date: 04/07/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Semivolatile Organics - Westborough Lab Associated sample(s): 03 Batch: WG991586-2 WG991586-3								
Acenaphthene	65		63		40-140	3		20
1,2,4-Trichlorobenzene	64		66		40-140	3		20
Hexachlorobenzene	71		71		40-140	0		20
Bis(2-chloroethyl)ether	61		61		40-140	0		20
2-Chloronaphthalene	69		70		40-140	1		20
1,2-Dichlorobenzene	59		57		40-140	3		20
1,3-Dichlorobenzene	58		54		40-140	7		20
1,4-Dichlorobenzene	58		55		40-140	5		20
3,3'-Dichlorobenzidine	61		66		40-140	8		20
2,4-Dinitrotoluene	71		73		40-140	3		20
2,6-Dinitrotoluene	75		78		40-140	4		20
Azobenzene	62		62		40-140	0		20
Fluoranthene	66		69		40-140	4		20
4-Bromophenyl phenyl ether	70		73		40-140	4		20
Bis(2-chloroisopropyl)ether	62		61		40-140	2		20
Bis(2-chloroethoxy)methane	68		69		40-140	1		20
Hexachlorobutadiene	64		66		40-140	3		20
Hexachloroethane	56		54		40-140	4		20
Isophorone	67		67		40-140	0		20
Naphthalene	63		62		40-140	2		20
Nitrobenzene	63		63		40-140	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 25 FID

Project Number: 40717

Lab Number: L1709923

Report Date: 04/07/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Semivolatile Organics - Westborough Lab Associated sample(s): 03 Batch: WG991586-2 WG991586-3								
Bis(2-ethylhexyl)phthalate	64		67		40-140	5		20
Butyl benzyl phthalate	67		68		40-140	1		20
Di-n-butylphthalate	65		67		40-140	3		20
Di-n-octylphthalate	67		69		40-140	3		20
Diethyl phthalate	66		68		40-140	3		20
Dimethyl phthalate	74		76		40-140	3		20
Benzo(a)anthracene	65		66		40-140	2		20
Benzo(a)pyrene	67		69		40-140	3		20
Benzo(b)fluoranthene	69		70		40-140	1		20
Benzo(k)fluoranthene	66		68		40-140	3		20
Chrysene	65		66		40-140	2		20
Acenaphthylene	70		71		40-140	1		20
Anthracene	66		67		40-140	2		20
Benzo(ghi)perylene	65		66		40-140	2		20
Fluorene	67		67		40-140	0		20
Phenanthrene	65		66		40-140	2		20
Dibenzo(a,h)anthracene	65		67		40-140	3		20
Indeno(1,2,3-cd)pyrene	65		68		40-140	5		20
Pyrene	67		68		40-140	1		20
Aniline	**38**	Q	45		40-140	17		20
4-Chloroaniline	50		56		40-140	11		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: 25 FID
Project Number: 40717

Lab Number: L1709923
Report Date: 04/07/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Semivolatile Organics - Westborough Lab Associated sample(s): 03 Batch: WG991586-2 WG991586-3								
Dibenzofuran	66		66		40-140	0		20
2-Methylnaphthalene	67		67		40-140	0		20
Acetophenone	70		70		40-140	0		20
2,4,6-Trichlorophenol	79		78		30-130	1		20
2-Chlorophenol	65		65		30-130	0		20
2,4-Dichlorophenol	73		74		30-130	1		20
2,4-Dimethylphenol	76		73		30-130	4		20
2-Nitrophenol	70		70		30-130	0		20
4-Nitrophenol	43		43		30-130	0		20
2,4-Dinitrophenol	66		67		30-130	2		20
Pentachlorophenol	63		63		30-130	0		20
Phenol	31		32		30-130	3		20
2-Methylphenol	62		62		30-130	0		20
3-Methylphenol/4-Methylphenol	60		60		30-130	0		20
2,4,5-Trichlorophenol	77		79		30-130	3		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 25 FID
Project Number: 40717

Lab Number: L1709923
Report Date: 04/07/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Semivolatile Organics - Westborough Lab Associated sample(s): 03 Batch: WG991586-2 WG991586-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	44		42		15-110
Phenol-d6	31		31		15-110
Nitrobenzene-d5	62		60		30-130
2-Fluorobiphenyl	69		66		30-130
2,4,6-Tribromophenol	74		73		15-110
4-Terphenyl-d14	66		65		30-130

PCBS

Project Name: 25 FID
Project Number: 40717

Lab Number: L1709923
Report Date: 04/07/17

SAMPLE RESULTS

Lab ID: L1709923-03
Client ID: VES-REC
Sample Location: BOSTON, MA
Matrix: Water
Analytical Method: 5,608
Analytical Date: 04/05/17 13:28
Analyst: JW

Date Collected: 03/31/17 07:45
Date Received: 03/31/17
Field Prep: Not Specified
Extraction Method: EPA 608
Extraction Date: 04/01/17 08:35
Cleanup Method: EPA 3665A
Cleanup Date: 04/02/17
Cleanup Method: EPA 3660B
Cleanup Date: 04/02/17

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	83		30-150	B
Decachlorobiphenyl	67		30-150	B

Project Name: 25 FID
Project Number: 40717

Lab Number: L1709923
Report Date: 04/07/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,608
Analytical Date: 04/02/17 23:27
Analyst: HT

Extraction Method: EPA 608
Extraction Date: 04/01/17 08:35
Cleanup Method: EPA 3665A
Cleanup Date: 04/02/17
Cleanup Method: EPA 3660B
Cleanup Date: 04/02/17

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 03 Batch: WG990212-1						
Aroclor 1016	ND		ug/l	0.250	--	A
Aroclor 1221	ND		ug/l	0.250	--	A
Aroclor 1232	ND		ug/l	0.250	--	A
Aroclor 1242	ND		ug/l	0.250	--	A
Aroclor 1248	ND		ug/l	0.250	--	A
Aroclor 1254	ND		ug/l	0.250	--	A
Aroclor 1260	ND		ug/l	0.200	--	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	90		30-150	A
Decachlorobiphenyl	79		30-150	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: 25 FID

Project Number: 40717

Lab Number: L1709923

Report Date: 04/07/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 03 Batch: WG990212-2									
Aroclor 1016	82		-		40-140	-		50	A
Aroclor 1260	79		-		40-140	-		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	93				30-150	A
Decachlorobiphenyl	83				30-150	A

Matrix Spike Analysis
Batch Quality Control

Project Name: 25 FID
Project Number: 40717

Lab Number: L1709923
Report Date: 04/07/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 03 QC Batch ID: WG990212-3 QC Sample: L1700004-02 Client ID: MS Sample													
Aroclor 1016	ND	1	0.928	93		-	-		40-140	-		50	B
Aroclor 1260	ND	1	0.730	73		-	-		40-140	-		50	B

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	87				30-150	B
Decachlorobiphenyl	81				30-150	B

Lab Duplicate Analysis
Batch Quality Control

Project Name: 25 FID
Project Number: 40717

Lab Number: L1709923
Report Date: 04/07/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits	
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 03 QC Batch ID: WG990212-4 QC Sample: L1700004-02 Client ID: DUP Sample							
Aroclor 1016	ND	ND	ug/l	NC		50	B
Aroclor 1221	ND	ND	ug/l	NC		50	B
Aroclor 1232	ND	ND	ug/l	NC		50	B
Aroclor 1242	ND	ND	ug/l	NC		50	B
Aroclor 1248	ND	ND	ug/l	NC		50	B
Aroclor 1254	ND	ND	ug/l	NC		50	B
Aroclor 1260	ND	ND	ug/l	NC		50	B

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	90		81		30-150	B
Decachlorobiphenyl	77		71		30-150	B

METALS

Project Name: 25 FID
Project Number: 40717
Lab Number: L1709923
Report Date: 04/07/17

SAMPLE RESULTS

Lab ID: L1709923-03
Client ID: VES-REC
Sample Location: BOSTON, MA
Matrix: Water
Date Collected: 03/31/17 07:45
Date Received: 03/31/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Total Metals - Mansfield Lab											
Antimony, Total	0.0124		mg/l	0.0040	--	1	04/03/17 10:28	04/06/17 14:56	EPA 3005A	97,6020A	BV
Arsenic, Total	0.0104		mg/l	0.0005	--	1	04/03/17 10:28	04/06/17 14:56	EPA 3005A	97,6020A	BV
Cadmium, Total	ND		mg/l	0.0005	--	1	04/03/17 10:28	04/06/17 14:56	EPA 3005A	97,6020A	BV
Chromium, Total	ND		mg/l	0.0010	--	1	04/03/17 10:28	04/06/17 14:56	EPA 3005A	97,6020A	BV
Copper, Total	ND		mg/l	0.0010	--	1	04/03/17 10:28	04/06/17 14:56	EPA 3005A	97,6020A	BV
Iron, Total	0.12		mg/l	0.05	--	1	04/03/17 10:28	04/04/17 15:53	EPA 3005A	97,6010C	AB
Lead, Total	ND		mg/l	0.0050	--	5	04/03/17 10:28	04/06/17 15:38	EPA 3005A	97,6020A	BV
Mercury, Total	ND		mg/l	0.0002	--	1	04/03/17 09:42	04/03/17 18:00	EPA 7470A	97,7470A	EA
Nickel, Total	ND		mg/l	0.0020	--	1	04/03/17 10:28	04/06/17 14:56	EPA 3005A	97,6020A	BV
Selenium, Total	ND		mg/l	0.005	--	1	04/03/17 10:28	04/06/17 14:56	EPA 3005A	97,6020A	BV
Silver, Total	ND		mg/l	0.0005	--	1	04/03/17 10:28	04/06/17 14:56	EPA 3005A	97,6020A	BV
Zinc, Total	ND		mg/l	0.0100	--	1	04/03/17 10:28	04/06/17 14:56	EPA 3005A	97,6020A	BV

Project Name: 25 FID
Project Number: 40717
Lab Number: L1709923
Report Date: 04/07/17

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Total Metals - Mansfield Lab for sample(s): 03 Batch: WG990466-1										
Mercury, Total	ND		mg/l	0.0002	--	1	04/03/17 09:42	04/03/17 17:50	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 - Mansfield Lab for sample(s): 03 Batch: WG990470-1										
Iron, Total	ND		mg/l	0.05	--	1	04/03/17 10:28	04/04/17 10:15	97,6010C	PS

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Total Metals - Mansfield Lab for sample(s): 03 Batch: WG990471-1										
Antimony, Total	ND		mg/l	0.0040	--	1	04/03/17 10:28	04/06/17 14:42	97,6020A	BV
Arsenic, Total	ND		mg/l	0.0005	--	1	04/03/17 10:28	04/06/17 14:42	97,6020A	BV
Cadmium, Total	ND		mg/l	0.0005	--	1	04/03/17 10:28	04/06/17 14:42	97,6020A	BV
Chromium, Total	ND		mg/l	0.0010	--	1	04/03/17 10:28	04/06/17 14:42	97,6020A	BV
Copper, Total	ND		mg/l	0.0010	--	1	04/03/17 10:28	04/06/17 14:42	97,6020A	BV
Lead, Total	ND		mg/l	0.0010	--	1	04/03/17 10:28	04/06/17 14:42	97,6020A	BV
Nickel, Total	ND		mg/l	0.0020	--	1	04/03/17 10:28	04/06/17 14:42	97,6020A	BV
Selenium, Total	ND		mg/l	0.005	--	1	04/03/17 10:28	04/06/17 14:42	97,6020A	BV
Silver, Total	ND		mg/l	0.0005	--	1	04/03/17 10:28	04/06/17 14:42	97,6020A	BV
Zinc, Total	ND		mg/l	0.0100	--	1	04/03/17 10:28	04/06/17 14:42	97,6020A	BV

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: 25 FID
Project Number: 40717

Lab Number: L1709923
Report Date: 04/07/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Total Metals - Mansfield Lab Associated sample(s): 03 Batch: WG990466-2 WG990466-3								
Mercury, Total	92		95		80-120	3		20
MCP Total Metals - Mansfield Lab Associated sample(s): 03 Batch: WG990470-2 WG990470-3								
Iron, Total	99		100		80-120	1		20
MCP Total Metals - Mansfield Lab Associated sample(s): 03 Batch: WG990471-2 WG990471-3								
Antimony, Total	98		100		80-120	2		20
Arsenic, Total	108		108		80-120	0		20
Cadmium, Total	111		113		80-120	2		20
Chromium, Total	101		101		80-120	0		20
Copper, Total	104		104		80-120	0		20
Lead, Total	105		106		80-120	1		20
Nickel, Total	103		104		80-120	1		20
Selenium, Total	117		114		80-120	3		20
Silver, Total	102		101		80-120	1		20
Zinc, Total	105		105		80-120	0		20

INORGANICS
&
MISCELLANEOUS

Project Name: 25 FID
Project Number: 40717

Lab Number: L1709923
Report Date: 04/07/17

SAMPLE RESULTS

Lab ID: L1709923-01
Client ID: VES-102-RGP
Sample Location: BOSTON, MA
Matrix: Water

Date Collected: 03/31/17 07:10
Date Received: 03/31/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
SALINITY	ND		SU	2.0	--	1	-	04/05/17 17:03	121,2520B	AS

Project Name: 25 FID
Project Number: 40717

Lab Number: L1709923
Report Date: 04/07/17

SAMPLE RESULTS

Lab ID: L1709923-02
Client ID: VES-208-RGP
Sample Location: BOSTON, MA
Matrix: Water

Date Collected: 03/31/17 08:15
Date Received: 03/31/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
SALINITY	3.4		SU	2.0	--	1	-	04/05/17 17:03	121,2520B	AS

Project Name: 25 FID
Project Number: 40717

Lab Number: L1709923
Report Date: 04/07/17

SAMPLE RESULTS

Lab ID: L1709923-03
Client ID: VES-REC
Sample Location: BOSTON, MA
Matrix: Water

Date Collected: 03/31/17 07:45
Date Received: 03/31/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP General Chemistry - Westborough Lab										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	03/31/17 22:45	03/31/17 23:11	97,7196A	KA
General Chemistry - Westborough Lab										
SALINITY	9.4		SU	2.0	--	1	-	04/05/17 17:03	121,2520B	AS
Solids, Total Suspended	16.		mg/l	5.0	NA	1	-	04/04/17 23:20	121,2540D	RP
Cyanide, Total	ND		mg/l	0.005	--	1	04/04/17 20:04	04/05/17 13:49	121,4500CN-CE	JO
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	03/31/17 21:45	121,4500CL-D	AS
pH (H)	7.8		SU	-	NA	1	-	03/31/17 22:25	121,4500H+-B	AS
Nitrogen, Ammonia	0.079		mg/l	0.075	--	1	04/03/17 23:30	04/05/17 22:20	44,350.1	AT
TPH, SGT-HEM	ND		mg/l	4.00	--	1	04/03/17 16:30	04/03/17 21:30	74,1664A	ML
Phenolics, Total	ND		mg/l	0.030	--	1	04/04/17 11:13	04/04/17 13:53	4,420.1	AW
Anions by Ion Chromatography - Westborough Lab										
Chloride	17900		mg/l	250	--	500	-	04/05/17 02:47	44,300.0	AU

Project Name: 25 FID
Project Number: 40717
Lab Number: L1709923
Report Date: 04/07/17

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): 03 Batch: WG990149-1										
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	03/31/17 21:45	121,4500CL-D	AS
MCP General Chemistry - Westborough Lab for sample(s): 03 Batch: WG990164-1										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	03/31/17 22:45	03/31/17 23:10	97,7196A	KA
General Chemistry - Westborough Lab for sample(s): 03 Batch: WG990598-1										
TPH, SGT-HEM	ND		mg/l	4.00	--	1	04/03/17 16:30	04/03/17 21:30	74,1664A	ML
General Chemistry - Westborough Lab for sample(s): 03 Batch: WG990663-1										
Nitrogen, Ammonia	ND		mg/l	0.075	--	1	04/03/17 23:30	04/05/17 22:11	44,350.1	AT
General Chemistry - Westborough Lab for sample(s): 03 Batch: WG990861-1										
Phenolics, Total	ND		mg/l	0.030	--	1	04/04/17 11:13	04/04/17 13:48	4,420.1	AW
General Chemistry - Westborough Lab for sample(s): 03 Batch: WG991022-1										
Cyanide, Total	ND		mg/l	0.005	--	1	04/04/17 20:04	04/05/17 13:42	121,4500CN-CE	JO
General Chemistry - Westborough Lab for sample(s): 03 Batch: WG991058-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	04/04/17 23:20	121,2540D	RP
Anions by Ion Chromatography - Westborough Lab for sample(s): 03 Batch: WG991464-1										
Chloride	ND		mg/l	0.500	--	1	-	04/04/17 21:59	44,300.0	AU

Lab Control Sample Analysis

Batch Quality Control

Project Name: 25 FID
Project Number: 40717

Lab Number: L1709923
Report Date: 04/07/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 03 Batch: WG990149-2								
Chlorine, Total Residual	109		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 03 Batch: WG990161-1								
pH	101		-		99-101	-		5
MCP General Chemistry - Westborough Lab Associated sample(s): 03 Batch: WG990164-2 WG990164-3								
Chromium, Hexavalent	98		98		49-151	0		20
General Chemistry - Westborough Lab Associated sample(s): 03 Batch: WG990598-2								
TPH	95		-		64-132	-		34
General Chemistry - Westborough Lab Associated sample(s): 03 Batch: WG990663-2								
Nitrogen, Ammonia	95		-		90-110	-		20
General Chemistry - Westborough Lab Associated sample(s): 03 Batch: WG990861-2								
Phenolics, Total	100		-		70-130	-		
General Chemistry - Westborough Lab Associated sample(s): 03 Batch: WG991022-2								
Cyanide, Total	94		-		90-110	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 25 FID
Project Number: 40717

Lab Number: L1709923
Report Date: 04/07/17

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-03 Batch: WG991448-1					
SALINITY	102	-		-	
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 03 Batch: WG991464-2					
Chloride	104	-	90-110	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: 25 FID
Project Number: 40717

Lab Number: L1709923
Report Date: 04/07/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 03 QC Batch ID: WG990149-4 QC Sample: L1709923-03 Client ID: VES-REC												
Chlorine, Total Residual	ND	0.248	0.27	109		-	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 03 QC Batch ID: WG990598-4 QC Sample: L1709923-03 Client ID: VES-REC												
TPH	ND	22	17.9	81		-	-		64-132	-		34
General Chemistry - Westborough Lab Associated sample(s): 03 QC Batch ID: WG990861-4 QC Sample: L1709923-03 Client ID: VES-REC												
Phenolics, Total	ND	0.4	0.50	126		-	-		70-130	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: 25 FID
Project Number: 40717

Lab Number: L1709923
Report Date: 04/07/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 03 QC Batch ID: WG990161-2 QC Sample: L1709923-03 Client ID: VES-REC						
pH (H)	7.8	7.8	SU	0		5
General Chemistry - Westborough Lab Associated sample(s): 03 QC Batch ID: WG990861-3 QC Sample: L1709923-03 Client ID: VES-REC						
Phenolics, Total	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG991448-2 QC Sample: L1709923-03 Client ID: VES-REC						
SALINITY	9.4	9.4	SU	0		

Project Name: 25 FID
Project Number: 40717

Lab Number: L1709923
Report Date: 04/07/17

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information Custody Seal

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1709923-01A	Amber 250ml unpreserved	A	7	3.4	Y	Absent	SALINITY(28)
L1709923-02A	Amber 250ml unpreserved	A	7	3.4	Y	Absent	SALINITY(28)
L1709923-03A	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260SIM-10(14),MCP-8260-10(14)
L1709923-03B	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260SIM-10(14),MCP-8260-10(14)
L1709923-03C	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260SIM-10(14),MCP-8260-10(14)
L1709923-03D	Vial Na2S2O3 preserved	A	N/A	3.4	Y	Absent	504(14)
L1709923-03E	Vial Na2S2O3 preserved	A	N/A	3.4	Y	Absent	504(14)
L1709923-03F	Plastic 250ml HNO3 preserved	A	<2	3.4	Y	Absent	MCP-FE-6010T-10(180),MCP-CR-6020T-10(180),MCP-7470T-10(28),MCP-CU-6020T-10(180),MCP-ZN-6020T-10(180),MCP-AS-6020T-10(180),MCP-NI-6020T-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)
L1709923-03G	Plastic 250ml NaOH preserved	A	>12	3.4	Y	Absent	TCN-4500(14)
L1709923-03H	Plastic 500ml H2SO4 preserved	A	<2	3.4	Y	Absent	NH3-350(28)
L1709923-03J	Plastic 950ml unpreserved	A	7	3.4	Y	Absent	CL-300(28),TRC-4500(1),PH-4500(.01),MCP-HEXCR7196-10(1)
L1709923-03K	Plastic 950ml unpreserved	A	7	3.4	Y	Absent	TSS-2540(7)
L1709923-03L	Amber 950ml H2SO4 preserved	A	<2	3.4	Y	Absent	TPHENOL-420(28)
L1709923-03M	Amber 1000ml HCl preserved	A	N/A	3.4	Y	Absent	TPH-1664(28)
L1709923-03N	Amber 1000ml HCl preserved	A	N/A	3.4	Y	Absent	TPH-1664(28)
L1709923-03P	Vial unpreserved	A	N/A	3.4	Y	Absent	A2-ALCOHOL(14)
L1709923-03Q	Amber 1000ml Na2S2O3	A	7	3.4	Y	Absent	PCB-608(7)
L1709923-03R	Amber 1000ml Na2S2O3	A	7	3.4	Y	Absent	PCB-608(7)
L1709923-03S	Amber 1000ml unpreserved	A	7	3.4	Y	Absent	MCP-8270-10(7),MCP-8270SIM-10(7)
L1709923-03T	Amber 1000ml unpreserved	A	7	3.4	Y	Absent	MCP-8270-10(7),MCP-8270SIM-10(7)

*Values in parentheses indicate holding time in days

Project Name: 25 FID
Project Number: 40717

Lab Number: L1709923
Report Date: 04/07/17

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1709923-03U	Amber 250ml unpreserved	A	7	3.4	Y	Absent	SALINITY(28)

*Values in parentheses indicate holding time in days

Project Name:	25 FID	**Lab Number:**	L1709923
Project Number:	40717	**Report Date:**	04/07/17

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.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
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.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
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

Report Format: Data Usability Report

Project Name:	25 FID	**Lab Number:**	L1709923
Project Number:	40717	**Report Date:**	04/07/17

Data Qualifiers

reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

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

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

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

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.

Report Format: Data Usability Report

Project Name: 25 FID
Project Number: 40717
Lab Number: L1709923
Report Date: 04/07/17

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

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

5 Methods for the Organic Chemical Analysis of Municipal and Industrial Wastewater. Appendix A, Part 136, 40 CFR (Code of Federal Regulations).

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

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

74 Method 1664,Revision A: N-Hexane Extractable Material (HEM; Oil & Grease) and Silica Gel Treated N-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry, EPA-821-R-98-002, February 1999.

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.

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

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility
EPA 624: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 300: DW: Bromide
EPA 6860: NPW and SCM: Perchlorate
EPA 9010: NPW and SCM: Amenable Cyanide Distillation
EPA 9012B: NPW: Total Cyanide
EPA 9050A: NPW: Specific Conductance
SM3500: NPW: Ferrous Iron
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.
SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility
SM 2540D: TSS
EPA 3005A NPW
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

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

Westborough Facility:

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

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 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, SM9221E.**

Mansfield Facility:

Drinking Water
EPA 200.7: Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. **EPA 200.8:** Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. **EPA 245.1** Hg.

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

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

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 3/31/17

ALPHA Job #: L1709923

ALPHA ANALYTICAL
8 Walkup Drive, Westboro, MA 01581, Tel: 508-898-9220
320 Forbes Blvd, Mansfield, MA 02048, Tel: 508-822-9300

Project Information
Project Name: 25 Fid
Project Location: Boston MA
Project #: 40717
Project Manager: F. Calandra
ALPHA Quote #:

Report Information - Data Deliverables
☒ ADEx ☒ EMAIL

Billing Information
☒ Same as Client info PO #:

Client Information
Client: VERTEX
Address: 1 Congress St Boston MA
Phone: 781-974-7395
Email: bsivonen@vertexeng.com

Regulatory Requirements & Project Information Requirements
☒ Yes ☐ No MA MCP Analytical Methods ☐ Yes ☒ No CT RCP Analytical Methods
☐ Yes ☒ No Matrix Spike Required on this SDG? (Required for MCP Inorganics)
☒ Yes ☐ No GW1 Standards (Info Required for Metals & EPH with Targets)
☒ Yes ☐ No NPDES RGP
☐ Other State /Fed Program ______ Criteria ______

Turn-Around Time
☒ Standard ☐ RUSH *(only confirmed if pre-approved!)*
Date Due:

Additional Project Information:

ANALYSIS: VOC: ☐ 8260 ☐ 624 ☐ 524.2 | SVOC: ☐ ABN ☐ PAH | METALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15 | METALS: ☐ RCRA5 ☐ RCRA8 ☐ PP13 | EPH: ☐ Ranges & Targets ☐ Ranges Only | VPH: ☐ Ranges & Targets ☐ Ranges Only | ☐ PCB ☐ PEST | TPH: ☐ Quant Only ☐ Fingerprint | NPDES RGP Plus CL-300 | Ammonia Nitrogen | Alcohols - EPA 8015D | Salinity - chloride SM2520

SAMPLE INFO — Filtration: ☐ Field ☐ Lab to do; Preservation: ☐ Lab to do

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler Initials	VOC	SVOC	METALS (MCP)	METALS (RCRA)	EPH	VPH	PCB/PEST	TPH	NPDES RGP Plus CL-300	Ammonia Nitrogen	Alcohols - EPA 8015D	Salinity - chloride SM2520	Sample Comments	Total # Bottles
09923-01	VES-102-RGP	3/31/17	7:10	GW	BS												X		1
02	VES-208-RGP	3/31/17	8:15	GW	BS												X		1
03	VES-REC	3/31/17	7:45	SW	BS									X	X	X	X		19

	NPDES RGP Plus CL-300	Ammonia Nitrogen	Alcohols - EPA 8015D	Salinity - chloride SM2520
Container Type	A/V/P	A/V/P	A/V/P	A
Preservative	9	0	0	A

Container Type: P= Plastic, A= Amber glass, V= Vial, G= Glass, B= Bacteria cup, C= Cube, O= Other, E= Encore, D= BOD Bottle

Preservative: A= None, B= HCl, C= HNO_3, D= H_2SO_4, E= NaOH, F= MeOH, G= $NaHSO_4$, H = $Na_2S_2O_3$, I= Ascorbic Acid, J = NH_4Cl, K= Zn Acetate, O= Other

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	3/31/17 12:08	[signature] AAL	3/31/17 1208
[signature]	3/31/17 1810	[signature]	3/31/17 1810

Method Blank Summary
Form 4

Client	: Vertex Environmental Services, Inc.	**Lab Number**	: L1709923
Project Name	: 25 FID	**Project Number**	: 40717
Lab Sample ID	: WG991908-5	**Lab File ID**	: V16170406A09
Instrument ID	: VOA116		
Matrix	: WATER	**Analysis Date**	: 04/06/17 09:03

Client Sample No.	Lab Sample ID	Analysis Date
WG991908-3LCS	WG991908-3	04/06/17 06:07
WG991908-4LCSD	WG991908-4	04/06/17 06:32
VES-REC	L1709923-03	04/06/17 09:53

Continuing Calibration
Form 7

Client	: Vertex Environmental Services, Inc.	**Lab Number**	: L1709923	
Project Name	: 25 FID	**Project Number**	: 40717	
Instrument ID	: VOA116	**Calibration Date**	: 04/06/17 06:07	
Lab File ID	: V16170406A02	**Init. Calib. Date(s)**	: 03/22/17	03/22/17
Sample No	: WG991908-2	**Init. Calib. Times**	: 08:07	10:38
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	127	0
1,4-Dioxane	0.031	0.031	-	0	20	119	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	139	0
1,1,2,2-Tetrachloroethane	0.631	0.75	-	-18.9	20	154	0

* Value outside of QC limits.

Method Blank Summary
Form 4

Client	: Vertex Environmental Services, Inc.	**Lab Number**	: L1709923
Project Name	: 25 FID	**Project Number**	: 40717
Lab Sample ID	: WG991897-5	**Lab File ID**	: V16170406A09
Instrument ID	: VOA116		
Matrix	: WATER	**Analysis Date**	: 04/06/17 09:03

Client Sample No.	Lab Sample ID	Analysis Date
WG991897-3LCS	WG991897-3	04/06/17 06:58
WG991897-4LCSD	WG991897-4	04/06/17 07:23
VES-REC	L1709923-03	04/06/17 09:53

Continuing Calibration
Form 7

Client	: Vertex Environmental Services, Inc.	**Lab Number**	: L1709923	
Project Name	: 25 FID	**Project Number**	: 40717	
Instrument ID	: VOA116	**Calibration Date**	: 04/06/17 06:58	
Lab File ID	: V16170406A04	**Init. Calib. Date(s)**	: 04/05/17	04/05/17
Sample No	: WG991897-2	**Init. Calib. Times**	: 18:33	22:17
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	111	0
Dichlorodifluoromethane	0.281	0.275	-	2.1	20	110	.01
Chloromethane	0.454	0.462	-	-1.8	20	117	.01
Vinyl chloride	0.398	0.377	-	5.3	20	113	0
Bromomethane	0.184	0.165	-	10.3	20	110	0
Chloroethane	0.241	0.237	-	1.7	20	111	0
Trichlorofluoromethane	0.486	0.464	-	4.5	20	111	0
Ethyl ether	0.138	0.124	-	10.1	20	103	0
1,1-Dichloroethene	0.272	0.256	-	5.9	20	110	0
Carbon disulfide	0.917	0.877	-	4.4	20	104	0
Freon-113	0.267	0.265	-	0.7	20	114	0
Iodomethane	10	7.018	-	29.8*	20	98	0
Acrolein	0.052	0.045*	-	13.5	20	102	0
Methylene chloride	0.311	0.303	-	2.6	20	107	-.01
Acetone	10	8.52	-	14.8	20	90	0
trans-1,2-Dichloroethene	0.308	0.289	-	6.2	20	108	0
Methyl acetate	0.186	0.168	-	9.7	20	98	0
Methyl tert-butyl ether	0.646	0.608	-	5.9	20	109	0
tert-Butyl alcohol	0.017	0.014*	-	17.6	20	94	0
Diisopropyl ether	1.341	1.261	-	6	20	109	0
1,1-Dichloroethane	0.718	0.693	-	3.5	20	107	0
Halothane	0.228	0.23	-	-0.9	20	111	0
Acrylonitrile	0.095	0.092	-	3.2	20	104	0
Ethyl tert-butyl ether	1.002	0.912	-	9	20	104	0
Vinyl acetate	0.792	0.722	-	8.8	20	103	0
cis-1,2-Dichloroethene	0.323	0.31	-	4	20	108	0
2,2-Dichloropropane	0.53	0.495	-	6.6	20	111	0
Bromochloromethane	0.13	0.127	-	2.3	20	103	0
Cyclohexane	0.724	0.703	-	2.9	20	114	0
Chloroform	0.598	0.574	-	4	20	105	0
Ethyl acetate	0.257	0.238	-	7.4	20	106	0
Carbon tetrachloride	0.473	0.448	-	5.3	20	111	-.01
Tetrahydrofuran	0.092	0.088	-	4.3	20	104	0
Dibromofluoromethane	0.306	0.289	-	5.6	20	105	-.01
1,1,1-Trichloroethane	0.543	0.516	-	5	20	112	0
2-Butanone	0.096	0.094*	-	2.1	20	99	0
1,1-Dichloropropene	0.443	0.42	-	5.2	20	114	0
Benzene	1.311	1.262	-	3.7	20	108	0
tert-Amyl methyl ether	0.642	0.587	-	8.6	20	106	0
1,2-Dichloroethane-d4	0.378	0.374	-	1.1	20	108	0
1,2-Dichloroethane	0.463	0.443	-	4.3	20	105	0
Methyl cyclohexane	0.503	0.47	-	6.6	20	111	0
Trichloroethene	0.345	0.328	-	4.9	20	113	0
Dibromomethane	0.163	0.159	-	2.5	20	107	0
1,2-Dichloropropane	0.38	0.357	-	6.1	20	108	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Vertex Environmental Services, Inc.	**Lab Number**	: L1709923	
Project Name	: 25 FID	**Project Number**	: 40717	
Instrument ID	: VOA116	**Calibration Date**	: 04/06/17 06:58	
Lab File ID	: V16170406A04	**Init. Calib. Date(s)**	: 04/05/17	04/05/17
Sample No	: WG991897-2	**Init. Calib. Times**	: 18:33	22:17
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
2-Chloroethyl vinyl ether	10	6.707	-	32.9*	20	84	0
Bromodichloromethane	0.455	0.418	-	8.1	20	109	0
1,4-Dioxane	0.00139	0.00113*	-	18.7	20	91	0
cis-1,3-Dichloropropene	0.513	0.455	-	11.3	20	102	0
Chlorobenzene-d5	1	1	-	0	20	97	0
Toluene-d8	1.277	1.396	-	-9.3	20	104	0
Toluene	0.911	0.987	-	-8.3	20	110	0
4-Methyl-2-pentanone	10	9.309	-	6.9	20	106	0
Tetrachloroethene	0.362	0.394	-	-8.8	20	110	0
trans-1,3-Dichloropropene	0.47	0.484	-	-3	20	105	0
Ethyl methacrylate	10	9.108	-	8.9	20	106	0
1,1,2-Trichloroethane	0.227	0.248	-	-9.3	20	104	0
Chlorodibromomethane	0.303	0.323	-	-6.6	20	105	0
1,3-Dichloropropane	0.461	0.499	-	-8.2	20	106	0
1,2-Dibromoethane	0.235	0.26	-	-10.6	20	108	0
2-Hexanone	10	8.895	-	11.1	20	102	0
Chlorobenzene	0.934	0.991	-	-6.1	20	107	0
Ethylbenzene	1.708	1.861	-	-9	20	109	0
1,1,1,2-Tetrachloroethane	0.325	0.353	-	-8.6	20	110	0
p/m Xylene	0.618	0.702	-	-13.6	20	110	0
o Xylene	20	20.265	-	-1.3	20	111	0
Styrene	0.649	0.744	-	-14.6	20	103	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	94	0
Bromoform	0.215	0.225	-	-4.7	20	109	0
Isopropylbenzene	3.032	3.395	-	-12	20	113	0
4-Bromofluorobenzene	0.945	0.955	-	-1.1	20	96	0
Bromobenzene	0.662	0.72	-	-8.8	20	107	0
n-Propylbenzene	3.961	4.322	-	-9.1	20	109	0
1,4-Dichlorobutane	1.196	1.301	-	-8.8	20	106	0
1,1,2,2-Tetrachloroethane	0.561	0.619	-	-10.3	20	103	0
4-Ethyltoluene	3.052	3.454	-	-13.2	20	110	0
2-Chlorotoluene	2.665	2.982	-	-11.9	20	107	0
1,3,5-Trimethylbenzene	2.535	2.879	-	-13.6	20	111	0
1,2,3-Trichloropropane	0.443	0.491	-	-10.8	20	104	0
trans-1,4-Dichloro-2-buten	0.228	0.231	-	-1.3	20	101	-.01
4-Chlorotoluene	2.265	2.532	-	-11.8	20	108	0
tert-Butylbenzene	2.012	2.214	-	-10	20	110	0
1,2,4-Trimethylbenzene	2.452	2.744	-	-11.9	20	106	0
sec-Butylbenzene	3.279	3.825	-	-16.7	20	106	0
p-Isopropyltoluene	10	9.681	-	3.2	20	108	0
1,3-Dichlorobenzene	1.345	1.495	-	-11.2	20	108	0
1,4-Dichlorobenzene	1.325	1.447	-	-9.2	20	107	0
p-Diethylbenzene	1.535	1.541	-	-0.4	20	109	0
n-Butylbenzene	2.522	2.795	-	-10.8	20	108	0
1,2-Dichlorobenzene	1.185	1.297	-	-9.5	20	108	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Vertex Environmental Services, Inc.	**Lab Number**	: L1709923	
Project Name	: 25 FID	**Project Number**	: 40717	
Instrument ID	: VOA116	**Calibration Date**	: 04/06/17 06:58	
Lab File ID	: V16170406A04	**Init. Calib. Date(s)**	: 04/05/17	04/05/17
Sample No	: WG991897-2	**Init. Calib. Times**	: 18:33	22:17
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2,4,5-Tetramethylbenzene	10	9.475	-	5.3	20	111	0
1,2-Dibromo-3-chloropropan	0.068	0.067	-	1.5	20	102	0
1,3,5-Trichlorobenzene	0.816	0.867	-	-6.3	20	107	0
Hexachlorobutadiene	0.235	0.248	-	-5.5	20	107	0
1,2,4-Trichlorobenzene	0.65	0.679	-	-4.5	20	109	0
Naphthalene	10	8.484	-	15.2	20	105	0
1,2,3-Trichlorobenzene	0.56	0.584	-	-4.3	20	104	0

* Value outside of QC limits.