Haley & Aldrich, Inc.
465 Medford St.
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Boston, MA 02129-1400

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HaleyAldrich.com

29 April 2013
File No. 32206-301

US Environmental Protection Agency
Dewatering GP Processing
Municipal Assistance Unit (CMU)
5 Post Office Square - Suite 100
Boston, MA 02109-3912

Attention: Mr. Victor Alvarez

Subject: Notice of Intent (NOI) for NPDES Dewatering General Permit
Temporary Construction Dewatering
20 Somerset Street
Boston, Massachusetts 02108

Ladies and Gentlemen:

On behalf of our client, Suffolk University, Haley & Aldrich respectfully requests approval for a National Pollutant Discharge Elimination System (NPDES) General Permit for temporary construction dewatering. In accordance with the NPDES Dewatering General Permit (DGP) in Massachusetts, MAG070000, this letter submits a Notice of Intent (NOI) and the applicable documentation as required by the US Environmental Protection Agency (USEPA) for construction site dewatering under the DGP.

The completed "Suggested Notice of Intent" (NOI) form as provided in the DGP is enclosed in Appendix A. A copy of this DGP NOI is being provided to MassDEP. Appendix B contains the Massachusetts Department of Environmental (MassDEP) Transmittal Form for Permit Application and Payment, as required by MassDEP for the permit application. A copy of the BWSC Discharge Permit Application is provided in Appendix C. Appendices D and E include National Register of Historic Places and Endangered Species Act Documentation, respectively. A copy of the groundwater testing laboratory results are provided in Appendix F.

SITE LOCATION AND EXISTING CONDITIONS

The subject site consists of an approximately 13,500 square foot parcel of land developed with a vacant 9-story office building with a 7,900 square foot footprint that was formerly utilized as the Metropolitan District Commission (MDC) (currently known as the Massachusetts Department of Conservation and Recreation (DCR)) offices located at 20 Somerset Street in Boston, Massachusetts; refer to Figure 1 – Project Locus. The building is a masonry block structure with a flat tar and gravel roof constructed on spread footings in 1930.

As shown on Figure 2, Site and Subsurface Exploration Plan, the exterior of the subject site consists of a paved driveway directly north and west of the subject building and a one-story brick transformer enclosure owned by the Boston Edison Company and located in the southwest corner of the subject site. Additionally, the subject site is bordered to the north by the Saltonstall Building and associated underground garage, to the east by Somerset Street, beyond which an office building, to the south by a

four-level parking garage for the McCormack Building, which is partially covered by a plaza and to the west by the McCormack building and associated underground garage.

Two test borings (B-1 and B-2) were conducted at the approximate locations shown on the attached Figure 2 to provide data on subsurface soil and groundwater conditions for the building foundation design and construction. The test borings were drilled by New Hampshire Boring, Inc. between 29 November and 8 December 2005. The test borings were advanced to 119 and 143 feet below the existing ground surface (Approximately El. -47 and El. -78) in borings B-1 and B-2, respectively. A groundwater observation well was also installed with completed boring B-2.

The soil conditions at the site were found to generally consist of approximately 14 to 24 feet of granular fill (Approx. El. 58 to El. 41), over a very dense layer of glacial outwash sand and gravel and glacial till. A layer of decomposed bedrock was encountered in boring B-2. Additionally, an approximately 12 ft thick layer of very dense re-worked fill material was noted in boring B-2 below the fill layer, and was likely backfill material placed when the adjacent buildings were constructed.

Groundwater was detected at depths of 33 and 21 feet below the existing ground surface (El. 39 and El. 44) Boston City Based (BCB) datum in borings B-1 and B-2, respectively.

SUMMARY OF SOIL TESTING PROGRAM

Analytical testing was conducted on 17 soil samples obtained outside the building footprint to characterize soils for off-site removal. Testing of the soils conducted to date have not indicated that the site soil does not exceed a notification threshold, therefore the site is **not** a MassDEP Disposal Site as defined under the Massachusetts Contingency Plan (MCP), (310 CMR 40.0000).

PROPOSED CONSTRUCTION

The proposed development will include an 8-story classroom complex. The proposed building footprint will occupy nearly the entire site with a new two level basement constructed directly against the existing basement walls of the parking garage to the south, west and north. The proposed concrete-frame building is planned to be eight stories above grade with two below grade levels. The ground floor is planned to be finished at El. 68 and the top of the lowest level (basement) slab is planned at El. 54.

The typical bottom of excavation for the foundation will be at approximately El. 52, assuming a 1 ft thick concrete slab and 1 ft thick crushed stone layer below the slab. Construction of elevator pits will require local excavation to about El. 47 near the east wall, along Somerset Street. A groundwater recharge tank is planned along the north side of the building with an invert at about El. 51.

The planned excavation activities will remain above the observed groundwater levels however temporary construction dewatering will be required during below-grade construction activities to manage and control:

- Seepage from adjacent basement underdrain systems; and
- Precipitation and/or surface water runoff into the excavation

Due to site constraints, on-site recharge of construction dewatering effluent is not likely feasible. For the majority of the below-grade construction, the Project plans to direct the dewatering effluent to the existing storm drain system which ultimately drains to the Charles River. The project specifications include provisions for collection, pumping, handling, treatment (if required), and discharge of construction dewatering effluent.

DISCHARGE START DATE AND LENGTH OF DISCHARGE

Site work and associated construction dewatering is currently anticipated to begin in September 2013 and is estimated to take up to 15 months to complete. Dewatering activities during below-grade construction are anticipated to be periodic and intermittent.

ANALYTICAL TESTING

On 5 December 2005, Haley & Aldrich collected one groundwater sample from observation well B-2(OW) located within the limits of the project site. The sample was submitted to Alpha Woods Hole Laboratory (currently Alpha Analytical) of Westborough, Massachusetts, a DEP certified laboratory, and analyzed for volatile organic compounds (VOCs), volatile petroleum hydrocarbons (VPH) carbon ranges, and extractable petroleum hydrocarbons (EPHs) carbon ranges. Concentrations of VOCs and EPH constituents were detected; however, none were above the applicable RCGW-2 Reportable Concentrations. The results of water quality testing conducted for this DGP NOI are summarized in Table I. The location of the observation well is shown on Figure 2.

On 8 February 2013, monitoring well B-2(OW) Haley & Aldrich attempted to collect a groundwater sample from monitoring well B-2(OW). A groundwater sample could not be collected because the monitoring well was determined to be dry. A water sample will be collected and submitted for laboratory analyses on the first day of dewatering/discharge. The analytical results will be subsequently submitted to the United States Environmental Protection Agency.

Based on the site history information, soil precharacterization testing, and the groundwater sample collected, the site groundwater is anticipated to be un-impacted by contaminants, and therefore a Remediation General Permit is not required.

MANAGEMENT OF DEWATERING EFFLUENT

Construction dewatering activities are anticipated to be intermittent and only required during periods of foundation construction below existing adjacent basement slabs and periods of precipitation. Water will be collected in temporary sumps constructed within the excavation and pumped to sedimentation control systems. The Contractor will design, operate, and maintain dewatering and sedimentation control systems for off-site discharge. The systems will be designed to meet the permit requirements for suspended solids in the effluent stream prior to discharge into the nearby storm drain. It is planned to filter the water through bag filters prior to discharge to remove suspended sediment. Haley & Aldrich plans to perform the required sampling and testing of dewatering effluent and will submit the results as required by the Permit. The Contractor's sedimentation system and/or dewatering procedures will be modified as necessary to comply with the Permit's discharge criteria. Refer to the attached Effluent Flow Diagram (Figure 3).

RECEIVING WATERS

Prior to discharge, collected water will be routed through a sedimentation basin at a minimum, to remove suspended solids and undissolved chemical constituents. Construction dewatering under this DGP NOI will include piping and discharging to storm drains located within and near the site. The storm drains travel to the east of the site, ultimately discharging into the Charles River. The proposed on-site point of discharge and the outfall location is shown on Figure 4, NPDES Discharge Location Plan and Figure 5, NPDES Outfall Location Plan, respectively.

SUPPORTING INFORMATION

In response to NOI Sections 4 and 5 regarding information on Endangered Species and Historic Places, available public documentation on the National Register of Historic Places and Endangered Species Act are provided in Appendices D and E, respectively. Additionally, Alpha Analytical reports for collected water samples are provided in Appendix F.

Please call the undersigned at 617-886-7400 if you have any questions or require additional information. Thank you for your assistance in this matter.

Sincerely yours,
HALEY & ALDRICH, INC.

Abigail N. Cohan
Assistant Project Manager

Keith E. Johnson, P.E., LSP
Vice President

Attachments:

Table I - Summary of Groundwater Quality Data
Figure 1 - Project Locus
Figure 2 - Site and Subsurface Exploration Plan
Figure 3 - Construction Dewatering Effluent Flow Diagram
Figure 4 - NPDES Discharge Location Plan
Figure 5 - NPDES Outfall Location Plan
Appendix A - Notice of Intent (NOI) for Dewatering General Permit (DGP)
Appendix B - MassDEP Transmittal Form for Permit Application and Payment
Appendix C - BWSC Permit Application
Appendix D - National Register of Historic Places and Massachusetts Historical Commission Documentation
Appendix E - Endangered Species Act Documentation
Appendix F - Laboratory Data Reports

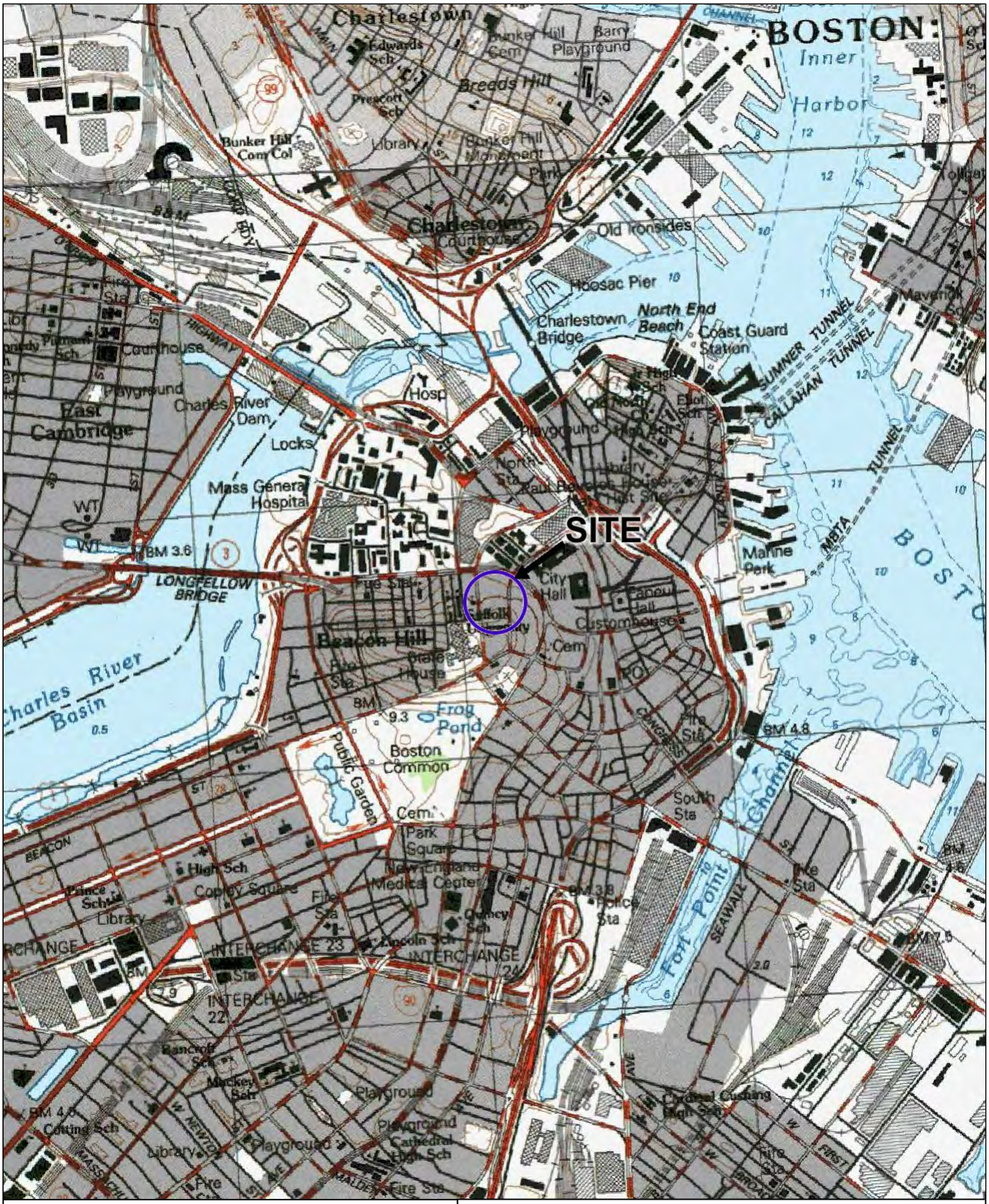
c: MADEP; Attn: Division of Watershed Management, Robert Kubit
Boston Water and Sewer Commission; Attn: Francis McLaughlin
Suffolk University; Attn: Gordon King

TABLE I - SUMMARY OF GROUNDWATER QUALITY DATA
20 SOMERSET STREET
BOSTON, MA
32206-000

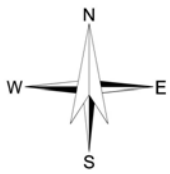
LAB SAMPLE ID	MCP	NPDES	L0515076-01
SAMPLE NAME	Reportable	Dewatering	B2
SAMPLE DATE	Concentration	General Permit (DGP)	09-DEC-05
SCREEN DEPTH (FT.)	RCGW-2	Discharge Limits	15
SCREEN ELEVATION (FT.)			
VOCs (mg/l)			
Acetone	50	NA	0.024
Total VOCs (mg/l)	NA	NA	0.024
VPH (mg/l)			
C5-C8 Aliphatics, Adjusted	1	NA	ND(0.025)
C5-C8 Aliphatics, Unadjusted	1	NA	ND(0.025)
C9-C10 Aromatics	4	NA	ND(0.025)
C9-C12 Aliphatics, Adjusted	1	NA	ND(0.025)
C9-C12 Aliphatics, Unadjusted	1	NA	ND(0.025)
EPH (mg/l)			
C11-C22 Aromatics, Adjusted	30	NA	0.162
C11-C22 Aromatics, Unadjusted	30	NA	0.162
C19-C36 Aliphatics	20	NA	0.794
C9-C18 Aliphatics	1	NA	0.363

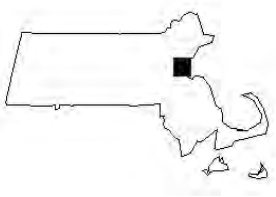
ABBREVIATIONS:
NA : Not applicable
ND(2.5): Not detected; number in parentheses is one-half the laboratory detection limit
VOCs: Volatile Organic Compounds
VPH: Volatile Petroleum Hydrocarbons
EPH: Extractable Petroleum Hydrocarbons

NOTES:
1. This table includes only those compounds detected on the dates indicated.
2. NPDES Effluent Limits for freshwater taken from Appendix III of EPA Permit No. MAG910000



SITE COORDINATES:42°21'36"N 71°3'43"W





U.S.G.S. QUADRANGLE: BOSTON SOUTH, MA

HALEY & ALDRICH

20 SOMERSET STREET
BOSTON, MASSACHUSETTS

PROJECT LOCUS

SCALE: 1:24,000
APRIL 2013

FIGURE 1

32206-200 1.PDF

ASHBURTON PLACE
(PUBLIC–VARIABLE WIDTH)

SOMERSET STREET
(PUBLIC–VARIABLE WIDTH)

N/F
COMMONWEALTH OF MASSACHUSETTS

MC CORMACK BUILDING
23 STORY MASONRY
ONE ASHBURTON PLACE

ENTRANCE

L=107.50'
R=388.00'

BUILDING FOOTPRINT

BUILDING ABOVE

APPROXIMATE LIMITS OF UNDERGROUND GARAGE

APPROXIMATE LOCATION OF PROPERTY LINE

CONC. WALL

N01°19'20"W

116.69'–FACE OF CONC. FOUNDATION

1 STORY BRICK

LOT LS–1A AREA=
5,612±S.F.

N05°23'22"E
66.55'
(M)

B2 (OW)

PLAZA

NORTH PLAZA

PLANTER
BENCH
BRICK
PRECAST CONC. WALL
PLAZA LEVEL
CONC. WALL

S88°52'04"W
223.36'–CALC.
223.46'–REC.

BRICK
VGC
CONC. WALL
PLANTER
BENCH
GRANITE STEPS
CONC. SIDEWALK
MULCH
VENT
HH
GG
S

S83°36'17"W
118.01'

R=28.00'
L=37.89'

77.26'

S05°34'32"W

CONC. SIDEWALK

VGC

S88°36'51"W
97.80'–FACE OF CONC. FOUNDATION

BITUMINOUS CONCRETE

CONC. WALL

CONC. RAMP

N89°19'13"W
40.24'

52.79'

N85°59'39"W

LOT LS–1 AND LOT LS–1A TO BE COMBINED TO COMPRISE ONE LOT CONSISTING OF 13,500±S.F.

LOT LS–1 AREA=
7,888±S.F.

93.93'

N87°51'23"E

112.36'

BITUMINOUS CONCRETE

N88°50'50"E
59.53'

51.71'

N01°18'08"W

TOTAL AGGREGATE PLAZA AREA=
24,721± SQUARE FEET

N/F
100 CAMBRIDGE STREET CONDOMINIUM CORPORATION

B1

APPROXIMATE LOCATION OF AST

APPROXIMATE LIMITS OF UST AND EXCAVATION

9 STORY BRICK
NO. 20 SOMERSET STREET

APPROXIMATE LOCATION OF FILL PIPE

APPROXIMATE LOCATION OF VENT PIPE

STP
STPO
STPF

24.42'

S05°34'32"W

S05°34'33"W
3.03'

14.43'

N87°51'23"E
15.87'

S07°17'52"W
15.42'

S03°21'51"W

WG

FA

CARD READER AND GATE

CONC. SIDEWALK

VGC

HH

LEGEND:

B1 — DESIGNATION AND APPROXIMATE LOCATION OF BORING INSTALLED BY NEW HAMPSHIRE BORING, INC. UNDER THE SUPERVISION OF HALEY & ALDRICH IN NOVEMBER AND DECEMBER 2005

(OW) — INDICATES GROUNDWATER OBSERVATION WELL INSTALLED IN COMPLETED BOREHOLE

NOTE:

PLAN PREPARED FROM A PLAN ENTITLED "DEVELOPMENT PLAN" PREPARED BY JUDITH NITSCH ENGINEERING, INC. DATED APRIL 29, 2005.

0 30 60
SCALE IN FEET

HALEY & ALDRICH

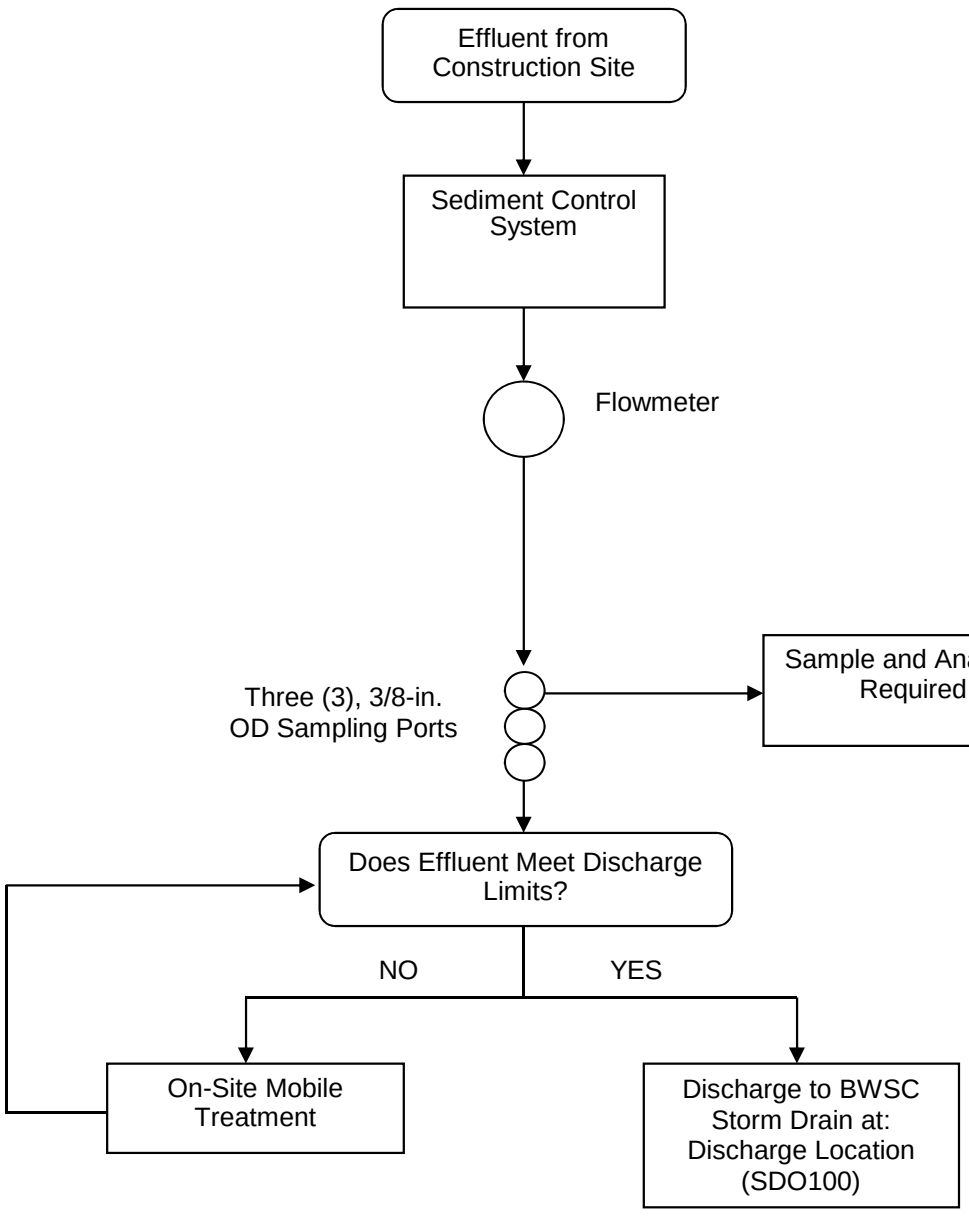
PROPOSED SUFFOLK UNIVERSITY RESIDENCES
20 SOMERSET STREET
BOSTON, MASSACHUSETTS

SITE AND SUBSURFACE EXPLORATION LOCATION PLAN

SCALE: AS SHOWN
APRIL 2009

FIGURE 2

J:\GRAPHICS\32206\32206-200-B017.DWG



HALEY & ALDRICH

20 Somersert Street
Boston, Massachusetts

CONSTRUCTION DEWATERING EFFLUENT FLOW DIAGRAM

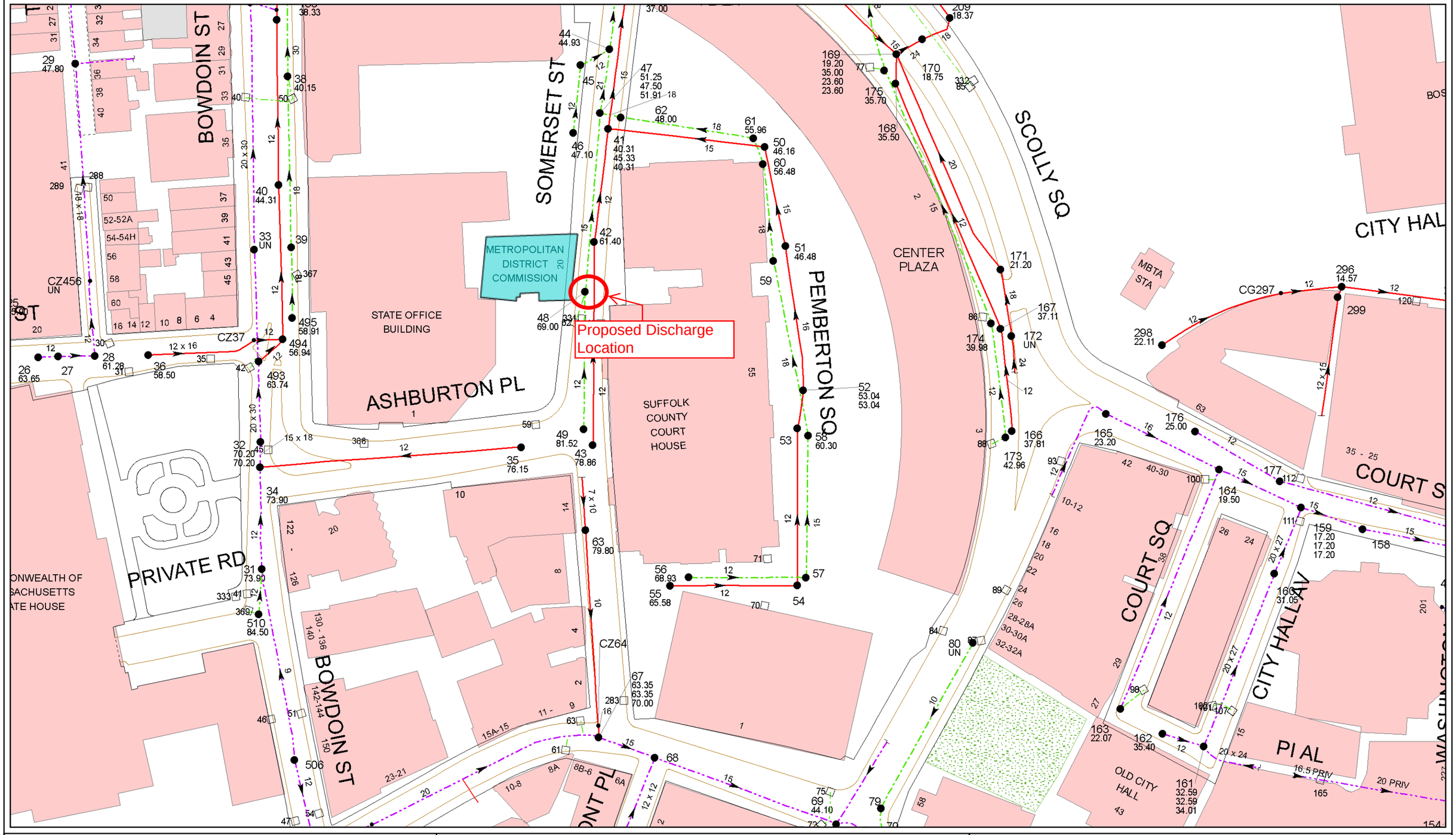
UNDERGROUND ENGINEERING & ENVIRONMENTAL SOLUTIONS

G:\36905\001 - NPDES DGP\Flow Chart.xls

File No. 32206-301

April 2013

FIGURE 3



BOSTON WATER AND SEWER

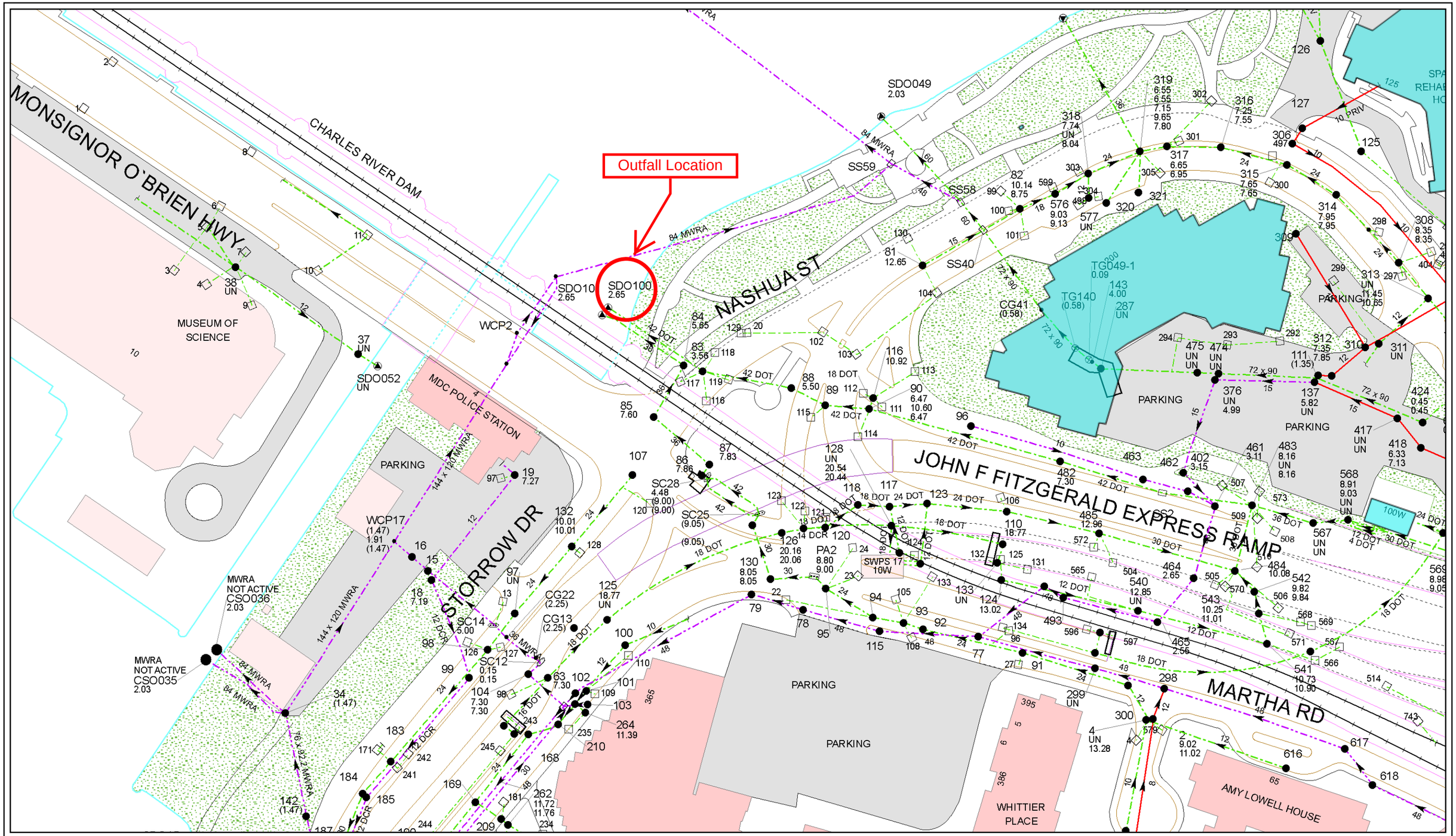
N W E S

100 50 0 100 200 300 Feet

1 inch = 100 feet

Discharge Location Plan
20 Somerset St., Boston, MA
April 2013

Figure 4



BOSTON WATER AND SEWER

N W E S

100 50 0 100 200 300 Feet

1 inch = 100 feet

Discharge Location Plan
20 Somerset St., Boston, MA
April 2013 Figure 5

Appendix A
Suggested Notice of Intent (NOI) Form

II. Suggested Notice of Intent (NOI) Form

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

a) Name of facility: 20 Somerset Street	**Mailing Address for the Facility:** 20 Somerset Street Boston, Massachusetts 02108	
b) Location Address of the Facility (if different from mailing address):	**Facility Location** **longitude:** -71.061673 **latitude:** 42.359697	**Type of Business:** Vacant Office Building **Facility SIC codes:** NA

c) Name of facility owner: Suffolk University; Gordon King **Owner's email:** gking@suffolk.edu

Owner's Tel #: 617-557-1520 **Owner's Fax #:** 617-994-4207

Address of owner (if different from facility address)

Owner is (check one): 1. Federal____ 2. State _____ 3.Tribal_____ 4. Private ✓ **4. Other _____(Describe)**

Legal name of Operator, if not owner: Suffolk Construction Company

Operator Contact Name: Frank Craemer

Operator Tel Number: (617) 517-5236 **Fax Number:** _____

Operator's email: fcraemer@suffolkconstruction.com

Operator Address (if different from owner)

65 Allerton St., Boston, MA 02119

d) Attach a topographic map indicating the location of the facility and the outfall(s) to the receiving water. Map attached? ✓

e) Check Yes or No for the following:

1. **Has a prior NPDES permit been granted for the discharge? Yes ____ No** ✓ **If Yes, Permit Number: _____**
2. **Is the discharge a "new discharge" as defined by 40 CFR Section 122.22? Yes** ✓ **No_____**
3. **Is the facility covered by an individual NPDES permit? Yes_____ No** ✓ **If Yes, Permit Number ____**
4. **Is there a pending application on file with EPA for this discharge? Yes _____ No** ✓ **If Yes, date of submittal:**

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

a) **Name of receiving water into which discharge will occur:** Charles River (Outfall No. SDO100)
State Water Quality Classification: Class B **Freshwater:** X **Marine Water:** _____

b) **Describe the discharge activities for which the owner/applicant is seeking coverage:**
(1.) **Construction dewatering of groundwater intrusion and/or storm water accumulation.**
2. **Short-term or long-term dewatering of foundation sumps.**
3. **Other.**

c) **Number of outfalls** 1

For each outfall:

d) **Estimate the maximum daily and average monthly flow of the discharge (in gallons per day – GPD). Max Daily Flow** 300 **GPD**
Average Monthly Flow 100-150 **GPD**

e) **What is the maximum and minimum monthly pH of the discharge (in s.u.)? Max pH** 8.3 **Min pH** 6.5

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

g) **What treatment does the wastewater receive prior to discharge?** Sedimentation, filtration, and other treatment

h) **Is the discharge continuous? Yes** _____ **No** ✓ **If no, is the discharge periodic (P) (occurs regularly, i.e., monthly or seasonally, but is not continuous all year) or intermittent (I) (occurs sometimes but not regularly) or both (B)** (I)
If (P), number of days or months per year of the discharge NA **and the specific months of discharge** NA ;
If (I), number of days/year there is a discharge Approx. 100 (TBD)
Is the discharge temporary? Yes ✓ **No** _____
If yes, approximate start date of dewatering September 2013 **approximate end date of dewatering** December 2014

i) **Latitude and longitude of each discharge within 100 feet (See http://www.epa.gov/tri/report/siting_tool): Outfall 1: long.** -71.06411 **lat.** 42.3671
Outfall 2: long._____ **lat.**_____; **Outfall 3: long.**_____ **lat.**_____.

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

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

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

3. **Contaminant Information**

a) **Are any pH neutralization and/or dechlorination chemicals used in the discharge? If so, include the chemical name and manufacturer; maximum and average daily quantity used as well as the maximum and average daily expected concentrations (mg/l) in the discharge, and the vendor's reported aquatic toxicity (NOAEL and/or LC_{50} in percent for aquatic organism(s)).** pH treatment, if necessary, to be determined.

b) **Please report any known remediation activities or water-quality issues in the vicinity of the discharge.** No known remediation activities in vicinity of discharge.

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

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

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

a) **Are any historic properties listed or eligible for listing on the National Register of Historic Places located on the facility site or in proximity to the discharge? Yes ✓ No ____**
b) **Have any State or Tribal historic preservation officers been consulted in this determination? Yes _____ or No ✓ If yes, attach the results of the consultation(s).**
c) **Which of the three National Historic Preservation Act requirements listed in Appendix 3, Section C (1,2 o3) have you met? 2**

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

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

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

dechlorination chemicals; (3) the discharge does not come in contact with any raw materials, intermediate product, water product or finished product; (4) if the discharge of dewatering subsequently mixes with other permitted wastewater (i.e.stormwater) prior to discharging to the receiving water, any monitoring provided under this permit will be only for dewatering discharge; (5) where applicable, the facility has complied with the requirements of this permit specific to the Endangered Species Act and National Historic Preservation Act; and (6) this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.

Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Facility Name: 20 Somerset Street, Boston, MA 02108

Operator signature:

Title: Vice President

Date: 4-19-13

Federal regulations require this application to be signed as follows:

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

Appendix B
MassDEP Transmittal Form for Permit Application and Payment

Enter your transmittal number → X255496 (Transmittal Number)

Your unique Transmittal Number can be accessed online: http://mass.gov/dep/service/online/trasmfrm.shtml or call MassDEP's InfoLine at 617-338-2255 or 800-462-0444 (from 508, 781, and 978 area codes).

Massachusetts Department of Environmental Protection

Transmittal Form for Permit Application and Payment

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

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

3. Three copies of this form will be needed.

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

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

MassDEP
P.O. Box 4062
Boston, MA
02211

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

A. Permit Information

1. Permit Code: 7 or 8 character code from permit instructions	2. Name of Permit Category
BRP WM 10	NPDES

3. Type of Project or Activity: Construction Dewatering

B. Applicant Information – Firm or Individual

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

2. **Last Name** of Individual	3. **First Name** of Individual	4. MI

5. Street Address: 8 Ashburton Place

6. City/Town	7. State	8. Zip Code	9. Telephone #	10. Ext. #
Boston	MA	02108	617-557-1520	

11. Contact Person	12. e-mail address (optional)
Gordon King	gking@suffolk.edu

C. Facility, Site or Individual Requiring Approval

1. Name of Facility, Site Or Individual: 20 Somerset Street

2. Street Address: 20 Somerset Street

3. City/Town	4. State	5. Zip Code	6. Telephone #	7. Ext. #
Boston	MA	02108		

8. DEP Facility Number (if Known)	9. Federal I.D. Number (if Known)	10. BWSC Tracking # (if Known)

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

1. Name of Firm Or Individual: Haley & Aldrich, Inc.

2. Address: 465 Medford Street Suite 2200

3. City/Town	4. State	5. Zip Code	6. Telephone #	7. Ext. #
Boston	MA	02129	617-886-7400	

8. Contact Person	9. LSP Number (BWSC Permits only)
Mr. Keith Johnson	9789

E. Permit - Project Coordination

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

EOEA File Number

F. Amount Due

DEP Use Only

Permit No:

Rec'd Date:

Reviewer:

Special Provisions:

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

Check Number	Dollar Amount	Date
198185	$385	4/10/2013

HALEY & ALDRICH

Haley & Aldrich, Inc.
70 Blanchard Road
Suite 204
Burlington, MA 01803-5100
Tel: 617-886-7400

CITIZENS BANK
MASSACHUSETTS

5-7017
2110

198185

198185

DATE
Apr 10, 2013

AMOUNT
$385.00

****** Three Hundred Eighty-five Dollars And Zero Cents

PAY
TO THE
ORDER
OF

Commonwealth of Massachusetts - LSP Board
Commonwealth Master Lock Box
P.O. Box 4062
Boston, MA 02211-4062

VOID AFTER 90 DAYS

AUTHORIZED SIGNATURE

Security features. Details on back.

⑈198185⑈ ⑆211070175⑆ 1078245566⑈

Appendix C
BWSC Permit Application

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

DEWATERING DISCHARGE PERMIT APPLICATION

OWNER / AUTHORIZED APPLICANT PROVIDE INFORMATION HERE:

Company Name: Suffolk University Address: 8 Ashburton Place, Boston

Phone number: 617-557-1520 Fax number: 617-994-4207

Contact person name: Mr. Gordon King Title: Senior Director Facilities Planning and Management

Cell number: NA Email address: gking@suffolk.edu

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: 20 Somerset Street Neighborhood Boston - Central

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

Describe Proposed Pre-Treatment System(s): Sedimentation Tank

BWSC Outfall No. SDO100 Receiving Waters Charles River

Temporary Discharges (Provide Anticipated Dates of Discharge): From _____ To_____

□ Groundwater Remediation	□ Tank Removal/Installation	[X] Foundation Excavation
□ Utility/Manhole Pumping	□ Test Pipe	□ Trench Excavation
[X] 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. ***Refer to copy of NPDES Permit Application.***
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. ***Refer to copy of NPDES Permit Application.***
4. Dewatering Drainage Permit will be denied or revoked if applicant fails to obtain the necessary permits from MWRA or EPA.

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

BWSC Use Only: Date Received _____ Comments: _____

Appendix D
National Register of Historic Places and
Massachusetts Historical Commission Documentation

nps.gov

National Park Service
U.S. Department of the Interior

National Register of Historic Places

HOME
BROWSE
ADVANCED SEARCH
DOWNLOAD CENTER
ABOUT
STATUS
HELP

Contact Us

Find A Park
History & Culture
Nature & Science
Education & Interpretation

TITLE LIST DISPLAY
From: NPS Digital Library
Term(s) Searched: Somerset Street and Massachusetts and BOSTON
Records Displayed: 1 to 15 of 16

Go back to: **Revise Search**

Sort By: **Title** | **Relevancy** | **Modified**

- **Arlington Street Church** *[Image]* 7%
- **Bennington Street Burying Ground** *[Image]* 7%
- **Building at 138--142 Portland Street** *[Image]* 7%
- **Charles Street African Methodist Episcopal Church** *[Image]* 7%
- **Congress Street Fire Station** *[Image]* 7%
- **Fenway-Boylston Street District** *[Image]* 7%
- **House at 1 Bay Street** *[Image]* 7%
- **House at 17 Cranston Street** *[Image]* 7%
- **Moreland Street Historic District** *[Image]* 7%
- **Morton Street, Metropolitan Park System of Greater Boston** *[Image]* 7%
- **Park Street District** *[Image]* 7%
- **Phipps Street Burying Ground** *[Image]* 7%
- **Tremont Street Subway** *[Image]* 7%
- **Tremont Street Subway** *[Image]* 7%
- **Washington Street Theatre District** *[Image]* 7%

Prev | 1 2 | Next

nps.gov

National Park Service
U.S. Department of the Interior

National Register of Historic Places

HOME
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DOWNLOAD CENTER
ABOUT
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HELP

Contact Us

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History & Culture
Nature & Science
Education & Interpretation

TITLE LIST DISPLAY

From: NPS Digital Library
Term(s) Searched: Somerset Street and Massachusetts and BOSTON
Records Displayed: 16 to 16 of 16

Go back to: **Revise Search**

Sort By: **Title** | **Relevancy** | **Modified**

- **West Street District** *[Image]* 7%

Prev | 1 2 | Next

Massachusetts Historical Commission

William Francis Galvin, Secretary of the Commonwealth

Massachusetts Cultural Resource Information System

MACRIS

Scanned forms and photos now available for selected towns!

The Massachusetts Cultural Resource Information System (MACRIS) allows you to search the Massachusetts Historical Commission database for information on historic properties and areas in the Commonwealth.

Users of the database should keep in mind that it does not include information on all historic properties and areas in Massachusetts, nor does it reflect all the information on file on historic properties and areas at the Massachusetts Historical Commission.

Click here to begin your search of the MACRIS database.




Home | Search | Index | Feedback | Contact

Massachusetts Cultural Resource Information System
MACRIS

MHC Home | MACRIS Home

Results

Get Results in Report Format
PDF Spreadsheet

Below are the results of your search, using the following search criteria:
Town(s): Boston
Street No: 20
Street Name: Somerset

For more information about this page and how to use it, click here

Inv. No.	Property Name	Street	Town
BOS.1980	Metropolitan District Commission Building	20 Somerset St	Boston

1 Properties Found

New Search | New Search – Same Town(s) | Previous

MHC Home | MACRIS Home

Massachusetts Cultural Resource Information System
MACRIS

Inventory No:	BOS.1980 INV
Historic Name:	Metropolitan District Commission Building
Common Name:	
Address:	20 Somerset St
City/Town:	Boston
Village/Neighborhood:	Central Business District; Government Center
Local No:	16-14; 0302782000
Year Constructed:	1932
Architect(s):	Densmore, LeClear and Robbins
Architectural Style(s):	Classical Revival
Use(s):	Abandoned or Vacant; Business Office; Other Governmental or Civic; Undetermined
Significance:	Architecture; Politics Government
Area(s):	
Designation(s):	

New Search Previous

MHC Home | MACRIS Home

Massachusetts Cultural Resource Information System
Scanned Record Cover Page

Inventory No:	BOS.1980
Historic Name:	Metropolitan District Commission Building
Common Name:	
Address:	20 Somerset St
City/Town:	Boston
Village/Neighborhood:	Central Business District; Government Center
Local No:	16-14; 0302782000
Year Constructed:	
Architect(s):	Densmore, LeClear and Robbins
Architectural Style(s):	Classical Revival
Use(s):	Abandoned or Vacant; Business Office; Other Governmental or Civic; Undetermined
Significance:	Architecture; Politics Government
Area(s):	
Designation(s):	

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

EOS. 1980

FORM B - BUILDING

Area	Form no.
	16-14

MASSACHUSETTS HISTORICAL COMMISSION
80 Boylston Street, Boston, MA 02116

Town Boston

Address 20 Somerset Street

Historic Name Metropolitan District Commission Headquarters Bldg.

Use: Original Administrative Offices

Present Administrative Offices

Ownership: ☐ Private individual
Private organization

Public Met. District Commission

Original owner MDC

SKETCH MAP

Draw map showing property's location in relation to nearest cross streets and other buildings or geographical features. Indicate north.

N

MDC Headquarters

Recorded by Jane Carolan

Organization Louis Berger & Associates, Inc.

Date May 1985

DESCRIPTION:

Date 1930

Source MDC Annual Report 1930: 2

Style Classical Revival

Architect Densmore, LeClear & Robbins

Exterior wall fabric brick w/stone trim

Outbuildings

Major alterations (with dates)

Moved Date

Approx. acreage 1/4 acre

Setting urban

(Staple additional sheets here)

ARCHITECTURAL SIGNIFICANCE (describe important architectural features and evaluate in terms of other buildings within community)

This is a nine-story, rectangular shaped office building with the facade on the short axis. The building, of brick on a stone base, is in a classical revival style with a "raised basement" of stone with arched windows and keystone surrounds (first floor) and a brick level with symmetrically arranged three part multi-paned windows and quions (second floor) separated from the mid-section of the building by a molded stone belt course. Floors 3 - 7 form the central portion of the building and are rather simple with single casement windows on the outside bays and paired casement windows on the inside. Raised brick piers separate and define the interior bays. Outside bay windows on the 7th floor are topped with arched stone pediments and a belt course above the window runs the length of the interior bays. Another belt course (cont.)

HISTORICAL SIGNIFICANCE (explain the role owners played in local or state history and how the building relates to the development of the community)

Built by the MDC as "the office building for the Metropolitan District activities" (Metropolitan District Commission Annual Report 1930: 2) The building houses MDC Water, Park, Police and Sewerage Divisions. It also held the office of the Metropolitan District Water Supply Commission on the 9th floor.

BIBLIOGRAPHY and/or REFERENCES

Metropolitan District Commission Annual Report, 1930: 48

BOS.1960

INVENTORY FORM CONTINUATION SHEET

MASSACHUSETTS HISTORICAL COMMISSION
Office of the Secretary, Boston

Community: Boston	Form No:
Property Name: MDC Administration Bldg.	

Indicate each item on inventory form which is being continued below.

ARCHITECTURAL SIGNFICANCE:

above this marks the beginning of the attic level which consists of the 8th and 9th floor which has an identical window arrangement to that of the mid-section. The building is topped with a brick parapet with concrete coping and a brick pediment on the facade. The entrance is arched with double brass and glass doors and a fanlight which leads to a circular enclosure for revolving doors (now removed). The small lobby, with a marble floor and incised brass panels contains Art Deco motifs and a vaulted ceiling. Another pair of double doors leads to the elevator lobby and offices which are off the lobby. Some of the floors (8-9) have been changed very little since the building was constructed, while others (5-6) which receive the most public traffic, have been modernized. Constructed to fireproof codes of 1929, the structure was built with concrete walls, floors and stairs, and metal fire doors. The building contains 45,000 square feet of space on nine floors and a basement.

Staple to Inventory form at bottom

BOSTON LANDMARKS COMMISSION Building Information Form Form No. ___ Area CBD

ADDRESS 20 Somerset St. COR. _____

NAME Metropolitan District Commission
present original (same)

MAP No. 25N/12E SUB AREA Gov. Ctr.

DATE 1930 MDC Annual Report 1930: 2
source

ARCHITECT Densmore, LeClear & Robbins/MDC Annual Report
source 1930: 2

BUILDER _____
source

OWNER Metropolitan District Commission (original &
original present present owner)

PHOTOGRAPHS 3 3/2 * 80

_____

TYPE (residential) single double row 2-fam. 3-deck ten apt.
(non-residential) MDC offices

NO. OF STORIES (1st to cornice) 9 plus _____

ROOF flat cupola _____ dormers _____

MATERIALS (Frame) clapboards shingles stucco asphalt asbestos alum/vinyl
(Other) (brick) red (stone) granite concrete iron/steel/alum.

BRIEF DESCRIPTION Freestanding 5 X 6 bay Georgian Revival government office building. Granite base with Gibbsian surrounds at semi-circular arched window openings. Center entrance on Somerset with decorative metal surround, ~~and~~ leaded glass transom and bronze eagle. Plaque with bldg. name. Cornice above 2nd floor followed by 5-story shaft of continuous brick piers and recessed brick spandrals inset w/ black glazed headers in center bays. Simple stone cornice, brick parapet. Triangular pediment on one side facade dec. with stone seal

EXTERIOR ALTERATION (minor) moderate drastic

CONDITION (good) fair poor LOT AREA 7,929 sq. feet

NOTEWORTHY SITE CHARACTERISTICS Sloping site.

_____

SIGNIFICANCE (cont'd on reverse)

Generally intact example of its style built to house the Metropolitan District Commission offices at floors 5-9 as well as the following other state offices: Board of Probation, Board of Tax Appeals, Dept.of Conservation, Division of Forestry, Division of Fisheries and Game, Metropolitan Planning Division, and others.[1]

(V) PF (June, 1980) (mt)

Moved; date if known_____

Themes (check as many as applicable)

Aboriginal	____	Conservation	____	Recreation	____
Agricultural	____	Education	____	Religion	____
Architectural	____	Exploration/ settlement	____	Science/ invention	____
The Arts	____	Industry	____	Social/ humanitarian	____
Commerce	____	Military	____	Transportation	____
Communication	____	Political	____		
Community/ development	____				

Significance (include explanation of themes checked above)

Preservation Consideration (accessibility, re-use possibilities, capacity for public use and enjoyment, protection, utilities, context)

Bibliography and/or references (such as local histories, deeds, assessor's records, early maps, etc.)

1. See 1932 Boston City Directory for complete listing.

EXISTING STATE REGISTER DESIGNATIONS

DESIG CODE	DATE	NAME
none		

MAJOR CHANGES OR CORRECTIONS TO PAGE 1 BASE INFORMATION

Assessors Parcel ID: 0302782000
Assessors Address: 20 Somerset Street

ADDITIONAL ARCHITECTURAL DESCRIPTION

ADDITIONAL HISTORICAL NARRATIVE

Originally established as Densmore & LeClear, Densmore, LeClear & Robbins was a respected Boston architectural and engineering firm in the early 20th century, in practice from the late 19th century through 1942. Edward Dana Densmore (1871-1925) served as the senior member of the firm. Born in Somerville, Mass., he attended Harvard University and studied mechanical engineering at MIT. Little information is available about his two partners, Gifford LeClear and Henry Chandler Robbins.

Densmore, LeClear & Robbins designed several noteworthy Boston buildings, including Beth Israel Hospital, the Youth's Companion Building (1915), Salada Tea Company Building (1919; BOS.2392), New England Telephone & Telegraph Building (1930; BOS.1575), the Park Square Office Building, and the Paine Furniture Building (1913), and many commercial/industrial projects in Cambridge, including the J.L. Hammett Co. Building at Kendall Square. Projects in Cambridge, Newton, Quincy, Somerville, Watertown, Williamstown, and Worcester included a number of buildings for the New England Telephone Company, as well as schools, hospitals, and warehouses. The firm also designed numerous buildings and infrastructure for the MDC at the Quabbin and Norumbega reservoirs in central and western Massachusetts.

BIBLIOGRAPHY and/or REFERENCES

Boston Landmarks Commission. "The Metropolitan District Commission (MDC) Headquarters Building Study Report." 6/16/2006.
Jenkins, Candace, and Wendy Frontiero. MHC Form B – Building for 300-316 Babcock Street, Boston. 2003.

SUPPLEMENTARY IMAGES and LOCATIONAL INFORMATION

Assessors Map

Ground floor detail – Somerset Street

Somerset Street (east) and north facades

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 W. Frontiero

The MDC Headquarters Building is significant for its association with its original and primary tenant, the Metropolitan District Commission, which was a pioneer in regional planning in the U.S., and for its association with the prominent Boston architectural firm of Densmore, LeClear, and Robbins. In 2006, the Massachusetts Historical Commission found 20 Somerset Street to be individually eligible for listing in the National Register under Criteria A and C at the local and state levels. In that same year, 20 Somerset Street was proposed for designation as a Boston Landmark; the petition was denied.

The building is also located within Government Center, a significant mid-twentieth century urban renewal project that in the 1960s transformed the old Scollay Square into a newly configured, mixed-use civic center. Government Center was one of the early projects of the Boston Redevelopment Authority, which was established in 1957 and headed by the visionary planner Edward J. Logue from 1960 to 1968. I.M. Pei & Associates of New York City designed the master plan (1961), which encompassed new city, state, and federal office buildings, privately-financed office and retail space, and the eight-acre city Hall Plaza, as well as the preservation of select historic properties. An array of architects with regional, national, and international reputations was associated with its execution. As part of the redevelopment of the area, approximately 60 acres of land were cleared of buildings, thousands of residents and hundreds of businesses were displaced, 22 streets were consolidated into six, and a new network of pedestrian open spaces, with integral streetscape elements and public art, was created.

In 2009, Government Center is not yet 50 years of age; its eligibility for listing on the National Register as a district should be reconsidered as significant components of its design achieve 50-year status. At this time, more research would be necessary to determine whether there presently exists a sufficient body of scholarly research and evaluation of Government Center and its role in the context of mid-20th century urban renewal in Boston, the state, and nationally, for it to meet the threshold of exceptional significance of National Register Criteria Consideration G, for properties less than 50 years of age.

BOS.1980

Original yellow form: Eligibility file
Copies: Inventory form
Town file(w/corresp.)
Macris
NR director ____

Community: Boston

MHC OPINION: ELIGIBILITY FOR NATIONAL REGISTER

Date Received: Date Due: Date Reviewed: May 3, 2004

Type: _X_Individual __District (Attach map indicating boundaries)

Name: MDC Building Inventory Form: BOS.1980

Address: 20 Somerset St., Boston

Requested by: MHC

Action: __Honor __ITC __Grant _X_R & C
Other:

Agency: DCAM Staff in charge of Review: BS

INDIVIDUAL PROPERTIES

_X_ Eligible
__ Eligible, also in district
__ Eligible only in district needed
___ Ineligible
__ More information needed

DISTRICTS

__ Eligible
__ Ineligible
_ More information

CRITERIA: _X_A __B _X_C __D

LEVEL: __Local _X_State ___National

STATEMENT OF SIGNIFICANCE by Brona Simon & Betsy Friedberg

The MDC Building is eligible for listing in the National Register of Historic Places under criteria A and C of the National Register at the state level of significance (36 CFR 60).

The building is significant for its associations with the Metropolitan District Commission, a state agency that managed the metropolitan district area state parks, reservations,

beaches, historic parkways, and other public facilities for over 100 years. This building was constructed in 1930-1932 to house the MDC and a number of other state agencies.

It is a fine example of Classical Revival architectural style designed by the significant Boston architectural firm of Densmore, LeClear & Robbins. The firm (originally Densmore & LeClear) was in practice from early in the 20th century to 1942. Known for their work in the Classical and Art Deco styles, the firm designed numerous public and institutional buildings statewide, including the Paine Furniture Building (1912) in Boston, the Waban Branch Library (1929) in Newton, and the New England Telephone building (1906) in Quincy, all of which are individually listed in the National Register of Historic Places. The firm also designed a number of buildings and structures associated with the Quabbin Reservoir.

The central entrance of the MDC building is on Somerset Street and includes important architectural detailing such as an arched entrance, the plaque with the building name, decorative metal surrounding lead glass transom and bronze eagle, arched windows and keystone surrounds. The first floor lobby has a marble floor, incised brass panels with Art Deco motifs, and a vaulted ceiling. Additional significant interior spaces may still be intact, upon further investigation of current conditions.

Appendix E
Endangered Species Act Documentation

MassDEP - Bureau of Waste Site Cleanup

Site Information: MCP Numerical Ranking System Map: 500 feet & 0.5 Mile Radii

20 SOMERSET STREET BOSTON, MA

NAD83 UTM Meters:
4691776mN , 330204mE (Zone: 19)
March 22, 2013

The information shown is the best available at the date of printing. However, it may be incomplete. The responsible party and LSP are ultimately repsponsible 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

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

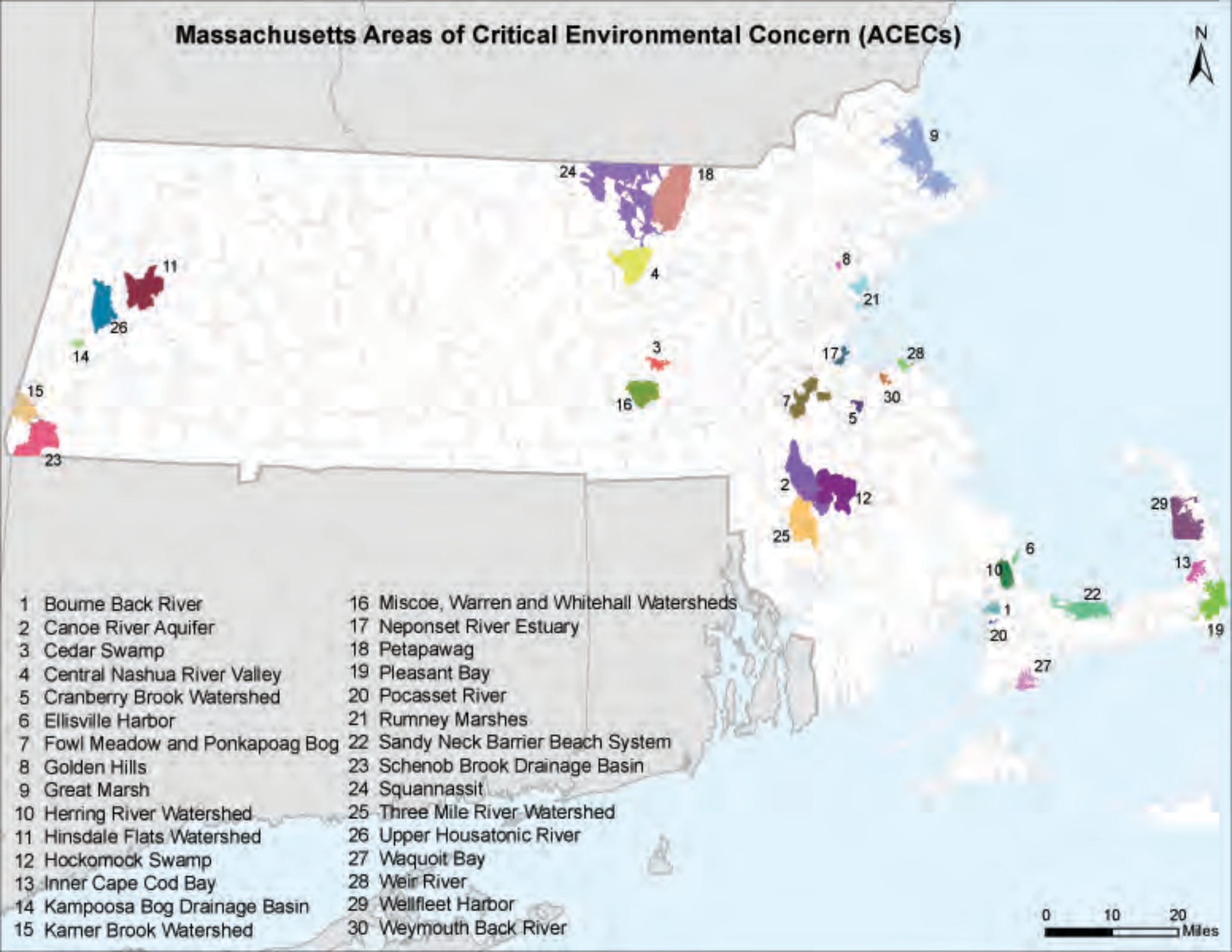
ACEC acreages above are based on MassGIS calculations and may differ from numbers originally presented in designation documents and other ACEC publications due to improvements in accuracy of GIS data and boundary clarifications. Listed acreages have been rounded to the nearest 50 or 10 depending on whether 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

.

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

FEDERALLY LISTED ENDANGERED AND THREATENED SPECIES IN MASSACHUSETTS

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

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

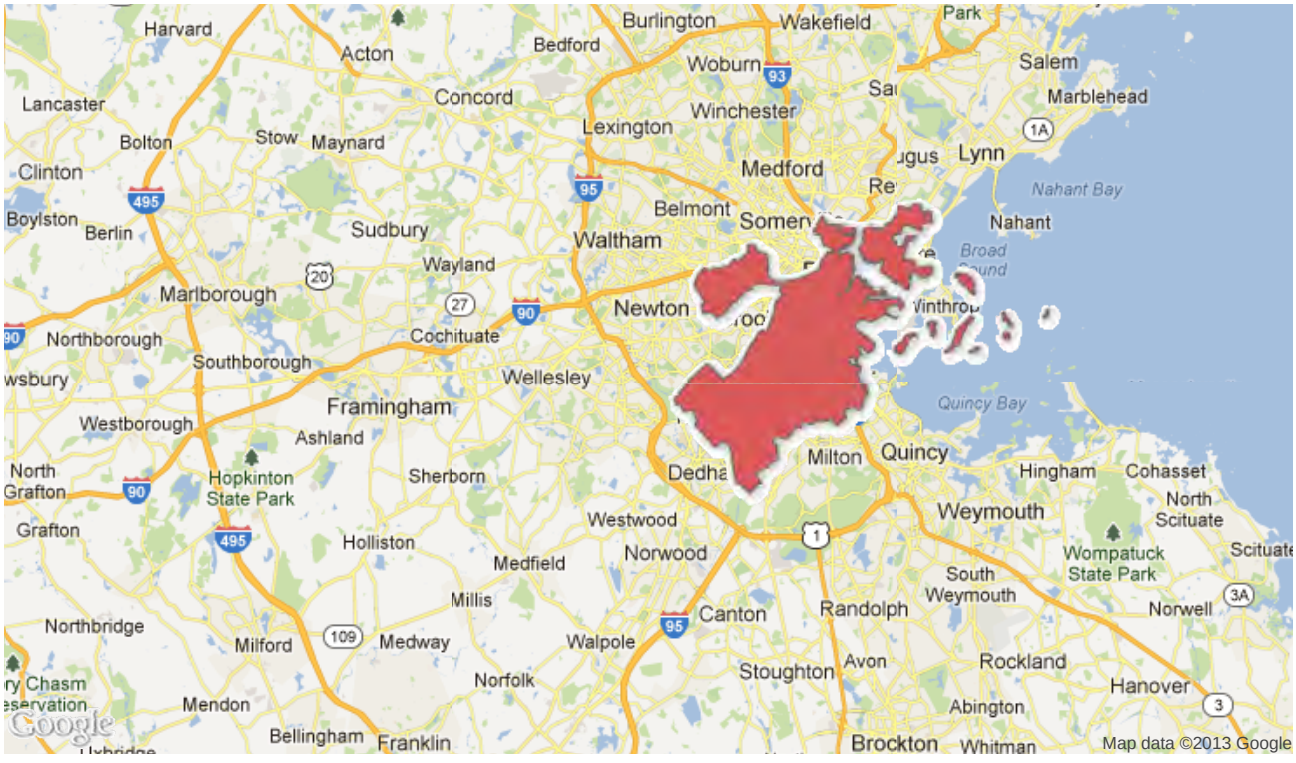
Revised 10/7/2011

Rare Species by Town

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.

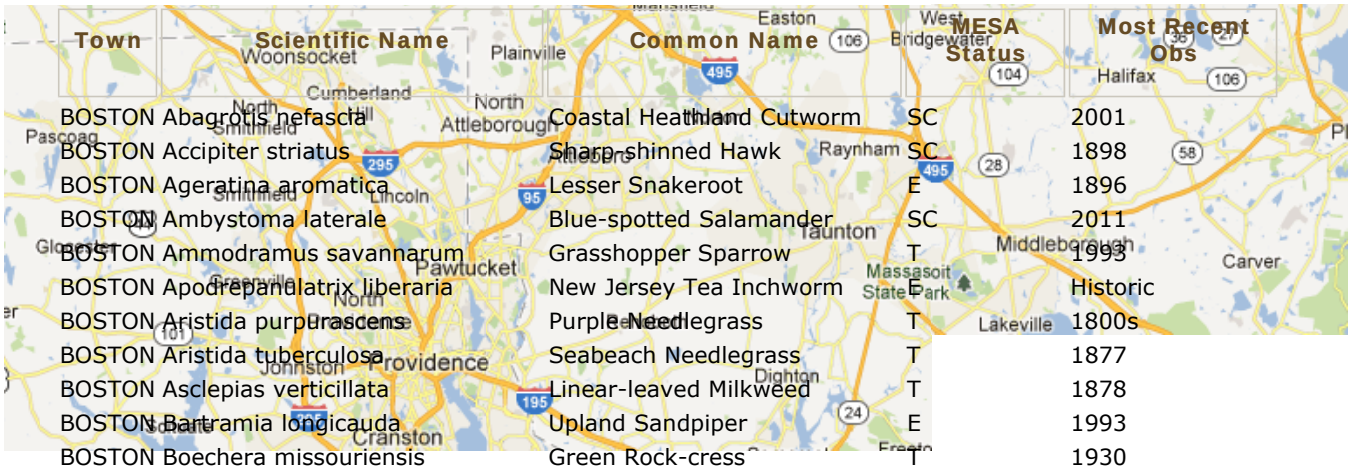
Town: BOSTON or Species (Common Name): or Species (Scientific Name):



Download data as xls or csv file.

Showing 1 to 46 of 46 entries Search:

First Previous 1 Next Last



Town	Scientific Name	Common Name	MESA Status	Most Recent Obs
BOSTON	Abagrotis nefascia	Coastal Heathland Cutworm	SC	2001
BOSTON	Accipiter striatus	Sharp-shinned Hawk	SC	1898
BOSTON	Ageratina aromatica	Lesser Snakeroot	E	1896
BOSTON	Ambystoma laterale	Blue-spotted Salamander	SC	2011
BOSTON	Ammodramus savannarum	Grasshopper Sparrow	T	1993
BOSTON	Apodrepanulatrix liberaria	New Jersey Tea Inchworm	E	Historic
BOSTON	Aristida purpurascens	Purple Needlegrass	T	1800s
BOSTON	Aristida tuberculosa	Seabeach Needlegrass	T	1877
BOSTON	Asclepias verticillata	Linear-leaved Milkweed	T	1878
BOSTON	Bartramia longicauda	Upland Sandpiper	E	1993
BOSTON	Boechera missouriensis	Green Rock-cress	T	1930
BOSTON	Carex striata	Walter's Sedge	E	Historic
BOSTON	Charadrius melodus	Piping Plover	T	2011
BOSTON	Cicindela duodecimguttata	Twelve-spotted Tiger Beetle	SC	1910
BOSTON	Cicindela purpurea	Cow Path Tiger Beetle	SC	1928
BOSTON	Cicindela rufiventris hentzii	Eastern Red-bellied Tiger Beetle	T	1927
BOSTON	Desmodium cuspidatum	Large-bracted Tick-trefoil	T	1896
BOSTON	Eriophorum gracile	Slender Cottongrass	T	1885
BOSTON	Falco peregrinus	Peregrine Falcon	E	2010
BOSTON	Gasterosteus aculeatus	Threespine Stickleback	T	2000
BOSTON	Gavia immer	Common Loon	SC	1824
BOSTON	Houstonia longifolia	Long-leaved Bluet	E	1918
BOSTON	Liatris scariosa var. novae-angliae	New England Blazing Star	SC	1933
BOSTON	Ligumia nasuta	Eastern Pondmussel	SC	1841
BOSTON	Linum medium var. texanum	Rigid Flax	T	1909
BOSTON	Lycopus rubellus	Gypsywort	E	1896
BOSTON	Metarranthis apiciaria	Barrens Metarranthis	E	1934
BOSTON	Myriophyllum alterniflorum	Alternate-flowered Water-milfoil	E	Historic
BOSTON	Ophioglossum pusillum	Adder's-tongue Fern	T	1884
BOSTON	Platanthera flava var. herbiola	Pale Green Orchis	T	1908
BOSTON	Pooecetes gramineus	Vesper Sparrow	T	1985
BOSTON	Pyrrhia aurantiago	Orange Sallow Moth	SC	1988
BOSTON	Ranunculus micranthus	Tiny-flowered Buttercup	E	1891
BOSTON	Rumex pallidus	Seabeach Dock	T	1984
BOSTON	Sanicula odorata	Long-styled Sanicle	T	Historic
BOSTON	Scaphiopus holbrookii	Eastern Spadefoot	T	1932
BOSTON	Scirpus longii	Long's Bulrush	T	1907
BOSTON	Setaria parviflora	Bristly Foxtail	SC	2001
BOSTON	Somatochlora linearis	Mocha Emerald	SC	2009
BOSTON	Sterna hirundo	Common Tern	SC	2010
BOSTON	Sternula antillarum	Least Tern	SC	2010
BOSTON	Suaeda calceoliformis	American Sea-blite	SC	1909
BOSTON	Terrapene carolina	Eastern Box Turtle	SC	1939
BOSTON	Tyto alba	Barn Owl	SC	1989
BOSTON	Vermivora chrysoptera	Golden-winged Warbler	E	Historic
BOSTON	Viola brittoniana	Britton's Violet	T	1909

Show 100 entries

Hide Additional Info

Status

- E = Endangered • T = Threatened • SC = Special Concern

Most Recent Observation

This field represents the most recent observation of that species in a town. However, because they are rare, many MESA-listed species are difficult to detect even when they are present. Natural Heritage does not have the resources to be able to conduct methodical species surveys in each town on a regular basis. Therefore, the fact that the 'Most Recent Observation' recorded for a species may be several years old should not be interpreted as meaning that the species no longer occurs in a town. However, Natural Heritage regards records older than twenty-five years historic.

For more information about a particular species, view the list of Natural Heritage Fact Sheets.

Massachusetts Division of Fisheries and Wildlife, 1 Rabbit Hill Rd, Westborough, MA 01581
Tel: (508) 389-6300; Fax: (508) 389-7890
Natural Heritage & Endangered Species Program Tel: (508) 389-6360; Fax: (508) 389-7891

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 7, 2013

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)

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 Mr. Brett Hillman 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 F
Laboratory Data Reports

ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220 www.alphalab.com

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

Client: Haley & Aldrich, Inc.
Address: 465 Medford Street, Suite 2200
Boston, MA 02129-1400
Attn: Mr. Steve Provencal
Project Number: 32206-000
Site: SUFFOLK UNIVERSITY

Laboratory Job Number: L0515076
Date Received: 09-DEC-2005
Date Reported: 14-DEC-2005
Delivery Method: Alpha

The following questions pertain only to MCP Analytical Methods

An affirmative response to questions A,B,C & D is required for "Presumptive Certainty" status

A. Were all samples received by the laboratory in a condition consistent with those described on their Chain-of-Custody documentation for the data set?	YES
B. Were all QA/QC procedures required for the specified analytical method(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	YES
C. Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in section 2.0 of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	YES
D. **VPH and EPH methods only:** Was the VPH or EPH method run without significant modifications, as specified in Section 11.3?	YES

A response to questions E and F is required for "Presumptive Certainty" status

E. Were all QC performance standards and recommendations for the specified method(s) achieved?	NO
F. Were results for all analyte-list compounds/elements for the specified method(s) reported?	NO

Any answers of NO to the above questions are addressed in the case narrative.

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

Authorized by: Douglas Sheehy
Technical Director

Laboratory Job Number: L0515076
Date Reported: 14-DEC-2005

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0515076-01	B2	

ALPHA ANALYTICAL LABORATORIES
NARRATIVE REPORT

Laboratory Job Number: L0515076

Report Submission

In reference to question F:

At the client's request, all submitted samples were not analyzed for the full MCP list of compounds specified for the Method.

EPH

WG223637:

Extraction method 3510C

The surrogate percent recovery for 1-chloro-octadecane (12%) on -01 is below the acceptance criteria for the method possibly due to the matrix of the sample. The sample was re-extracted and re-analyzed and confirms possible matrix interference. The difference in the analytical results is attributed to non-homogeneity between the two ambers.

Volatile Organics

In reference to question E:

The WG223795-2 LCSD has a low recovery for dichlorodifluoromethane (67%), a difficult analyte.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0515076-01
B2
Sample Matrix: WATER

Date Collected: 09-DEC-2005 11:00
Date Received : 09-DEC-2005
Date Reported : 14-DEC-2005

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 2-Amber,4-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B				60 8260B		1213 18:16	BT
Methylene chloride	ND	ug/l	5.0				
1,1-Dichloroethane	ND	ug/l	0.75				
Chloroform	ND	ug/l	0.75				
Carbon tetrachloride	ND	ug/l	0.50				
1,2-Dichloropropane	ND	ug/l	1.8				
Dibromochloromethane	ND	ug/l	0.50				
1,1,2-Trichloroethane	ND	ug/l	0.75				
Tetrachloroethene	ND	ug/l	0.50				
Chlorobenzene	ND	ug/l	0.50				
Trichlorofluoromethane	ND	ug/l	2.5				
1,2-Dichloroethane	ND	ug/l	0.50				
1,1,1-Trichloroethane	ND	ug/l	0.50				
Bromodichloromethane	ND	ug/l	0.50				
trans-1,3-Dichloropropene	ND	ug/l	0.50				
cis-1,3-Dichloropropene	ND	ug/l	0.50				
1,1-Dichloropropene	ND	ug/l	2.5				
Bromoform	ND	ug/l	2.0				
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50				
Benzene	ND	ug/l	0.50				
Toluene	ND	ug/l	0.75				
Ethylbenzene	ND	ug/l	0.50				
Chloromethane	ND	ug/l	2.5				
Bromomethane	ND	ug/l	1.0				
Vinyl chloride	ND	ug/l	1.0				
Chloroethane	ND	ug/l	1.0				
1,1-Dichloroethene	ND	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.75				
Trichloroethene	ND	ug/l	0.50				
1,2-Dichlorobenzene	ND	ug/l	2.5				
1,3-Dichlorobenzene	ND	ug/l	2.5				
1,4-Dichlorobenzene	ND	ug/l	2.5				
Methyl tert butyl ether	ND	ug/l	1.0				
p/m-Xylene	ND	ug/l	1.0				
o-Xylene	ND	ug/l	1.0				
cis-1,2-Dichloroethene	ND	ug/l	0.50				
Dibromomethane	ND	ug/l	5.0				
1,2,3-Trichloropropane	ND	ug/l	5.0				
Styrene	ND	ug/l	1.0				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0515076-01
B2

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		1213 18:16	BT
Dichlorodifluoromethane	ND	ug/l	5.0				
Acetone	24.	ug/l	5.0				
Carbon disulfide	ND	ug/l	5.0				
2-Butanone	ND	ug/l	5.0				
4-Methyl-2-pentanone	ND	ug/l	5.0				
2-Hexanone	ND	ug/l	5.0				
Bromochloromethane	ND	ug/l	2.5				
Tetrahydrofuran	ND	ug/l	10.				
2,2-Dichloropropane	ND	ug/l	2.5				
1,2-Dibromoethane	ND	ug/l	2.0				
1,3-Dichloropropane	ND	ug/l	2.5				
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50				
Bromobenzene	ND	ug/l	2.5				
n-Butylbenzene	ND	ug/l	0.50				
sec-Butylbenzene	ND	ug/l	0.50				
tert-Butylbenzene	ND	ug/l	2.5				
o-Chlorotoluene	ND	ug/l	2.5				
p-Chlorotoluene	ND	ug/l	2.5				
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	1.0				
Isopropylbenzene	ND	ug/l	0.50				
p-Isopropyltoluene	ND	ug/l	0.50				
Naphthalene	ND	ug/l	2.5				
n-Propylbenzene	ND	ug/l	0.50				
1,2,3-Trichlorobenzene	ND	ug/l	2.5				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				
1,3,5-Trimethylbenzene	ND	ug/l	2.5				
1,2,4-Trimethylbenzene	ND	ug/l	2.5				
Ethyl ether	ND	ug/l	2.5				
Isopropyl Ether	ND	ug/l	2.0				
Ethyl-Tert-Butyl-Ether	ND	ug/l	2.0				
Tertiary-Amyl Methyl Ether	ND	ug/l	2.0				
1,4-Dioxane	ND	ug/l	250				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/l	10.				

Surrogate(s)	Recovery		QC Criteria
1,2-Dichloroethane-d4	115.	%	70-130
Toluene-d8	99.0	%	70-130
4-Bromofluorobenzene	104.	%	70-130
Dibromofluoromethane	109.	%	70-130

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0515076-01
B2

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Petroleum Hydrocarbons				59 VPH-04-1.1		1212 17:06	TT

Quality Control Information

Condition of sample received: Satisfactory
Aqueous preservative: Laboratory Provided Preserved Container
Sample temperature upon receipt: Received on Ice
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
VPH Standard analysis reports only range data with no adjustments.
The normal acceptance range for the surrogate, 2,5-Dibromotoluene, is 70-130%.

C5-C8 Aliphatics, Unadjusted	ND	ug/l	50.0
C9-C12 Aliphatics, Unadjusted	ND	ug/l	50.0
C9-C10 Aromatics	ND	ug/l	50.0
C5-C8 Aliphatics, Adjusted	ND	ug/l	50.0
C9-C12 Aliphatics, Adjusted	ND	ug/l	50.0

Surrogate(s)	Recovery		QC Criteria
2,5-Dibromotoluene-PID	86.0	%	70-130
2,5-Dibromotoluene-FID	88.0	%	70-130

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0515076-01
B2

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Extractable Petroleum Hydrocarbons				61 EPH-04-1	1212 10:30	1213 02:34	BN

Quality Control Information

Condition of sample received: Satisfactory
Aqueous preservative: Laboratory Provided Preserved Container
Sample temperature upon receipt: Received on Ice
Sample extraction method: Extracted Per the Method
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? NO
1. One or more of the extraction surrogate recoveries were less than 40%.
Were significant modifications made to the method as specified in Sect 11.3? NO
The normal acceptance range for the extraction surrogates, Chloro-octadecane and o-Terphenyl, is 40-140%.
The normal acceptance range for the fractionation surrogates, 2-Fluorobiphenyl and 2-Bromonaphthalene, is 40-140%.

C9-C18 Aliphatics	363.	ug/l	132.
C19-C36 Aliphatics	794.	ug/l	132.
C11-C22 Aromatics, Unadjusted	162.	ug/l	132.
C11-C22 Aromatics, Adjusted	162.	ug/l	132.

Surrogate(s)	Recovery		QC Criteria
Chloro-Octadecane	12.0	%	40-140
o-Terphenyl	40.0	%	40-140
2-Fluorobiphenyl	68.0	%	40-140
2-Bromonaphthalene	68.0	%	40-140

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0515076-01
B2

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Extractable Petroleum Hydrocarbons				61 EPH-04-1	1213 07:45	1213 17:06	BN

Quality Control Information

Condition of sample received: Satisfactory
Aqueous preservative: Laboratory Provided Preserved Container
Sample temperature upon receipt: Received on Ice
Sample extraction method: Extracted Per the Method
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? NO
1. One or more of the extraction surrogate recoveries were less than 40%.
Were significant modifications made to the method as specified in Sect 11.3? NO
The normal acceptance range for the extraction surrogates, Chloro-octadecane and o-Terphenyl, is 40-140%.
The normal acceptance range for the fractionation surrogates, 2-Fluorobiphenyl and 2-Bromonaphthalene, is 40-140%.

C9-C18 Aliphatics	ND	ug/l	149.
C19-C36 Aliphatics	ND	ug/l	149.
C11-C22 Aromatics, Unadjusted	ND	ug/l	149.
C11-C22 Aromatics, Adjusted	ND	ug/l	149.

Surrogate(s)	Recovery		QC Criteria
Chloro-Octadecane	33.0	%	40-140
o-Terphenyl	67.0	%	40-140
2-Fluorobiphenyl	80.0	%	40-140
2-Bromonaphthalene	82.0	%	40-140

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0515076

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Volatile Organics by MCP 8260B for sample(s) 01 (WG223795-1, WG223795-2)					
Methylene chloride	100	97	3	25	70-130
1,1-Dichloroethane	102	103	1	25	70-130
Chloroform	104	102	2	25	70-130
Carbon tetrachloride	100	102	2	25	70-130
1,2-Dichloropropane	102	102	0	25	70-130
Dibromochloromethane	94	98	4	25	70-130
1,1,2-Trichloroethane	100	98	2	25	70-130
Tetrachloroethene	106	104	2	25	70-130
Chlorobenzene	105	103	2	25	70-130
Trichlorofluoromethane	116	110	5	25	70-130
1,2-Dichloroethane	108	110	2	25	70-130
1,1,1-Trichloroethane	102	103	1	25	70-130
Bromodichloromethane	98	99	1	25	70-130
trans-1,3-Dichloropropene	104	102	2	25	70-130
cis-1,3-Dichloropropene	97	98	1	25	70-130
1,1-Dichloropropene	110	107	3	25	70-130
Bromoform	94	91	3	50	70-130
1,1,2,2-Tetrachloroethane	96	96	0	25	70-130
Benzene	105	102	3	25	70-130
Toluene	106	103	3	25	70-130
Ethylbenzene	108	106	2	25	70-130
Chloromethane	94	87	8	50	70-130
Bromomethane	90	82	9	50	70-130
Vinyl chloride	100	96	4	25	70-130
Chloroethane	108	101	7	25	70-130
1,1-Dichloroethene	101	103	2	25	70-130
trans-1,2-Dichloroethene	107	96	11	25	70-130
Trichloroethene	103	98	5	25	70-130
1,2-Dichlorobenzene	100	96	4	25	70-130
1,3-Dichlorobenzene	103	98	5	25	70-130
1,4-Dichlorobenzene	99	97	2	25	70-130
Methyl tert butyl ether	97	95	2	25	70-130
p/m-Xylene	109	106	3	25	70-130
o-Xylene	107	104	3	25	70-130
cis-1,2-Dichloroethene	106	109	3	25	70-130
Dibromomethane	109	110	1	25	70-130
1,2,3-Trichloropropane	113	110	3	25	70-130
Styrene	108	106	2	25	70-130
Dichlorodifluoromethane	70	67	4	50	70-130
Acetone	122	119	2	50	70-130
Carbon disulfide	75	71	5	25	70-130
2-Butanone	105	101	4	50	70-130
4-Methyl-2-pentanone	98	96	2	50	70-130
2-Hexanone	109	106	3	50	70-130
Bromochloromethane	106	100	6	25	70-130
Tetrahydrofuran	96	92	4	25	70-130
2,2-Dichloropropane	104	101	3	50	70-130
1,2-Dibromoethane	100	99	1	25	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0515076

Continued

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Volatile Organics by MCP 8260B for sample(s) 01 (WG223795-1, WG223795-2)					
1,3-Dichloropropane	103	104	1	25	70-130
1,1,1,2-Tetrachloroethane	100	102	2	25	70-130
Bromobenzene	98	96	2	25	70-130
n-Butylbenzene	104	99	5	25	70-130
sec-Butylbenzene	106	101	5	25	70-130
tert-Butylbenzene	111	107	4	25	70-130
o-Chlorotoluene	103	102	1	25	70-130
p-Chlorotoluene	103	100	3	25	70-130
1,2-Dibromo-3-chloropropane	94	86	9	50	70-130
Hexachlorobutadiene	108	97	11	25	70-130
Isopropylbenzene	116	116	0	25	70-130
p-Isopropyltoluene	112	108	4	25	70-130
Naphthalene	102	97	5	25	70-130
n-Propylbenzene	104	102	2	25	70-130
1,2,3-Trichlorobenzene	108	97	11	25	70-130
1,2,4-Trichlorobenzene	105	96	9	25	70-130
1,3,5-Trimethylbenzene	106	104	2	25	70-130
1,2,4-Trimethylbenzene	103	101	2	25	70-130
Ethyl ether	92	98	6	25	70-130
Isopropyl Ether	104	101	3	25	70-130
Ethyl-Tert-Butyl-Ether	102	101	1	25	70-130
Tertiary-Amyl Methyl Ether	97	96	1	25	70-130
1,4-Dioxane	114	108	5	50	70-130
Surrogate(s)					
1,2-Dichloroethane-d4	105	108	3		70-130
Toluene-d8	101	100	1		70-130
4-Bromofluorobenzene	98	98	0		70-130
Dibromofluoromethane	102	104	2		70-130
Volatile Petroleum Hydrocarbons for sample(s) 01 (WG223463-1, WG223463-2)					
C5-C8 Aliphatics	98	108	9	25	70-130
C9-C12 Aliphatics	75	79	6	25	70-130
C9-C10 Aromatics	77	86	11	25	70-130
Benzene	82	94	13	25	70-130
Toluene	80	90	13	25	70-130
Ethylbenzene	79	89	12	25	70-130
p/m-Xylene	79	89	12	25	70-130
o-Xylene	78	89	12	25	70-130
Methyl tert butyl ether	76	88	14	25	70-130
Naphthalene	81	90	11	25	70-130
Surrogate(s)					
2,5-Dibromotoluene-PID	80	89	11		70-130
2,5-Dibromotoluene-FID	83	95	13		70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0515076

Continued

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Extractable Petroleum Hydrocarbons for sample(s) 01 (WG223637-2, WG223637-3)					
C9-C18 Aliphatics	54	53	2	25	40-140
C19-C36 Aliphatics	69	65	6	25	40-140
C11-C22 Aromatics	69	71	3	25	40-140
Naphthalene	64	64	0	25	40-140
2-Methylnaphthalene	62	64	3	25	40-140
Acenaphthylene	66	68	3	25	40-140
Acenaphthene	66	68	3	25	40-140
Fluorene	69	71	3	25	40-140
Phenanthrene	72	74	3	25	40-140
Anthracene	74	76	3	25	40-140
Fluoranthene	71	74	4	25	40-140
Pyrene	71	74	4	25	40-140
Benzo(a)anthracene	69	72	4	25	40-140
Chrysene	83	86	4	25	40-140
Benzo(b)fluoranthene	68	70	3	25	40-140
Benzo(k)fluoranthene	69	71	3	25	40-140
Benzo(a)pyrene	67	69	3	25	40-140
Indeno(1,2,3-cd)Pyrene	65	67	3	25	40-140
Dibenzo(a,h)anthracene	67	69	3	25	40-140
Benzo(ghi)perylene	66	68	3	25	40-140
Nonane (C9)	42	42	0	25	30-140
Decane (C10)	50	50	0	25	40-140
Dodecane (C12)	54	54	0	25	40-140
Tetradecane (C14)	56	56	0	25	40-140
Hexadecane (C16)	60	58	3	25	40-140
Octadecane (C18)	63	60	5	25	40-140
Nonadecane (C19)	65	62	5	25	40-140
Eicosane (C20)	67	63	6	25	40-140
Docosane (C22)	69	65	6	25	40-140
Tetracosane (C24)	69	65	6	25	40-140
Hexacosane (C26)	70	66	6	25	40-140
Octacosane (C28)	70	66	6	25	40-140
Triacontane (C30)	71	66	7	25	40-140
Hexatriacontane (C36)	73	68	7	25	40-140
Surrogate(s)					
Chloro-Octadecane	53	52	2		40-140
o-Terphenyl	74	77	4		40-140
2-Fluorobiphenyl	76	75	1		40-140
2-Bromonaphthalene	77	75	3		40-140
% Naphthalene Breakthrough	0	0	NC		
% 2-Methylnaphthalene Breakthrough	0	0	NC		

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0515076

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01 (WG223795-3)							
Volatile Organics by MCP 8260B				60 8260B		1213 15:52	BT
Methylene chloride	ND	ug/l	5.0				
1,1-Dichloroethane	ND	ug/l	0.75				
Chloroform	ND	ug/l	0.75				
Carbon tetrachloride	ND	ug/l	0.50				
1,2-Dichloropropane	ND	ug/l	1.8				
Dibromochloromethane	ND	ug/l	0.50				
1,1,2-Trichloroethane	ND	ug/l	0.75				
Tetrachloroethene	ND	ug/l	0.50				
Chlorobenzene	ND	ug/l	0.50				
Trichlorofluoromethane	ND	ug/l	2.5				
1,2-Dichloroethane	ND	ug/l	0.50				
1,1,1-Trichloroethane	ND	ug/l	0.50				
Bromodichloromethane	ND	ug/l	0.50				
trans-1,3-Dichloropropene	ND	ug/l	0.50				
cis-1,3-Dichloropropene	ND	ug/l	0.50				
1,1-Dichloropropene	ND	ug/l	2.5				
Bromoform	ND	ug/l	2.0				
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50				
Benzene	ND	ug/l	0.50				
Toluene	ND	ug/l	0.75				
Ethylbenzene	ND	ug/l	0.50				
Chloromethane	ND	ug/l	2.5				
Bromomethane	ND	ug/l	1.0				
Vinyl chloride	ND	ug/l	1.0				
Chloroethane	ND	ug/l	1.0				
1,1-Dichloroethene	ND	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.75				
Trichloroethene	ND	ug/l	0.50				
1,2-Dichlorobenzene	ND	ug/l	2.5				
1,3-Dichlorobenzene	ND	ug/l	2.5				
1,4-Dichlorobenzene	ND	ug/l	2.5				
Methyl tert butyl ether	ND	ug/l	1.0				
p/m-Xylene	ND	ug/l	1.0				
o-Xylene	ND	ug/l	1.0				
cis-1,2-Dichloroethene	ND	ug/l	0.50				
Dibromomethane	ND	ug/l	5.0				
1,2,3-Trichloropropane	ND	ug/l	5.0				
Styrene	ND	ug/l	1.0				
Dichlorodifluoromethane	ND	ug/l	5.0				
Acetone	ND	ug/l	5.0				
Carbon disulfide	ND	ug/l	5.0				
2-Butanone	ND	ug/l	5.0				
4-Methyl-2-pentanone	ND	ug/l	5.0				
2-Hexanone	ND	ug/l	5.0				
Bromochloromethane	ND	ug/l	2.5				
Tetrahydrofuran	ND	ug/l	10.				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0515076

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01 (WG223795-3)							
Volatile Organics by MCP 8260B cont'd				60 8260B		1213 15:52	BT
2,2-Dichloropropane	ND	ug/l	2.5				
1,2-Dibromoethane	ND	ug/l	2.0				
1,3-Dichloropropane	ND	ug/l	2.5				
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50				
Bromobenzene	ND	ug/l	2.5				
n-Butylbenzene	ND	ug/l	0.50				
sec-Butylbenzene	ND	ug/l	0.50				
tert-Butylbenzene	ND	ug/l	2.5				
o-Chlorotoluene	ND	ug/l	2.5				
p-Chlorotoluene	ND	ug/l	2.5				
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	1.0				
Isopropylbenzene	ND	ug/l	0.50				
p-Isopropyltoluene	ND	ug/l	0.50				
Naphthalene	ND	ug/l	2.5				
n-Propylbenzene	ND	ug/l	0.50				
1,2,3-Trichlorobenzene	ND	ug/l	2.5				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				
1,3,5-Trimethylbenzene	ND	ug/l	2.5				
1,2,4-Trimethylbenzene	ND	ug/l	2.5				
Ethyl ether	ND	ug/l	2.5				
Isopropyl Ether	ND	ug/l	2.0				
Ethyl-Tert-Butyl-Ether	ND	ug/l	2.0				
Tertiary-Amyl Methyl Ether	ND	ug/l	2.0				
1,4-Dioxane	ND	ug/l	250				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/l	10.				
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	108.	%	70-130				
Toluene-d8	100.	%	70-130				
4-Bromofluorobenzene	107.	%	70-130				
Dibromofluoromethane	103.	%	70-130				
Blank Analysis for sample(s) 01 (WG223463-4)							
Volatile Petroleum Hydrocarbons				59 VPH-04-1.1		1212 09:07	TT
C5-C8 Aliphatics, Unadjusted	ND	ug/l	50.0				
C9-C12 Aliphatics, Unadjusted	ND	ug/l	50.0				
C9-C10 Aromatics	ND	ug/l	50.0				
C5-C8 Aliphatics, Adjusted	ND	ug/l	50.0				
C9-C12 Aliphatics, Adjusted	ND	ug/l	50.0				
Surrogate(s)	Recovery		QC Criteria				
2,5-Dibromotoluene-PID	77.0	%	70-130				
2,5-Dibromotoluene-FID	83.0	%	70-130				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0515076

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01 (WG223637-1)							
Extractable Petroleum Hydrocarbons				61 EPH-04-1	1212 10:30	1213 00:23	BN
C9-C18 Aliphatics	ND	ug/l	100.				
C19-C36 Aliphatics	ND	ug/l	100.				
C11-C22 Aromatics, Unadjusted	ND	ug/l	100.				
C11-C22 Aromatics, Adjusted	ND	ug/l	100.				
Surrogate(s)	Recovery		QC Criteria				
Chloro-Octadecane	59.0	%	40-140				
o-Terphenyl	68.0	%	40-140				
2-Fluorobiphenyl	76.0	%	40-140				
2-Bromonaphthalene	75.0	%	40-140				

REFERENCES

59. Method for the Determination of Volatile Petroleum Hydrocarbons (VPH). Massachusetts Department of Environmental Protection, DEA/ORS/BWSC. May 2004, Revision 1.1.

60. Quality Assurance and Quality Control Requirements and Performance Standards for SW-846 Methods. MADEP BWSC. WSC-CAM-IIA (Revision 4), WSC-CAM-V C (Revision 2), WSC-CAM-IIIA (Revision 5). May 2004.

61. Method for the Determination of Extractable Petroleum Hydrocarbons (EPH). Massachusetts Department of Environmental Protection, DEA/ORS/BWSC. May 2004, Revision 1.1.

GLOSSARY OF TERMS AND SYMBOLS

REF	Reference number in which test method may be found.
METHOD	Method number by which analysis was performed.
ID	Initials of the analyst.
ND	Not detected in comparison to the reported detection limit.
NI	Not Ignitable.
ug/cart	Micrograms per Cartridge.

LIMITATION OF LIABILITIES

Alpha Analytical, Inc. 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, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. 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, Inc.

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

ALPHA ANALYTICAL LABORATORIES
LOGIN SPECIFIC INFORMATION

Laboratory Job Number: L0515076

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0515076-01A	Vial HCl preserved	A	NA	0.6 C	Y	Absent	MCP-8260-04
L0515076-01B	Vial HCl preserved	A	NA	0.6 C	Y	Absent	MCP-8260-04
L0515076-01C	Vial HCl preserved	A	NA	0.6 C	Y	Absent	VPH-04
L0515076-01D	Vial HCl preserved	A	NA	0.6 C	Y	Absent	VPH-04
L0515076-01E	Amber 1000ml HCl preserved	A	<2	0.6 C	Y	Absent	EPH-04
L0515076-01F	Amber 1000ml HCl preserved	A	<2	0.6 C	Y	Absent	EPH-04

Container Comments

Container ID	Comments

HALEY & ALDRICH

Haley & Aldrich, Inc.
465 Medford St.,
Suite 200,
Boston, MA 02129-1400

ALPHA Job # L0515076

CHAIN OF CUSTODY RECORD

Phone (617) 886-7400
Fax (617) 886-7600
Page 1 of 1

H&A FILE NO. 32206-970
PROJECT NAME SUFFOLK UNIVERSITY
H&A CONTACT S. PROVENCAL

LABORATORY ALPHA
ADDRESS
CONTACT

DELIVERY DATE 12/9/05
TURNAROUND TIME 3 DAY
PROJECT MANAGER K. JOHNSON

Sample No.	Date	Time	Depth	Type	Analysis Requested: VOA	ABNs PAH only	MCP Metals	Pesticides PCBs	VPH Carbon Ranges only	EPH Carbon Ranges only	TPH (specify)	TCLP (specify)	Reactivity Ignitability Corrosivity				Number of Containers	Comments (special instructions, precautions, additional method numbers, etc.)
B2	12/9	11:05	GRAB	L	X				X	X							6	Laboratory to use applicable DEP CAM methods, unless otherwise directed. VPH & CARBON RANGE EPH ONLY
																	6	

Sampled and Relinquished by
Sign
Print CRAIG TOSCANO
Firm H&A
Date 12/9/05 Time 1215

Received by
Sign
Print Desmond Crawford
Firm H&A
Date 12/9/05 Time 1215

Relinquished by
Sign
Print Desmond Crawford
Firm H&A
Date 12/9/05 Time 1740

Received by
Sign
Print
Firm
Date Time 1740

Relinquished by
Sign
Print
Firm
Date 12/9/05 Time 2045

Received by
Sign
Print
Firm
Date 12/9/05 Time 2045

LIQUID	VOA Vial	Amber Glass	Plastic Bottle	Preservative	Volume
	X	X	X	F	40
			F		
			IL		

SOLID	VOA Vial	Amber Glass	Clear Glass	Preservative	Volume

PRESERVATION KEY

A Sample chilled	C NaOH	E H_2SO_4	G Methanol
B Sample filtered	D HNO_3	F HCL	H Water/NaHSO4 (circle)

Sampling Comments

I Believe your seeing A polymer in the jar samples. A polymer was used during drilling to stabilize the open borehole from collapsing.

Evidence samples were tampered with? YES NO
If YES, please explain in section below.

Presumptive Certainty Data Package (Laboratory to use applicable DEP CAM methods)

If Presumptive Certainty Data Package is needed, initial all sections:

_____ The required minimum field QC samples, as designated in BWSC CAM-VII have been or will be collected, as appropriate, to meet the requirements of Presumptive Certainty.

_____ Matrix Spike (MS) samples for MCP Metals and/or Cyanide are included and identified herein.

_____ This Chain of Custody Record (specify) _____ includes _____ does not include samples defined as Drinking Water Samples.

_____ If this Chain of Custody Record identifies samples defined as Drinking Water Samples, Trip Blanks and Field Duplicates are included and identified and analysis of TICs are required, as appropriate. Laboratory should (specify if applicable) _____ analyze _____ hold for contingency testing the Drinking Water Field Duplicate and Drinking Water Trip Blank samples.

Required Reporting Limits and Data Quality Objectives

☐ RC-S1 ☐ S1 ☐ GW1
☐ RC-S2 ☐ S2 ☐ GW2
☐ RC-GW1 ☐ S3 ☐ GW3
☐ RC-GW2

WHITE - Laboratory **CANARY** - Project Manager **PINK** - Haley & Aldrich Laboratory **GOLDENROD** - Haley & Aldrich Contact

Form 3003

AUGUST 2003