UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 1
5 Post Office Square, Suite 100
BOSTON, MA 02109-3912

CERTIFIED MAIL RETURN RECEIPT REQUESTED

DEC 10 2014

Jamie Noon
Project Manager
John Moriarty & Associates
3 Church Street
Winchester, MA 01890

Re: Authorization to discharge under the Remediation General Permit (RGP) – MAG910000. Redevelopment and new building construction site at 30-40 Guest Street in Brighton, MA 02135, Suffolk County; Authorization # MAG 910650

Dear Mr. Noon:

Based on the review of your Notice of Intent (NOI) as a representative of the firm John Moriarty and Associates, Inc. on behalf of Boston Landing, LLC, for the site referenced above, the U.S. Environmental Protection Agency (EPA) hereby authorizes you, as the named Operator, to discharge in accordance with the provisions of the RGP at that site. Your authorization number is listed above.

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

Please note the enclosed checklist includes parameters that exceeded Appendix III limits. The checklist also includes other parameters for which your laboratory reports indicated there was insufficient sensitivity to detect these parameters at the minimum levels established in Appendix VI of the RGP.

Also, please note that the metals included on the checklist are dilution dependent pollutants and subject to limitations based on selected dilution ranges and technology-based ceiling limitations. For each parameter the dilution factor 66.0 for this site is within a dilution range greater than fifty to one hundred (>50-100), established in the RGP. (See the RGP Appendix IV for Massachusetts facilities). Therefore, the limits for cadmium of

10 ug/L, trivalent chromium of 1,710 ug/L, copper of 260 ug/L, lead of 66 ug/L, nickel of 1,451 ug/L, zinc of 1,480 ug/L and iron of 5,000 ug/L, are required to achieve permit compliance at your site.

Finally, please note the checklist of pollutants attached to this authorization is subject to a recertification if the operations at the site result in a discharge lasting longer than six months. A recertification can be submitted to EPA within six (6) to twelve (12) months of operations in accordance with the 2010 RGP regulations.

This EPA general permit and authorization to discharge will expire on September 9, 2015. You have reported this project will terminate on September 15, 2016. Please be aware you are required to reapply for coverage after the EPA expired permit has been reissued. The reissuance date will be posted on the RGP website as well as a date for your reapplication submittal. Also, regardless of your project termination date you are required to submit a Notice of Termination (NOT) to the attention of the contact person indicated below within 30 days of project completion.

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

Sincerely,

Thelma Murphy

Thelma Murphy, Chief
Storm Water and Construction
Permits Section

Enclosure

cc: Robert Kubit, MassDEP
Stephen Shea, BWSC

2010 Remediation General Permit
Summary of Monitoring Parameters[1]

NPDES Authorization Number:	**MAG910650**
Authorization Issued:	December, 2015
Facility/Site Name:	Redevelopment and New Building Construction
Facility/Site Address:	38-40 Guest Street, Brighton, MA 02135. Mailing Address: 20 Guest Street, Brighton, MA 02135
	Email address of owner: jhalliday@nbdevelopment.com
Legal Name of Operator:	John Moriarty & Associates
Operator contact name, title, and Address:	Jamie Noon, Project Manager 3 Church Street, Winchester, MA 01890
	Email: jnoon@jm-a.com
Estimated date of the site's Completion:	September 15, 2016
Category and Sub-Category:	Category III- Contaminated Construction Dewatering. Subcategory B. Known Contaminated Sites
RGP Termination Date:	September 10, 2015
Receiving Water:	Charles River

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

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

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

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

	Metal parameter	Total Recoverable MA/Metal Limit H [10] = 50 mg/l CaCO3, Units = ug/l [(11/12)] Freshwater Limits	Minimum level=ML	
	39. Antimony	5.6	ML	10
	40. Arsenic **	10	ML	20
√	41. Cadmium **	0.2	ML	10
√	42. Chromium III (trivalent) **	48.8	ML	15
	43. Chromium VI (hexavalent) **	11.4	ML	10
√	44. Copper **	5.2	ML	15
√	45. Lead **	1.3	ML	20
	46. Mercury **	0.9	ML	02
√	47. Nickel **	29	ML	20
	48. Selenium **	5	ML	20
	49. Silver	1.2	ML	10
√	50. Zinc **	66.6	ML	15
√	51. Iron	1,000	ML	20

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

Footnotes:

[1] Although the maximum values for TRC are 11ug/l and 7.5 ug/l for freshwater, and saltwater respectively, the compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI (i.e., Method 330.5, 20 ug/l).
[2] Limits for cyanide are based on EPA's water quality criteria expressed as micrograms per liter. There is currently no EPA approved test method for free cyanide. Therefore, total cyanide must be reported.
[3] Although the maximum values for cyanide are 5.2 ug/l and 1.0 ug/l for freshwater and saltwater, respectively, the compliance limits are equal to the minimum level (ML) of the Method 335.4 as listed in Appendix VI (i.e., 10 ug/l).
[4] BTEX = sum of Benzene, Toluene, Ethylbenzene, and total Xylenes.
[5] Naphthalene can be reported as both a purgeable (VOC) and extractable (SVOC) organic compound. If both VOC and SVOC are analyzed, the highest value must be used unless the QC criteria for one of the analyses is not met. In such cases, the value from the analysis meeting the QC criteria must be used.
[6] The sum of individual phthalate compounds(not including the #34, Bis (2-Ethylhexyl) Phthalate . The compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI.
Total values calculated for reporting on NOIs and discharge monitoring reports shall be calculated by adding the measured concentration of each constituent. If the measurement of a constituent is less than the ML, the permittee shall use a value of zero for that constituent. For each test, the permittee shall also attach the raw data for each constituent to the discharge monitoring report, including the minimum level and minimum detection level for the analysis.
[7] Although the maximum value for the individual PAH compounds is 0.0038 ug/l, the compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI.
[8] In the November 2002 WQC, EPA has revised the definition of Total PCBs for aquatic life as total PCBs is the sum of all homologue, all isomer, all congener, or all "Aroclor analyses."Total values calculated for reporting on NOIs and discharge monitoring reports shall be calculated by adding the measured concentration of each constituent. If the measure of a constituent is less than the ML, the permittee shall use a value of zero for that constituent. For each test, the permittee shall also attach the raw data for each constituent to the discharge monitoring report, including the minimum level and minimum detection level for the analysis.
[9]Although the maximum value for total PCBs is 0.000064 ug/l, the compliance limit is equal to the minimum level (ML) of the test method used as listed in Appendix VI (i.e., 0.5 ug/l for Method 608 or 0.00005 ug/l when Method 1668a is approved).
[10] Hardness. Cadmium, Chromium III, Copper, Lead, Nickel, Silver, and Zinc are Hardness Dependent.
[11] For a Dilution Factor (DF) from 1 to 5, metals limits are calculated using DF times the base limit for the metal. See Appendix IV. For example, iron limits are calculated using DF x 1,000ug/L (the iron base limit). Therefore DF is 1.5, the iron limit will be 1,500 ug/L; DF 2, then iron limit =1,000 x 2 =2,000 ug/L., etc. not to exceed the DF=5.
[12] Minimum Level (ML) is the lowest level at which the analytical system gives a recognizable signal and acceptable calibration point for the analyte. The ML represents the lowest concentration at which an analyte can be measured with a known level of confidence. The ML is calculated by multiplying the laboratory-determined method detection limit by 3.18 (see 40 CFR Part 136, Appendix B).
[13] pH sampling for compliance with permit limits may be performed using field methods as provided for in EPA test Method 150.1.
[14] Temperature sampling per Method 170.1

John Moriarty & Associates, Inc.
Three Church Street
Winchester, MA 01890
Phone: 781-729-3900
FAX: 781-729-8456

MORIARTY

U.S. Environmental Protection Agency
5 Post Office Square, Suite 100
Mail Code OEP06-4
Boston, MA 02109-3912
ATTN: Remediation General Permit NOI Processing

November 7, 2014
File No. 3410.07

Re: Notice of Intent for the Remediation General Permit
Temporary Construction Dewatering for Site Redevelopment
38-40 Guest Street, Brighton, Massachusetts

Dear Sir/Madam:

On behalf of Boston Landing, LLC, John Moriarty and Associates, (JMA) has submitted this Notice of Intent (NOI) to the USEPA for coverage under the National Pollutant Discharge Elimination System (NPDES) Remediation General Permit (RGP) MAG910000. This letter and supporting documentation were prepared in accordance with the U.S. EPA guidance for construction dewatering under the RGP program. JMA is the general contractor for the project and will have direct responsibility of the subcontractors performing the dewatering activities at the Site. Subcontractors working for JMA on the project will be required to meet the requirements of this NOI and the RGP. The location of discharge via a storm drain outfall is shown on Figure 1 and the extent of the Site is shown on Figure 2.

The Site is located at 38-40 Guest Street in Brighton, Massachusetts (Figure 1). Redevelopment activities include mass excavation of urban fill and natural soils, installation of new utility systems and the earthwork required to prepare the Site for the construction of a new building. It is anticipated that urban fill will be encountered during earthwork activities. The Massachusetts Department of Environmental Protection (DEP) has assigned Release Tracking Numbers (RTNs) 3-31716 and 3-31717 to this Site under the Massachusetts Contingency Plan (310 CMR 40.0000), due to the presence of chlorinated volatile organic compounds (CVOCs) in groundwater and due to the presence of arsenic in historic fill soil. The Site redevelopment activities will be performed within an existing Activity and Use Limitation (AUL) area for RTN 3-24285, which was closed with a partial Class A-3 Response Action Outcome (RAO) in March 2009. The Site will also be within the limits of a Downgradient Property Status (DPS) condition for CVOCs in groundwater as part of RTN 3-13355.

The earthwork to prepare the Site for redevelopment will require excavation of soil to a depth of approximately 15 below ground surface (bgs), depending on the location. Groundwater is anticipated to be encountered between 8 to 10 feet bgs. The excavation will be supported by sheet piles which will remain as a permanent groundwater cutoff. Groundwater that flows into the excavations during remediation activities will be treated

prior to discharge to a storm drain such that the discharged effluent meets the effluent limitations established by Appendix III and Appendix IV of the RGP Application. Figure 3 includes a schematic of the proposed dewatering treatment system. The completed Notice of Intent for the Remediation General Permit form is included as Appendix A. Analytical laboratory data is included in Appendix B. The final discharge point for the treatment system will be the Charles River.

According to the Massachusetts Geographical Information System (MassGIS), the excavation activities will not impact Areas of Critical Environmental Concern (ACEC) or Habitats of Rare Wetland Wildlife. A review of the information on the U.S. Fish and Wildlife Service website led to the conclusion that the project will not impact federally-listed threatened or endangered species. A letter from that agency is included in Appendix D. A letter requesting information regarding Oceanic Fisheries was sent to the National Oceanic and Atmospheric Administration (NOAA), and their response (Appendix D) states that no listed species are known to occur in the Charles River in the area of discharge.

Discharge of treated water is scheduled to begin as early as December 1, 2014, pending authorization from the EPA and other agencies.

Thank you for your consideration of this NOI/Permit. Please feel free to contact us if you wish to discuss the information contained in this application, or if any additional information is needed.

Very truly yours,

JOHN MORIARTY AND ASSOCIATES

Jamie Noon
Project Manager

encl. Figure 1 – Locus Plan
Figure 2 – Location of Proposed Excavation
Figure 3 – Proposed Groundwater Treatment Schematic
Appendix A – Notice of Intent Form
Appendix B – Analytical Data
Appendix C – Charles River Dilution Calculations
Appendix D – Federal Correspondence
Appendix E – National Register of Historic Places, Brighton, Massachusetts
Appendix F – Best Management Practices Plan

cc: Boston Public Health Commission

FIGURES

NOTES:
Base map was taken from the "Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Information Technology Division"
7.5 minute USGS Quadrangle Maps: NEWTON, MA, REV: 1987

Drawn By: C.Green
Designed By: A.Blomeke
Reviewed By: S.Sadkowski
Project No: 3410.07
Date: November 2014

SCALE: 1:25,000

SANBORN HEAD

Figure 1

Locus Plan

Notice of Intent for Remediation General Permit

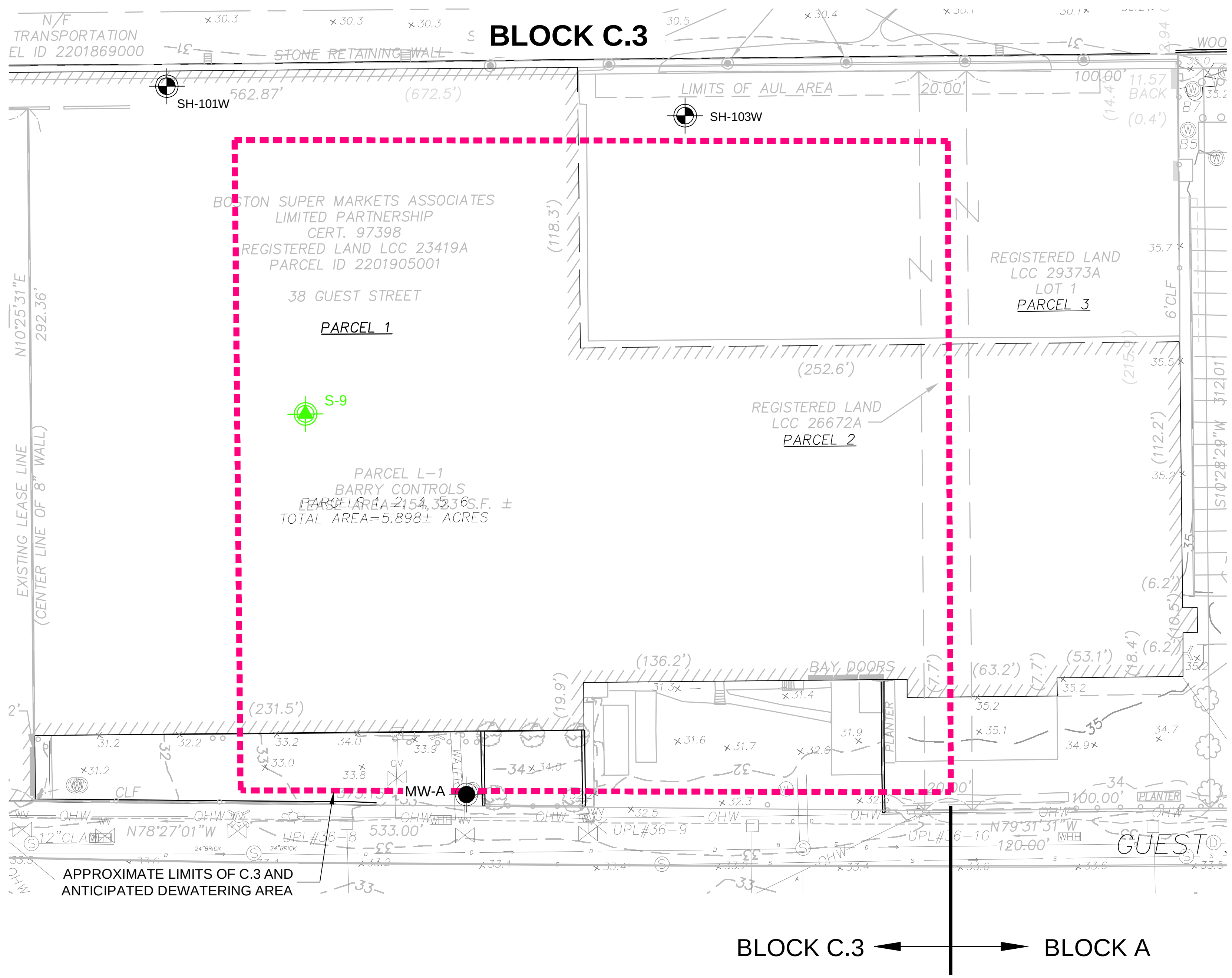
Boston Landing - Block C.3
Brighton, Massachusetts

NOTES:

1. THE BASE MAP WAS DRAWN FROM A PLAN ENTITLED, "BRIGHTON LANDING EXISTING CONDITIONS SURVEY 3-29-12", RECEIVED ELECTRONICALLY FROM BEALS ASSOCIATES OF CHARLESTOWN, DATED APRIL 6, 2012.
2. THE PROPOSED BLOCK C.3 BOUNDARY WAS RECEIVED ELECTRONICALLY FROM ELKUS-MANFREDI ARCHITECTS OF BOSTON, MA FROM A PLAN DATED OCTOBER 24, 2014.
3. SANBORN HEAD SOIL BORING LOCATIONS WERE MARKED IN THE FIELD USING A TOPCON GRS-1 GLOBAL POSITIONING SYSTEM (GPS) AND SHOULD BE CONSIDERED APPROXIMATE.

LEGEND:

S-9	APPROXIMATE LOCATION AND DESIGNATION OF SOIL PRE-CHARACTERIZATION BORING COMPLETED AS A MONITORING WELL BY NDS OBSERVED BY SANBORN HEAD IN JULY 2014
SH-101W	APPROXIMATE LOCATION AND DESIGNATION OF TEST BORING COMPLETED AS A MONITORING WELL BY CDS OBSERVED BY SANBORN HEAD IN SEPTEMBER 2013
MW-A	APPROXIMATE LOCATION AND DESIGNATION OF TEST BORING COMPLETED AS A MONITORING WELL BY OTHERS



SANBORN HEAD

GRAPHICAL SCALE
0 30 60 90 FT

NO.	DATE	DESCRIPTION	BY

DRAWN BY: C.GREEN
DESIGNED BY: A.BLOMEKE
REVIEWED BY: M.DIPILATO
PROJECT MGR: A.BLOMEKE
PIC: S.SADKOWSKI
DATE: NOVEMBER 2014

NOTICE OF INTENT FOR REMEDIATION GENERAL PERMIT
BOSTON LANDING - BLOCK C.3
BRIGHTON, MASSACHUSETTS

EXPLORATION LOCATION PLAN

PROJECT NUMBER: 3410.07

SHEET NUMBER: 2

FLOW

BULK LIQUID STORAGE TANK

FLOW

FLOW

OPTIONAL TREATMENT SYSTEM COMPONENTS

FLOW

FLOW

FLOW

LIQUID PHASE CARBON UNIT

RESIN VESSEL

RESIN VESSEL

(2) SEDIMENT BAG FILTER UNITS IN PARALLEL

CENTRIFUGAL PUMP

SAMPLE PORT

SAMPLE PORT

SAMPLE PORT

FLOW

EXCAVATION AREA

PERFORATED PIPE

GROUNDWATER ENTERING EXCAVATION AREA

SUBMERSIBLE PUMP

CRUSHED STONE

SAMPLE PORT

FLOW

FLOW METER / TOTALIZER

TO DISCHARGE POINT

NOTE: SYSTEM IS RATED FOR A MAXIMUM FLOW OF 100 GPM.

SANBORN HEAD

GRAPHICAL SCALE

0 20 40 60 FT

NO.	DATE	DESCRIPTION	BY

DRAWN BY: C.GREEN
DESIGNED BY: A.BLOMEKE
REVIEWED BY: M.DIPILATO
PROJECT MGR: A.BLOMEKE
PIC: S.SADKOWSKI
DATE: NOVEMBER 2014

NOTICE OF INTENT FOR REMEDIATION GENERAL PERMIT

BOSTON LANDING - BLOCK C.3

BRIGHTON, MASSACHUSETTS

PROPOSED GROUNDWATER TREATMENT SCHEMATIC

PROJECT NUMBER: 3410.07

SHEET NUMBER: 3

APPENDIX A

NOTICE OF INTENT FORM

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

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

a) Name of **facility/site**: 38-40 Guest Street		**Facility/site** mailing address:		
Location of **facility/site**: longitude: -71.145931 latitude: 42.357078	Facility SIC code(s): NA	Street: 20 Guest Street		
b) Name of **facility/site owner:**		Town: Brighton		
Email address of facility/site owner: jhalliday@nbdevelopment.com		State: MA	Zip: 01235	County: Suffolk
Telephone no. of facility/site **owner**: 617-987-2500				
Fax no. of facility/site **owner**:		**Owner** is (check one): 1. Federal ○ 2. State/Tribal ○ 3. Private ◉ 4. Other ○ if so, describe:		
Address of **owner** (if different from site):		Boston Landing LLC		
Street: 20 Guest Street				
Town: Brighton	State: MA	Zip: 01235	County: Suffolk	
c) Legal name of **operator**:		**Operator** telephone no: (781) 729-3900		
John Moriarty & Associates		**Operator** fax no.: (781) 729-8456	**Operator** email: jnoon@jm-a.com	
Operator contact name and title: Jamie Noon, Project Manager				
Address of **operator** (if different from owner):	Street: 3 Church Street			
Town: Winchester	State: MA	Zip: 01890	County: Middlesex	

d) Check Y for "yes" or N for "no" for the following:
1. Has a prior NPDES permit exclusion been granted for the discharge? Y__ N__, if Y, number:
2. Has a prior NPDES application (Form 1 & 2C) ever been filed for the discharge?
Y__ N__, if Y, date and tracking #:
3. Is the discharge a "new discharge" as defined by 40 CFR 122.2? Y__ N__
4. For sites in Massachusetts, is the discharge covered under the Massachusetts Contingency Plan (MCP) and exempt from state permitting? Y__ N__

e) Is site/facility subject to any State permitting, license, or other action which is causing the generation of discharge? Y__ N__
If Y, please list:
1. site identification # assigned by the state of NH or MA:
2. permit or license # assigned:
3. state agency contact information: name, location, and telephone number:

f) Is the site/facility covered by any other EPA permit, including:
1. Multi-Sector General Permit? Y__ N__, if Y, number:
2. Final Dewatering General Permit? Y__ N__, if Y, number:
3. EPA Construction General Permit? Y__ N__, if Y, number:
4. Individual NPDES permit? Y__ N__, if Y, number:
5. any other water quality related individual or general permit? Y__ N__, if Y, number:

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

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

Activity Category	**Activity Sub-Category**
I - Petroleum Related Site Remediation	A. Gasoline Only Sites ☐ B. Fuel Oils and Other Oil Sites (including Residential Non-Business Remediation Discharges) ☐ C. Petroleum Sites with Additional Contamination ☐
II - Non Petroleum Site Remediation	A. Volatile Organic Compound (VOC) Only Sites ☐ B. VOC Sites with Additional Contamination ☐ C. Primarily Heavy Metal Sites ☐
III - Contaminated Construction Dewatering	A. General Urban Fill Sites ☐ B. Known Contaminated Sites ☒

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

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

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

Temporary construction dewatering

b) Provide the following information about each discharge:

1) Number of discharge points: 1

2) What is the **maximum** and **average flow rate** of discharge (in cubic feet per second, ft^3/s)?
Max. flow: 0.22 Is maximum flow a **design value**? Y ◉ N ○
Average flow (include units) 0.06 Is average flow a design value or estimate? Estimate

3) Latitude and longitude of each discharge within 100 feet:
pt.1: lat. -71.138187 long. 42.364764 pt.2: lat. ____ long. ____;
pt.3: lat. ____ long. ____ pt.4: lat. ____ long. ____;
pt.5: lat. ____ long. ____ pt.6: lat. ____ long. ____;
pt.7: lat. ____ long. ____ pt.8: lat. ____ long. ____; etc.

4) If hydrostatic testing, total volume of the discharge (gals):

5) Is the discharge intermittent ◉ or seasonal ○?
Is discharge ongoing? Y ○ N ◉

c) Expected dates of discharge (mm/dd/yy): start Dec 1, 2014 end 09/15/2016

d) Please attach a line drawing or flow schematic showing water flow through the facility including:
1. sources of intake water, 2. contributing flow from the operation, 3. treatment units, and 4. discharge points and receiving waters(s). See attached figures

3. Contaminant information.

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

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
1. Total Suspended Solids (TSS)		☐	☒	1	Composite	2540D	50,000	740,000			
2. Total Residual Chlorine (TRC)		☒	☐	1	Composite	4500CL	20	ND			
3. Total Petroleum Hydrocarbons (TPH)		☒	☐	1	Composite	1664A	4,000	ND			
4. Cyanide (CN)	57125	☐	☒	1	Composite	4500CN	5.0	7			
5. Benzene (B)	71432	☒	☐	1	Composite	8260C	0.5	ND			
6. Toluene (T)	108883	☒	☐	1	Composite	8260C	0.75	ND			
7. Ethylbenzene (E)	100414	☒	☐	1	Composite	8260C	0.5	ND			
8. (m,p,o) Xylenes (X)	108883; 106423; 95476; 1330207	☒	☐	1	Composite	8260C	1.0	ND			
9. Total BTEX [2]	n/a	☒	☐	1	Composite	8260C	2.75	ND			
10. Ethylene Dibromide (EDB) (1,2-Dibromoethane) [3]	106934	☒	☐	1	Composite	504.1	0.01	ND			
11. Methyl-tert-Butyl Ether (MtBE)	1634044	☒	☐	1	Composite	8260C	1.0	ND			
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75650	☒	☐	1	Composite	8260C	10	ND			

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

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

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

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
13. tert-Amyl Methyl Ether (TAME)	9940508	☒	☐	1	Composite	8260C	2.0	ND			
14. Naphthalene	91203	☒	☐	1	Composite	8260C	2.5	ND			
15. Carbon Tetrachloride	56235	☒	☐	1	Composite	8260C	0.5	ND			
16. 1,2 Dichlorobenzene (o-DCB)	95501	☒	☐	1	Composite	8260C	2.5	ND			
17. 1,3 Dichlorobenzene (m-DCB)	541731	☒	☐	1	Composite	8260C	2.5	ND			
18. 1,4 Dichlorobenzene (p-DCB)	106467	☒	☐	1	Composite	8260C	2.5	ND			
18a. Total dichlorobenzene		☒	☐	1	Composite	8260C	7.5	ND			
19. 1,1 Dichloroethane (DCA)	75343	☐	☒	1	Composite	8260C	0.75	1.4			
20. 1,2 Dichloroethane (DCA)	107062	☒	☐	1	Composite	8260C	0.5	ND			
21. 1,1 Dichloroethene (DCE)	75354	☒	☐	1	Composite	8260C	0.5	ND			
22. cis-1,2 Dichloroethene (DCE)	156592	☐	☒	1	Composite	8260C	0.5	0.81			
23. Methylene Chloride	75092	☒	☐	1	Composite	8260C	3.0	ND			
24. Tetrachloroethene (PCE)	127184	☒	☐	1	Composite	8260C	0.5	ND			
25. 1,1,1 Trichloro-ethane (TCA)	71556	☒	☐	1	Composite	8260C	0.5	ND			
26. 1,1,2 Trichloro-ethane (TCA)	79005	☒	☐	1	Composite	8260C	0.75	ND			
27. Trichloroethene (TCE)	79016	☒	☐	1	Composite	8260C	0.5	ND			

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
28. Vinyl Chloride (Chloroethene)	75014	☒	☐	1	Composite	8260C	1.0	ND			
29. Acetone	67641	☒	☐	1	Composite	8260C	5.0	ND			
30. 1,4 Dioxane	123911	☒	☐	1	Composite	8260C SIM	3.0	ND			
31. Total Phenols	108952	☒	☐	1	Composite	8270D	5	ND			
32. Pentachlorophenol (PCP)	87865	☒	☐	1	Composite	8270D SIM	0.8	ND			
33. Total Phthalates (Phthalate esters) [4]		☒	☐	1	Composite	8270D	28	ND			
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	117817	☒	☐	1	Composite	8270D	3.0	ND			
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		☐	☒	1	Composite	8270D SIM	1.4	2.59			
a. Benzo(a) Anthracene	56553	☐	☒	1	Composite	8270D SIM	0.2	0.34			
b. Benzo(a) Pyrene	50328	☐	☒	1	Composite	8270D SIM	0.2	0.46			
c. Benzo(b)Fluoranthene	205992	☐	☒	1	Composite	8270D SIM	0.2	0.67			
d. Benzo(k)Fluoranthene	207089	☐	☒	1	Composite	8270D SIM	0.2	0.22			
e. Chrysene	21801	☐	☒	1	Composite	8270D SIM	0.2	0.37			
f. Dibenzo(a,h)anthracene	53703	☒	☐	1	Composite	8270D SIM	0.2	ND			
g. Indeno(1,2,3-cd) Pyrene	193395	☐	☒	1	Composite	8270D SIM	0.2	0.53			
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		☐	☒	1	Composite	8270D SIM	1.8	2.12			

[4] The sum of individual phthalate compounds.

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
h. Acenaphthene	83329	☒	☐	1	Composite	8270D SIM	0.2	ND			
i. Acenaphthylene	208968	☒	☐	1	Composite	8270D SIM	0.2	ND			
j. Anthracene	120127	☒	☐	1	Composite	8270D SIM	0.2	ND			
k. Benzo(ghi) Perylene	191242	☐	☒	1	Composite	8270D SIM	0.2	0.48			
l. Fluoranthene	206440	☐	☒	1	Composite	8270D SIM	0.2	0.72			
m. Fluorene	86737	☒	☐	1	Composite	8270D SIM	0.2	ND			
n. Naphthalene	91203	☒	☐	1	Composite	8270D SIM	0.2	ND			
o. Phenanthrene	85018	☐	☒	1	Composite	8270D SIM	0.2	0.24			
p. Pyrene	129000	☐	☒	1	Composite	8270D SIM	0.2	0.68			
37. Total Polychlorinated Biphenyls (PCBs)	85687; 84742; 117840; 84662; 131113; 117817.	☒	☐	1	Composite	608	1.7	ND			
38. Chloride	16887006	☐	☒	1	Composite	300.0	12,500	333,000			
39. Antimony	7440360	☒	☐	1	Composite	6020A	1.0	ND			
40. Arsenic	7440382	☐	☒	1	Composite	6020A	0.5	12.30			
41. Cadmium	7440439	☐	☒	1	Composite	6020A	0.2	0.53			
42. Chromium III (trivalent)	16065831	☐	☒	1	Composite	107	10	32			
43. Chromium VI (hexavalent)	18540299	☒	☐	1	Composite	3500CRD	10	ND			
44. Copper	7440508	☐	☒	1	Composite	6020A	1.0	66.72			
45. Lead	7439921	☐	☒	1	Composite	6020A	0.5	53.23			
46. Mercury	7439976	☒	☐	1	Composite	245.1	0.2	ND			
47. Nickel	7440020	☐	☒	1	Composite	6020A	0.5	42.55			
48. Selenium	7782492	☒	☐	1	Composite	6020A	5.0	ND			
49. Silver	7440224	☒	☐	1	Composite	6020A	0.4	ND			
50. Zinc	7440666	☐	☒	1	Composite	6020A	10	193.9			
51. Iron	7439896	☐	☒	1	Composite	200.7	50	56,000			
Other (describe):		☐	☐								

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

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

Step 1: Do any of the metals in the influent exceed the effluent limits in Appendix III (i.e., the limits set at zero dilution)? Y◉ N○	If yes, which metals? Arsenic, Cadmium, Copper, Iron, Lead, Nickel, Zinc
Step 2: For any metals which exceed the **Appendix III** limits, calculate the **dilution factor (DF)** using the formula in Part I.A.3.c (step 2) of the NOI instructions or as determined by the State prior to the submission of this NOI. What is the dilution factor for applicable metals? Metal: Arsenic DF: 65 Metal: Cadmium DF: 65 Metal: Copper DF: 65 Metal: Iron, Lead, Nickel, Zinc DF: 65 Etc.	Look up the limit calculated at the corresponding dilution factor in **Appendix IV.** Do any of the metals in the **influent** have the potential to exceed the corresponding **effluent** limits in Appendix IV (i.e., is the influent concentration above the limit set at the calculated dilution factor)? Y◉ N○ If Y, list which metals: Iron

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

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

Groundwater encountered during construction activities will be pumped into a treatment system prior to discharge into a storm drain. The first element of the treatment system will be a fractionalization tank where solids will settle out. The effluent will then pass through the following as necessary: a bag filter, a granular activated carbon vessel, and a cation resin vessel. The effluent will be discharged through the existing storm drain system.

b) Identify each applicable treatment unit (check all that apply):	Frac. tank ☒	Air stripper ☐	Oil/water separator ☐	Equalization tanks ☐	Bag filter ☒	GAC filter ☒
	Chlorination ☐	De-chlorination ☐	Other (please describe):	cation resin vessels (if needed for metals)		

c) Proposed **average** and **maximum flow rates** (gallons per minute) for the discharge and the **design flow rate**(s) (gallons per minute) of the treatment system:
Average flow rate of discharge 25 gpm Maximum flow rate of treatment system 100 gpm
Design flow rate of treatment system 100 gpm

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

None anticipated.

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

a) Identify the discharge pathway:	Direct to receiving water ☐	Within facility (sewer) ☐	Storm drain ☒	Wetlands ☐	Other (describe):

b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters:
Effluent will enter an existing storm water drainage system that discharges into the Charles River at BWSC stormwater outfall #SD0037

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

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

e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water 14.3 cfs
Please attach any calculation sheets used to support stream flow and dilution calculations.

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

Is there a final TMDL? Y ◉ N ○ If yes, for which pollutant(s)? Chlorophyll-a, E. coli, nutrients, phosphorus, turbidity

6. ESA and NHPA Eligibility.

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

a) Using the instructions in Appendix VII and information on Appendix II, under which criterion listed in Part I.C are you eligible for coverage under this general permit?

A ○ B ○ C ○ D ◉ E ○ F ○

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

c) If consultation with U.S. Fish and Wildlife Service and/or NOAA Fisheries Service was completed, was a written concurrence finding that the discharge is "not likely to adversely affect" listed species or critical habitat received? Y ◉ N ○

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

e) Using the instructions in Appendix VII, under which criterion listed in Part II.C are you eligible for coverage under this general permit?

1 ○ 2 ◉ 3 ○

f) If Criterion 3 was selected, attach all written correspondence with the State or Tribal historic preservation officers, including any terms and conditions that outline measures the applicant must follow to mitigate or prevent adverse effects due to activities regulated by the RGP.

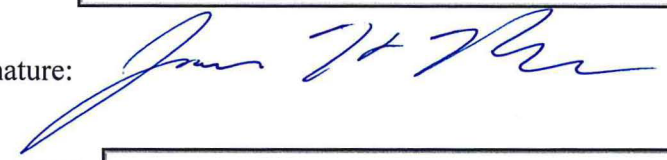
7. Supplemental information.

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

Appendix B includes the analytical data collected by Sanborn, Head & Associates, Inc. on August 8, 2014
Appendix C includes calculations for the dilution factor for metals.
Appendix D includes correspondence from the National Oceanic and Atmospheric Administration and the US Fish and Wildlife Service.
Appendix E includes a list of Historic Places in Brighton, Massachusetts.
Appendix F includes the Best Management Practices Plan.

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

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Facility/Site Name:	38-40 Guest Street, Brighton, Massachusetts
Operator signature:	
Printed Name &Title:	James Noon
Date:	11-14-14

APPENDIX B

ANALYTICAL DATA

TABLE 1
Summary of Groundwater Quality Data
NPDES Remediation General Permit
Boston Landing - Block C.3
Brighton, Massachusetts

LOCATION SAMPLING DATE LAB SAMPLE ID	Analytical Method	Units	NPDES RGP Effluent Limit (2010)	RGP BASELINE C.3 8/8/2014 L1417945-01	RGP BASELINE C.3 FF 8/8/2014 L1417945-02
General Parameter					
Solids, Total Suspended	TSS-2540	mg/l	30	**740**	-
Chloride	CL-300	mg/l	Monitor Only	333	-
Cyanide, Total	TCN-4500	ug/l	5.2	**7**	-
Chlorine, Total Residual[2]	TRC-4500	ug/l	11	<20	-
TPH	TPH-1664	mg/l	5.0	<4.0	-
Phenolics, Total	TPHENOL-420	ug/l	300	<150	-
Total Metals					
Chromium, Trivalent	CR-107	ug/l	48.5/1,710*	32	-
Chromium, Hexavalent	HEXCR-3500	ug/l	11.4/570*	<10	-
Antimony, Total[2]	SB-6020T	ug/l	5.6/141*	<1.0	-
Arsenic, Total	AS-6020T	ug/l	10/500*	12.30	-
Cadmium, Total	CD-6020T	ug/l	0.2/10*	0.53	-
Copper, Total	CU-6020T	ug/l	5.2/260*	66.72	-
Iron, Total	FE-UI	ug/l	1,000/5,000*	**56,000**	-
Lead, Total	PB-6020T	ug/l	1.3/66*	53.23	-
Mercury, Total	HG-U	ug/l	0.9/2.3*	<0.2	-
Nickel, Total	NI-6020T	ug/l	29/1,451*	42.55	-
Selenium, Total[2]	SE-6020T	ug/l	5/250*	<5.0	-
Silver, Total[2]	AG-6020T	ug/l	1.2/57*	<0.4	-
Zinc, Total	ZN-6020T	ug/l	66.6/1,480*	193.9	-
Dissolved Metals					
Antimony, Dissolved	SB-6020T	ug/l	5.6/141*	-	<1.0
Arsenic, Dissolved	AS-6020T	ug/l	10/500*	-	0.53
Cadmium, Dissolved	CD-6020T	ug/l	0.2/10*	-	<0.2
Chromium, Dissolved	CR-6020T	ug/l	48.8/1,710*	-	<1.0
Copper, Dissolved	CU-6020T	ug/l	5.2/260*	-	8.55
Iron, Dissolved	FE-UI	ug/l	1,000/5,000*	-	80
Lead, Dissolved	PB-6020T	ug/l	1.3/66*	-	<0.5
Mercury, Dissolved	HG-U	ug/l	0.9/2.3*	-	<0.2
Nickel, Dissolved	NI-6020T	ug/l	29/1,451*	-	17.83
Selenium, Dissolved	SE-6020T	ug/l	5/250*	-	<5.0
Silver, Dissolved	AG-6020T	ug/l	1.2/57*	-	<0.4
Zinc, Dissolved	ZN-6020T	ug/l	66.6/1,480*	-	20.16
Pesticides					
1,2-Dibromoethane[3]	504	ug/l	0.05	<0.011	-
Volatile Organic Compounds (VOCs)					
Methylene chloride	8260	ug/l	4.6	<3.0	-
1,1-Dichloroethane	8260	ug/l	70	1.4	-
Carbon tetrachloride	8260	ug/l	4.4	<0.5	-
1,1,2-Trichloroethane	8260	ug/l	5.0	<0.75	-
Tetrachloroethene	8260	ug/l	5.0	<0.5	-
1,2-Dichloroethane	8260	ug/l	5.0	<0.5	-
1,1,1-Trichloroethane	8260	ug/l	200	<0.5	-
Benzene	8260	ug/l	50.0 for hydrostatic testing only	<0.5	-
Toluene	8260	ug/l	see Total BTEX	<0.75	-
Ethylbenzene	8260	ug/l	see Total BTEX	<0.5	-
Vinyl chloride	8260	ug/l	2.0	<1.0	-
1,1-Dichloroethene	8260	ug/l	3.2	<0.5	-
Trichloroethene	8260	ug/l	5.0	<0.5	-
1,2-Dichlorobenzene	8260	ug/l	600	<2.5	-
1,3-Dichlorobenzene	8260	ug/l	320	<2.5	-
1,4-Dichlorobenzene	8260	ug/l	5.0	<2.5	-
Methyl tert butyl ether (MtBE)	8260	ug/l	70.0	<1.0	-
p/m-Xylene	8260	ug/l	see Total BTEX	<1.0	-
o-Xylene	8260	ug/l	see Total BTEX	<1.0	-
Xylenes, Total	8260	ug/l	see Total BTEX	<1.0	-
cis-1,2-Dichloroethene	8260	ug/l	70	0.81	-
Acetone	8260	ug/l	Monitor Only	<5.0	-
1,2-Dichloroethene, Total	8260	ug/l	NS	0.81	-
Naphthalene	8260	ug/l	20	<2.5	-
Tert-Butyl Alcohol	8260	ug/l	Monitor Only	<10	-
Tertiary-Amyl Methyl Ether	8260	ug/l	Monitor Only	<2.0	-
1,4-Dioxane	8260-SIM	ug/l	Monitor Only	<3.0	-
Total BTEX[4]	8260	ug/l	100	BDL	
Semivolatile Organic Compounds (SVOCs)					
Bis(2-ethylhexyl)phthalate[5]	8270TCL	ug/l	6.0	<3.0	-
Butyl benzyl phthalate[5]	8270TCL	ug/l	see Total Phthalates	<5.0	-
Di-n-butylphthalate[5]	8270TCL	ug/l	see Total Phthalates	<5.0	-
Di-n-octylphthalate[5]	8270TCL	ug/l	see Total Phthalates	<5.0	-
Diethyl phthalate[5]	8270TCL	ug/l	see Total Phthalates	<5.0	-
Dimethyl phthalate[5]	8270TCL	ug/l	see Total Phthalates	<5.0	-
Total Phthalates[6]	8270TCL	ug/l	3.0	BDL	
Acenaphthene[7]	8270TCL-SIM	ug/l	0.2	<0.2	-
Fluoranthene[7]	8270TCL-SIM	ug/l	0.2	**0.72**	-
Naphthalene	8270TCL-SIM	ug/l	20	<0.2	-
Benzo(a)anthracene[8]	8270TCL-SIM	ug/l	see Total Group I PAHs	0.34	-
Benzo(a)pyrene[8]	8270TCL-SIM	ug/l	see Total Group I PAHs	0.46	-
Benzo(b)fluoranthene[8]	8270TCL-SIM	ug/l	see Total Group I PAHs	0.67	-

TABLE 1
Summary of Groundwater Quality Data
NPDES Remediation General Permit
Boston Landing - Block C.3
Brighton, Massachusetts

LOCATION SAMPLING DATE LAB SAMPLE ID	Analytical Method	Units	NPDES RGP Effluent Limit (2010)	RGP BASELINE C.3 8/8/2014 L1417945-01	RGP BASELINE C.3 FF 8/8/2014 L1417945-02
Benzo(k)fluoranthene[8]	8270TCL-SIM	ug/l	see Total Group I PAHs	0.22	-
Chrysene[8]	8270TCL-SIM	ug/l	see Total Group I PAHs	0.37	-
Acenaphthylene[7]	8270TCL-SIM	ug/l	0.2	<0.2	-
Anthracene[7]	8270TCL-SIM	ug/l	0.2	<0.2	-
Benzo(ghi)perylene[7]	8270TCL-SIM	ug/l	0.2	**0.48**	-
Fluorene[7]	8270TCL-SIM	ug/l	0.2	<0.2	-
Phenanthrene[7]	8270TCL-SIM	ug/l	0.2	**0.24**	-
Dibenzo(a,h)anthracene[8]	8270TCL-SIM	ug/l	see Total Group I PAHs	<0.2	-
Indeno(1,2,3-cd)Pyrene[8]	8270TCL-SIM	ug/l	see Total Group I PAHs	0.53	-
Pyrene[7]	8270TCL-SIM	ug/l	0.2	**0.68**	-
Pentachlorophenol	8270TCL-SIM	ug/l	1.0	<0.8	-
Total Group I PAHs[9]	8270TCL-SIM	ug/l	10.0	2.59	-
Total Group II PAHs[10]	8270TCL-SIM	ug/l	100	2.12	-
Polychlorinated Biphenyls (PCBs)					
Aroclor 1016[11]	PCB-608	ug/l	see Total PCBs	<0.25	-
Aroclor 1221[11]	PCB-608	ug/l	see Total PCBs	<0.25	-
Aroclor 1232[11]	PCB-608	ug/l	see Total PCBs	<0.25	-
Aroclor 1242[11]	PCB-608	ug/l	see Total PCBs	<0.25	-
Aroclor 1248[11]	PCB-608	ug/l	see Total PCBs	<0.25	-
Aroclor 1254[11]	PCB-608	ug/l	see Total PCBs	<0.25	-
Aroclor 12601[11]	PCB-608	ug/l	see Total PCBs	<0.20	-
Total PCBs[12]	PCB-608	ug/l	0.5	BDL	-

Notes:
1. The samples were collected by Sanborn, Head & Associates, Inc. personnel on the dates indicated and were submitted to Alpha Analytical, Inc. of Westborough, MA (Alpha) for analysis. The sample was a composite of wells SH-101W, SH-103W, S-9W and MW-A. Discrete samples for VOCs were collected at MW-A.
2. The Laboratory Reporting Limit (RL) meets the requirements of Appendix VI of the National Pollutant Discharge Elimination System (NPDES) Remediation General Permit (RGP) even though RLs of certain analytes exceed RGP Effluent Limits (see notes 6,8, and 12).
3. RL achieved by Method 8260C was above the Effluent Limit.; however, 1,2-dibromoethane was also analytzed by Method 504, as shown, with an RL below the Effluent Limit.
4. Total BTEX = Sum of benzene, toluene, ethylbenzene, and total xylenes.
5. Individual phthalate compound.
6. "Total phthalates" is the sum of individual phthalate compounds; According to RGP Q&A #37, the RL for total phthalates is the highest reported phthalate RL; RL is less than the requirements in Appendix VI of RGP, even though RL exceeds RGP Effluent Limit.
7. Group II PAHs.
8. Group I PAHs; Although the maximum value for the individual PAH compounds is 0.0038 ug/l, the compliance limits are equal to the minimum level of the test method per Appendix VI.
9. Sum of Group I PAHs.
10. Sum of Group II PAHs.
11. Individual PCB congener.
12. Total of PCB congeners; Although the effluent limit for total PCB's is 0.000064 ug/l, the compliance limit is equal to the minimum level of the test method per Appendix VI (i.e. 0.5 ug/l for Method 608).
13. 'SHADED' values indicate exceedances of the NPDES RGP Effluent Limits; which were taken from Appendix III of the RGP.
'BOLDED' values indicate exceedances of the NPDES RGP Effluent Limits with appropriate applied dilution factors.
'<' = analytes not detected above laboratory reporting limits
'NS' = Not Specified
'BDL' = indicates analyte is below detection limits
'*' = indicates Effluent Limit reflects a dilution factor of 65 based on a flow rate from the dewatering operation of less than 100 gpm.
14. Monitor Only means that the subject compound is not subject to a (criteria) limit, however, the Permitee is still required to monitor and report the effluent concentration.

APPENDIX C

CHARLES RIVER DILUTION CALCULATION

Project Boston Landing – Block C
Location Brighton, Massachusetts
Subject Dilution Factor
Calculated By A. Martucci Date 10/29/2014
Checked By A. Blomeke Date 11/01/2014

S:\WESDATA\3400\3410.07\Source Files\Block C.3 RGP NOI\Appendix C - Stream Calcs\20141107 Dilution Factor.docx

PURPOSE:
To calculate the dilution factor (DF) for metal concentrations in a potential discharge from on-site construction dewatering activities.

METHOD:

$$DF = (Qd + Qs)/Qd$$

Where: DF = Dilution Factor
Qd = Maximum flow rate of the discharge in cubic feet per second (cfs)
Qs = Receiving water 7Q10 flow (cfs) where 7Q10 is the minimum flow (cfs) for 7 consecutive days with a recurrence interval of 10 years

GIVEN:
1.0 gpm = 0.00223 cfs
Qd = 100 gpm = 0.223 cfs
Qs = 14.3 cfs of flow in the Charles River [Reference 1]

CALCULATION:

$$DF = (0.223 \text{ cfs} + 14.3 \text{ cfs}) / 0.223 \text{ cfs}$$

DF = 65

RESULTS:

The resulting dilution factor to be used when discharging to the Charles River is 65.

REFERENCES:

[1] Wandle, S.W., Jr., 1984, Gazetteer of Hydrologic Characteristics of Streams in Massachusetts – Coastal River Basins of the North Shore and Massachusetts Bay: U.S. Geological Survey Water-Resources Investigations Report 84-4281, p. 39. (Refer to Attachment A)

Table 4.--Streamflow characteristics, in cubic feet per second, at selected stream-gaging stations (Continued)

Flow	Station name and site number				
	Charles River near Millis, Mass. (106)	Charles River at Dover, Mass. (130)	Mother Brook at Dedham, Mass. (135)	Charles River at Wellesley, Mass. (139)	Charles River at Waltham, Mass. (147)
MONTHLY (Continued)					
Q4	352	1137	381	877	1177
	246	571	159	532	595
	150	169	26.5	161	195
SDQ4	69.2	231	87.7	189	243
Q5	230	746	253	575	798
	165	359	90.6	332	355
	97.0	158	.00	176	135
SDQ5	54.4	141	56.4	114	137
Q6	103	725	238	572	694
	71.2	205	49.4	186	199
	40.6	67.2	.00	67.3	56.5
SDQ6	23.9	125	49.7	118	115
Q7	54.3	1060	339	280	915
	39.9	125	23.3	101	122
	22.5	19.5	.06	29.2	26.7
SDQ7	11.8	163	49.4	70.3	137
Q8	151	956	306	211	873
	73.8	109	21.8	79.5	105
	25.0	9.01	.00	13	14.6
SDQ8	49.1	162	53.6	58.5	145
Q9	67.6	640	189	253	616
	49.9	103	21.8	89.4	114
	17.7	7.78	.10	14.9	19.6
SDQ9	16.9	120	37.7	61.1	114
LOW FLOW					
7Q2	—	32.5	—	26.8	34.0
7Q10	—	12.9	—	10.3	14.3

APPENDIX D

FEDERAL CORRESPONDENCE

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, 2014

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 Maria Tur of this office at 603-223-2541 if we can be of further assistance.

Sincerely yours,

Thomas R. Chapman
Supervisor
New England Field Office

Andrew Martucci

From: Christine Vaccaro - NOAA Federal [christine.vaccaro@noaa.gov]
Sent: Wednesday, October 29, 2014 12:27 PM
To: Andrew Martucci
Subject: Re: Application for NPDES RGP

There are no ESA listed species that could be exposed to the effects of the action at that location.

Cheers,
Chris

Chris Vaccaro
Fisheries Biologist
Protected Resources Division
NOAA Fisheries
Gloucester, MA
Phone: 978-281-9167
Email: christine.vaccaro@noaa.gov

On Wed, Oct 29, 2014 at 12:22 PM, Andrew Martucci <amartucci@sanbornhead.com> wrote:

Good Afternoon Christine,

I am requesting information to be included as part of a Notice of Intent (NOI) for a Remediation General Permit (RGP). The NOI is for construction dewatering during excavation activities at 38-40 Guest Street in Brighton, Massachusetts. Effluent will be discharged to the Charles River, by means of the Everett Street drainage line. As part of the application to the USEPA for the RGP, we need to investigate whether this proposed temporary discharge has the potential to adversely affect any federally listed species in the reach of the Charles River located downstream of the discharge point.

Thank you in advance for your assistance, and please let me know if you require further information.

-AJ

Andrew J. Martucci
Project Engineer

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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

APPENDIX E

NATIONAL REGISTER OF HISTORICAL PLACES, BRIGHTON, MASSACHUSETTS

Appendix E
National Register of Historic Places
Research Documentation
Brighton, Massachusetts

Site Name	Address	Date Listed
Brighton Center Historic District	Academy Hill Rd., Chestnut Hill Ave., Dighton, Elko, Henshaw, Leicester, Market, Washington, and Winship Sts.	2/20/2001
Brighton Evangelical Congregational Church	404-410 Washington St.	8/21/1997
Chestnut Hill Reservoir Historic District	Beacon St. and Commonwealth Ave.	1/18/1990
Evergreen Cemetery	2060 Commonwealth Ave.	8/14/2009
Oak Square School	35 Nonantum St.	11/10/1980
Charles River Reservation (Speedway)-Upper Basin Headquarters	1420-1440 Soldiers Field Rd.	7/19/2010
Engine House No. 34	444 Western Ave.	10/24/1985

Notes:
Sanborn, Head & Associates, Inc. (Sanborn Head) conducted a review of the National Register of Historic Places within Brighton, Massachusetts. The search returned 7 results, none of which are located at or abutting the site.

APPENDIX F

BEST MANAGEMENT PRACTICES PLAN

APPENDIX F: BEST MANAGEMENT PRACTICES PLAN

Notice of Intent for the Remediation General Permit
Temporary Construction Dewatering for Site Redevelopment
38-40 Guest Street
Brighton, Massachusetts

This Best Management Practices Plan (BMPP) has been prepared in accordance with the requirements of the National Pollutant Discharge Elimination System (NPDES) Remediation General Permit (RGP) for Massachusetts (MAG910000). This BMPP is in support of an RGP application for dewatering during redevelopment construction of 38-40 Guest Street in Brighton, Massachusetts. The dewatering discharge will be conveyed through the existing storm drains and discharged to the Charles River in Brighton, MA.

The following practices will be adhered to during construction dewatering at the site.

Site Security

During construction activities, the dewatering system will be secured using standard construction practices. The fractionalization tank and associated filters, pumps, and flow meters will be located in a fenced area to limit access. All associated piping will be secured and checked regularly. Any system failure, vandalism, or other incidents will be addressed in a timely manner to prevent the discharge of oil or hazardous materials from exceeding the limits of the RGP.

Minimizing Sediment in Influent

Crushed stone sumps constructed as far as possible from the active excavation area will be used as the suction points for the dewatering system intakes. Efforts will be made to manage the pumping such that the amount of sediment in the influent to the treatment system is minimized.

Management of Generated Wastes

The excavations will be conducted within the limits of a Massachusetts Contingency Plan (MCP) release site. As such, the wastes that are generated during the operation of the dewatering treatment system will be managed as MCP wastes. The anticipated wastes are sediment that accumulates in the fractionalization tank, used bag filters, spent activated carbon, spent cation resin, and miscellaneous wastes associated with water quality sampling activities.

The sediment will be tested and disposed of at a licensed facility that is permitted to accept material with the documented physical and chemical characteristics of the sediment. The used bag filters and the miscellaneous sampling wastes will be appropriately disposed of as solid or contaminated wastes, based on their characteristics. The spent activated carbon will be processed and recycled by the company providing the fresh carbon. The spent cation resin will be processed and recycled by the company providing the fresh resin.

Prohibition of Discharge Exceeding Design Flow

The subcontractor providing the treatment system will provide the Operator with information on the design capacity of the treatment system and the features included in the design to monitor the flow rate to ensure that the capacity is not exceeded. The system will be monitored with a continuous flow meter such that the overall system flow does not exceed the lowest design capacity of an individual treatment system unit.

Preventative Maintenance Required

The treatment system will likely include two bag filter vessels (installed in parallel so the system does not need to be shut down for bag filter changeout), a primary clarifier, one activated carbon vessel, and two cation resin vessels in series. Sample ports will be available after the bag filter, after the carbon vessel, and after each cation resin vessel.

If sampling indicates that there is breakthrough in the carbon vessel, the system shall be shut down while the carbon is changed out; however, baseline groundwater sampling analytical data indicates that breakthrough of the carbon vessel is unlikely to occur during the operation of this system. If the sampling data at that point indicates that "breakthrough" has occurred on a cation resin vessel, the downstream resin vessel will be moved to the upstream position and the resin in the upstream unit will be changed out and then placed in service at the downstream side.

The bag filters will be replaced whenever the pressure drop across the filters exceeds the system's design criteria. The carbon vessels and resin vessels will be backwashed with a clean water source when the pressure drop across the vessel exceeds the system's design criteria. The subcontractor will be responsible for developing and implementing a preventative maintenance plan and schedule based on the specific design of the treatment system. The system shall be insulated to allow for treatment of water during extended exposure to subzero temperatures.

Employee Training

The field staff of the Operator and the subcontractor will be instructed regarding the water quality limits contained in the RGP and the critical need to operate the treatment system as designed. The staff will also be provided guidance on how to reduce the sediment content that is pumped into the treatment system. Personnel who have responsibilities related to the dewatering efforts will be informed of the contents of the RGP, this BMPP and the NOI.

Management of Run-on and Runoff

Hay bales and silt fences as well as sloped grades will be used as needed to construct a berm around the perimeter of the site to prevent rainfall from migrating off-site or into the excavation. If stockpiles of soil are generated, the stockpiles of contaminated soils will be placed on plastic sheets and then covered with sheeting and bermed with hay bales until off-site transport occurs.

Erosion, Scouring and Sediment Control

Considering the design flow of the system and the planned duration of the discharge relative to the size and flow of the storm drain where it discharges to the Charles River, it is not anticipated that the dewatering discharge will cause erosion, stream scouring at the discharge point, or additional sedimentation in the Charles River.