



Consulting July 30, 2015
Engineers and Project 11649-6
Scientists

Via E-mail: NPDES.Generalpermits.epa.gov

Environmental Protection Agency
DGP NOI Processing
5 Post Office Square, Suite 100
Mail Code OEP06-4
Boston, MA 02109-3912

Dear Sir or Madam:

**Re: Notice of Intent
NPDES Dewatering General Permit
Conley Terminal Dedicated Freight Corridor and
Buffer Open Space
South Boston, Massachusetts**

On behalf of the Massachusetts Port Authority (Massport), GEI Consultants, Inc. has prepared this Notice of Intent (NOI) for coverage under the National Pollutant Discharge Elimination System (NPDES) Dewatering General Permit (DGP), Massachusetts General Permit (MAG070000). This NOI was prepared in accordance with the general requirements of the NPDES DGP under Federal Register Document Citation 80 FR 21716 dated April 20, 2015, and related guidance documentation provided by the U.S. Environmental Protection Agency (EPA). The completed NOI form is provided in Appendix A.

Site Information

This NOI has been prepared for the discharge of dewatering effluent that will be generated during construction of a bridge abutment for the Conley Terminal Dedicated Freight Corridor. The proposed bridge abutment is located on a portion of property owned by Massport at 776 Summer Street in South Boston, Massachusetts (the Property; Fig. 1). The Property is bounded by Summer Street to the west, the Reserved Channel to the north, the Exelon inlet to the east, and the remaining Exelon New Boston facility to the south (Figs. 1 and 2). The Property is currently vacant and used as a contractor parking area (Fig. 2).

Discharge and Receiving Surface Water Information

Dewatering will be necessary to keep the excavation for the bridge abutment dry to facilitate construction. The intent of the project is to treat and directly discharge effluent to the Exelon Inlet, which is part of the Reserved Channel.

We evaluated the proposed influent by collecting a groundwater sample from the Site. We collected the groundwater sample from monitoring well B1043(MW) on June 5, 2015 (Fig. 2).

The water sample was analyzed for the parameters required under the NPDES DGP. The laboratory data reports for these samples are provided in Appendix B.

The analytical results indicated the presence of chloride and hardness. Metals were not detected above laboratory reporting limits. The measured pH of the groundwater within the project site was approximately 7.4 standard units (s.u.).

During construction, the collected water will be treated to remove suspended solids and, if required by EPA, metals prior to discharge. Two proposed conceptual treatment systems are shown in the process flow diagram in Fig. 3. The two conceptual treatment systems have been proposed to accommodate potential construction constraints. Option 1 is preferred; however, if space is limited Option 2 will be used.

The treated water will be discharged directly to the Exelon Inlet. The discharge locations are identified in Fig. 2 as Proposed Discharge Points 1 and 2.

Consultation with Federal Services

We reviewed the online electronic data viewers and databases from the Massachusetts Geographical Information System (MassGIS) and the United States Department of the Interior Division of Fisheries and Wildlife. Based on this review, neither the Site nor the point where the proposed discharge reaches the receiving surface water body are Areas of Critical Environmental Concern (ACEC), Habitats of Rare Wetland Wildlife, Habitats of Rare Species or Estimated Habitats of Rare Wildlife, or listed as a National Historic Place. A copy of the MassGIS map and a letter from the United States Department of the Interior Division of Fisheries and Wildlife are in Appendix C. Based on this information, additional consultation with federal and/or state officials was deemed unnecessary.

Coverage Under NPDES DGP

It is our opinion that the proposed discharge is eligible for coverage under the NPDES DGP based on the requirements of the NPDES DGP and our evaluation of the available site-specific information. The current intent of project dewatering is to treat and discharge effluent to the Exelon Inlet which is part of the Reserved Channel. On behalf of Massport, we are requesting coverage under the NPDES DGP for the discharge of treated construction dewatering effluent to the surface waters of the Exelon Inlet and Reserved Channel.

The enclosed NOI form provides required information on the general site conditions, discharge, treatment system, receiving water, and consultation with federal services (Appendix A). For this project, Massport is the owner and has operational control over the construction plans and specifications, including the ability to make modifications to those plans and specifications. SPS New England, Inc. of Salisbury, Massachusetts, contracted by Massport, is the operator and will direct the personnel responsible for the implementation and day-to-day operations and activities that are necessary to ensure compliance with the NPDES DGP, including operation, inspection, monitoring, and reporting.

Discharge of treated water is scheduled to begin in August 2015.

The Reserved Channel is classified as an SB(CSO) waterbody, therefore, fee payment to the Commonwealth of Massachusetts is not required.

Please contact me at 781.721.4012 or igladstone@geiconsultants.com if you have any questions.

Very truly yours,

GEI CONSULTANTS, INC.



Ileen S. Gladstone, P.E., LSP, LEED AP
Vice President

MWS/HAB/CGJ/ISG:jam

Enclosures

c: Kevin McWeeney, Massport
Jerry Friedman, HDR
Bill Czerepak, SPS
MassDEP Division of Watershed Management

Tables

Table 1. Chemical Testing Results - Groundwater

**Conley DFC - Exelon
776 Summer Street
South Boston, Massachusetts**

Sample Location: Sample Date:				B1043(MW 6/4/2015)
Analyte	Method	Units	DGP Minimum Levels	
Total Metals		µg/L		
Antimony	6010C		10	<25.0
Arsenic	7010		3	<2.5 K-
Cadmium	6010C		10	<2.5
Chromium	6010C		15	<10.0
Hexavalent Chromium	7196A		NS	<10
Copper	6010C		15	<10.0
Iron	6010C		20	<500
Lead	6010C		20	<20.0
Mercury	7470A		NS	<0.200
Nickel	6010C		20	<25.0
Selenium	7010		5	<15.0 K-
Silver	6010C		10	<5.0
Zinc	6010C		15	<25.0
Chemistry				
Chloride	9250	µg/L	NS	14,800,000
Hardness	6010B	µg/L	NS	5,300,000
pH	9040	SU	NS	7.37

General Notes:

1. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
2. DGP = Dewatering General Permit.
3. NPDES = National Pollutant Discharge Elimination System.
4. DGP Minimum Levels for Groundwater Sources are cited from Appendix VIII of the NPDES Dewatering General Perm
5. NS = No DGP Minimum Level has been established for this analyte.
6. µg/L = micrograms per liter.
7. SU = standard units.

Qualifying Notes:

K- The result has a low bias due to blank spike or laboratory control sample recovery below lower limits.

Figures



0 1000 2000 4000 6000

SCALE, FEET

This Image provided by MassGIS is from U.S.G.S.
Topographic 7.5 X 15 Minute Series
Boston North, MA Quadrangle, 1985.
Datum is National Geodetic Vertical Datum (NGVD).
Contour Interval is 3 Meters.



MASSACHUSETTS
QUADRANGLE LOCATION

DGP - Notice of Intent
Conley Terminal Dedicated Freight Corridor
South Boston, Massachusetts

Massachusetts Port Authority
Boston, Massachusetts

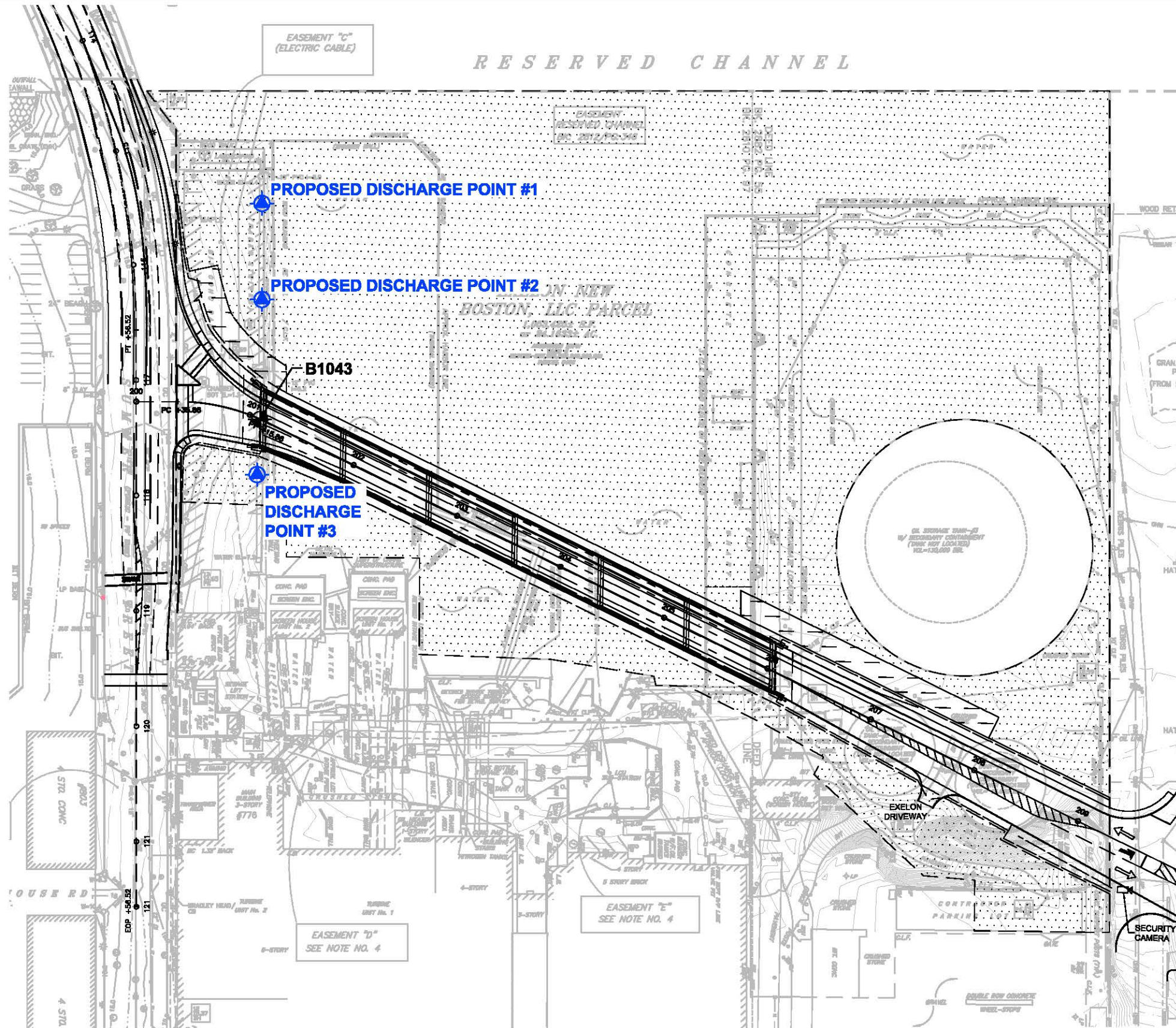


Project 11649-6

SITE LOCATION MAP

July 2015

Fig. 1

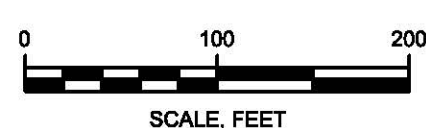


LEGEND:

-  PROPOSED DISCHARGE POINT
-  BORING AND MONITORING WELL, GEI 2013

NOTES:

1. BASE PLAN PROVIDED BY HDR ENGINEERING, INC. JANUARY 2012.

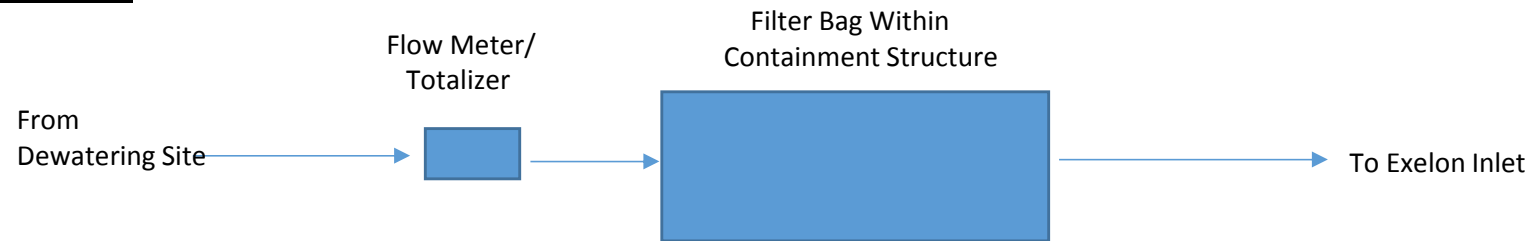


DGP - Notice of Intent Conley Terminal Dedicated Freight Corridor South Boston, Massachusetts		SITE PLAN
Massachusetts Port Authority Boston, Massachusetts	Project 11649-6	July 2015 Fig. 2

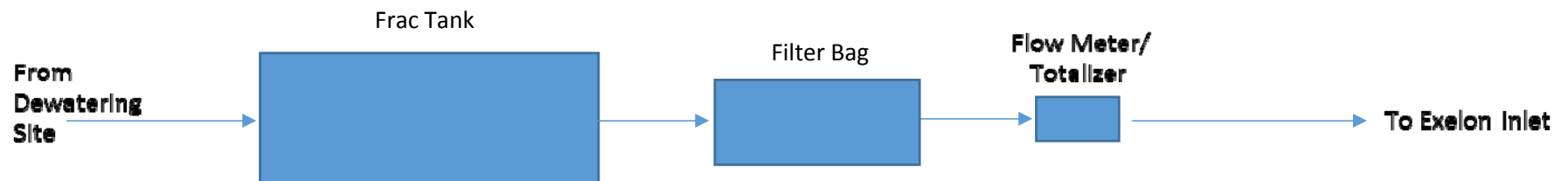
Conley Terminal Dedicated Freight Corridor
South Boston, MA

Process Flow Diagram

Option #1



Option #2



Appendix A

**Dewatering General Permit
Notice of Intent**

II. Suggested Notice of Intent (NOI) Format

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

a) Name of facility: Conley Terminal Dedicated Freight Corridor		Mailing Address for the Facility: 776 Summer St., South Boston, MA 02110	
b) Location Address of the Facility (if different from mailing address):	Facility Location	Type of Business: Highway& Street Construction with	
	longitude: <u>42.3403</u> latitude: <u>71.0353</u>	Facility SIC codes: 1611	
c) Name of facility owner: <u>Massachusetts Port Authority</u> Owner's email: <u>KMcWeeney@massport.com</u> Owner's Tel #: <u>(617) 568-5000</u> Owner's Fax #: _____ Address of owner (if different from facility address) <u>One Harborside Drive, Suite 200S, East Boston, MA 02128</u> Owner is (check one): 1. Federal _____ 2. State ☒ 3. Private _____ 4. Other _____ (Describe) _____			
Legal name of Operator, if not owner: <u>SPS New England, Inc.</u> Operator Contact Name: <u>Bill Czerepak</u> Operator Tel Number: <u>(978) 462-6543</u> Fax Number: _____ Operator's email: <u>bczerepak@spsnewengland.com</u> Operator Address (if different from owner) <u>98 Elm St. Salisbury, MA 01952</u>			
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 discharger" as defined by 40 CFR Section 122.2? 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: _____

State Water Quality Classification: _____ Freshwater: _____ 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 _____

For each outfall:

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

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

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. Surface water & groundwater

g.) What treatment does the wastewater receive prior to discharge? Settlement using a filter bag system or in a fractionation tank and filtering (10-micron filter bags)

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) _____

If (P), number of days or months per year of the discharge _____ and the specific months of discharge _____;

If (I), number of days/year there is a discharge _____

Is the discharge temporary? Yes _____ No _____

If yes, approximate start date of dewatering _____ approximate end date of dewatering _____

i.) Latitude and longitude of each discharge within 100 feet (See http://www.epa.gov/tri/report/siting_tool): Outfall 1: long. _____ lat. _____; 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 _____ 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 <u>✓</u> 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 LC₅₀ in percent for aquatic organism(s)). Not Applicable b) Please report any known remediation activities or water-quality issues in the vicinity of the discharge. Not applicable
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4. Determination of Endangered Species Act Eligibility: Provide documentation of ESA eligibility as required at Part 3.4 and Appendix IV. In addition, respond to the following questions.

a) Which of the three eligibility criteria listed in Appendix IV, Criterion (A, B, or C) have you met? A _____ b) Please attach documentation with your NOI supporting your response. Please see Appendix IV for acceptable documentation

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

a) See Screening Process in Appendix III and respond to questions regarding your site and any historic properties listed or eligible for listing on the National Register of Historic Places. Question 1: Yes <u>✓</u> No _____ ; Question 2: No <u>✓</u> Yes _____ b) Have any State or Tribal historic preservation officers been consulted in this determination? Yes _____ or No <u>✓</u> If yes, attach the results of the consultation(s). c) Which of the three National Historic Preservation Act eligibility criterion listed in Appendix III, Criterion (A, B, or C) have you met? A _____ d) Is the project located on property of religious or cultural significance to an Indian Tribe? Yes _____ or No <u>✓</u> If yes, provide that name of the Indian Tribe associated with the property. _____

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

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: Massachusetts Port Authority Dedicated Freight Corridor

Operator signature:

Print Full Name and Title: WILLIAM C. ZENEAK

Date:

7/30/15

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.

Dilution Factor Calculation

Approach

The discharge dilution factor was calculated in accordance with Appendix VII of the Dewatering General Permit (DGP) application.

Formula

$$DF = (Q_d + Q_s)/Q_d$$

DF = dilution factor

Q_d = flow of discharge into receiving water body

Q_s = estimated flow of receiving water body

Assumptions

Q_s = *estimated flow of receiving water body*

Q_s = tidal flow

Flow per ebb or flood tide = approximately 11,000,000 cubic feet of water

Duration of tidal ebb or flood tide = approximately 6 hours

Q_s = 510 cubic feet per second (cfs)

Q_d = flow of discharge into receiving water body

Q_d = 400 gallons per minute (gpm) = 0.9 cfs

Calculation

$$DF = (Q_d + Q_s)/Q_d$$

$$DF = (0.9 + 510)/(0.9)$$

$$DF = 567$$

$$DF > 100$$

Appendix B

Laboratory Data Reports



CERTIFICATE OF ANALYSIS

Jessica Englehart
GEI Consultants, Inc.
400 Unicorn Park Drive
Woburn, MA 01801

RE: Conley DFC - Exelon (11649-6)
ESS Laboratory Work Order Number: 1506134

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED

By ESS Laboratory at 3:54 pm, Jun 11, 2015

Analytical Summary

The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.



CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: Conley DFC - Exelon

ESS Laboratory Work Order: 1506134

SAMPLE RECEIPT

The following samples were received on June 04, 2015 for the analyses specified on the enclosed Chain of Custody Record.

To achieve CAM compliance for MCP data, ESS Laboratory has performed and reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All CAM requirements have been achieved unless noted in the project narrative.

Each method has been set-up in the laboratory to reach required MCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes. The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Data Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

Question I: All samples for Metals were analyzed for a subset of the required MCP list per the client's request.

<u>Lab Number</u>	<u>Sample Name</u>	<u>Matrix</u>	<u>Analysis</u>
1506134-01	11649-B1043-MW	Ground Water	6010B, 6010C, 7010, 7196A, 7470A, 9040, 9250



CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: Conley DFC - Exelon

ESS Laboratory Work Order: 1506134

PROJECT NARRATIVE

Total Metals

1506134-01 [Elevated Method Reporting Limits due to sample matrix \(EL\).](#)
Iron , Lead , Selenium
CF50604-BSD1 [Blank Spike recovery is below lower control limit \(B-\).](#)
Arsenic (77% @ 80-120%), Selenium (77% @ 80-120%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

[Definitions of Quality Control Parameters](#)
[Semivolatile Organics Internal Standard Information](#)
[Semivolatile Organics Surrogate Information](#)
[Volatile Organics Internal Standard Information](#)
[Volatile Organics Surrogate Information](#)
[EPH and VPH Alkane Lists](#)



CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: Conley DFC - Exelon

ESS Laboratory Work Order: 1506134

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015D - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.



CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: Conley DFC - Exelon

ESS Laboratory Work Order: 1506134

MassDEP Analytical Protocol Certification Form

MADEP RTN: _____

This form provides certification for the following data set: **1506134-01**

Matrices: ☒ Ground Water/Surface Water ☐ Soil/Sediment ☐ Drinking Water ☐ Air ☐ Other: _____

CAM Protocol (check all that apply below):

☐ 8260 VOC CAM II A	☒ 7470/7471 Hg CAM III B	☐ MassDEP VPH CAM IV A	☐ 8081 Pesticides CAM V B	☒ 7196 Hex Cr CAM VI B	☐ MassDEP APH CAM IX A
☐ 8270 SVOC CAM II B	☒ 7010 Metals CAM III C	☐ MassDEP EPH CAM IV B	☐ 8151 Herbicides CAM V C	☐ 8330 Explosives CAM VIII A	☐ TO-15 VOC CAM IX B
☒ 6010 Metals CAM III A	☐ 6020 Metals CAM III D	☐ 8082 PCB CAM V A	☐ 6860 Perchlorate CAM VIII B	☐ 9014 Total Cyanide/PAC CAM VI A	

Affirmative responses to questions A through F are required for Presumptive Certainty's status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	Yes ☒ No ☐
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes ☒ No ☐
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	Yes ☒ No ☐
D	Does the laboratory report comply with all the reporting requirements specified in the CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes ☒ No ☐
E	a. VPH, EPH, APH and TO-15 only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	Yes ☐ No ☐
	b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes ☐ No ☐
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	Yes ☒ No ☐

Responses to Questions G, H and I below are required for Presumptive Certainty's status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols(s)? Data User Note: Data that achieve Presumptive Certainty's status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.	Yes ☐ No ☒ *
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	Yes ☐ No ☒ *
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes ☐ No ☒ *

***All negative responses must be addressed in an attached laboratory 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 analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature: Laurel Stoddard
Printed Name: Laurel Stoddard

Date: June 11, 2015
Position: Laboratory Director



CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: Conley DFC - Exelon
Client Sample ID: 11649-B1043-MW
Date Sampled: 06/04/15 12:12
Percent Solids: N/A

ESS Laboratory Work Order: 1506134
ESS Laboratory Sample ID: 1506134-01
Sample Matrix: Ground Water
Units: ug/L

Extraction Method: 3005A

Total Metals

<u>Analyte</u>	<u>Results (MRL)</u>	<u>MDL</u>	<u>Method</u>	<u>Limit</u>	<u>DF</u>	<u>Analyst</u>	<u>Analyzed</u>	<u>I/V</u>	<u>F/V</u>	<u>Batch</u>
Antimony	ND (25.0)		6010C		1	KJK	06/08/15 23:48	50	25	CF50604
Arsenic	ND (2.5)		7010		1	KJK	06/10/15 9:05	50	25	CF50604
Cadmium	ND (2.5)		6010C		1	KJK	06/08/15 23:48	50	25	CF50604
Chromium	ND (10.0)		6010C		1	KJK	06/08/15 23:48	50	25	CF50604
Copper	ND (10.0)		6010C		1	KJK	06/08/15 23:48	50	25	CF50604
Hardness	5300000 (6620)		6010B		10	KJK	06/10/15 5:31	1	1	[CALC]
Iron	EL ND (500)		6010C		10	KJK	06/10/15 5:31	50	25	CF50604
Lead	EL ND (20.0)		6010C		2	KJK	06/10/15 5:36	50	25	CF50604
Mercury	ND (0.200)		7470A		1	BJV	06/08/15 14:39	20	40	CF50812
Nickel	ND (25.0)		6010C		1	KJK	06/08/15 23:48	50	25	CF50604
Selenium	EL ND (15.0)		7010		3	KJK	06/10/15 18:09	50	25	CF50604
Silver	ND (5.0)		6010C		1	KJK	06/08/15 23:48	50	25	CF50604
Zinc	ND (25.0)		6010C		1	KJK	06/08/15 23:48	50	25	CF50604



CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: Conley DFC - Exelon
Client Sample ID: 11649-B1043-MW
Date Sampled: 06/04/15 12:12
Percent Solids: N/A

ESS Laboratory Work Order: 1506134
ESS Laboratory Sample ID: 1506134-01
Sample Matrix: Ground Water

Classical Chemistry

<u>Analyte</u>	<u>Results (MRL)</u>	<u>MDL</u>	<u>Method</u>	<u>Limit</u>	<u>DF</u>	<u>Analyst</u>	<u>Analyzed</u>	<u>Units</u>	<u>Batch</u>
Chloride	14800000 (600000)		9250		200	EEM	06/10/15 13:12	ug/L	CF51035
Hexavalent Chromium	ND (10)		7196A		1	MJV	06/05/15 7:33	ug/L	CF50501
pH	7.37 (N/A)		9040		1	EEM	06/04/15 19:10	S.U.	CF50436
pH Sample Temp	Aqueous pH measured in water at 13.4 °C. (N/A)								



CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: Conley DFC - Exelon

ESS Laboratory Work Order: 1506134

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
---------	--------	-----	-------	-------------	---------------	------	-------------	-----	-----------	-----------

Total Metals

Batch CF50604 - 3005A

Blank

Antimony	ND	25.0	ug/L
Arsenic	ND	2.5	ug/L
Cadmium	ND	2.5	ug/L
Calcium	ND	0.100	mg/L
Chromium	ND	10.0	ug/L
Copper	ND	10.0	ug/L
Iron	ND	50.0	ug/L
Lead	ND	10.0	ug/L
Magnesium	ND	0.100	mg/L
Nickel	ND	25.0	ug/L
Selenium	ND	5.0	ug/L
Silver	ND	5.0	ug/L
Zinc	ND	25.0	ug/L

LCS

Antimony	224	25.0	ug/L	250.0	90	80-120
Arsenic	200	50.0	ug/L	250.0	80	80-120
Cadmium	112	2.5	ug/L	125.0	89	80-120
Calcium	2.38	0.100	mg/L	2.500	95	80-120
Chromium	244	10.0	ug/L	250.0	97	80-120
Copper	241	10.0	ug/L	250.0	97	80-120
Iron	1220	50.0	ug/L	1250	98	80-120
Lead	233	10.0	ug/L	250.0	93	80-120
Magnesium	2.44	0.100	mg/L	2.500	97	80-120
Nickel	241	25.0	ug/L	250.0	96	80-120
Selenium	405	100	ug/L	500.0	81	80-120
Silver	123	5.0	ug/L	125.0	98	80-120
Zinc	223	25.0	ug/L	250.0	89	80-120

LCS Dup

Antimony	212	25.0	ug/L	250.0	85	80-120	6	20	
Arsenic	193	50.0	ug/L	250.0	77	80-120	3	20	B-
Cadmium	106	2.5	ug/L	125.0	85	80-120	5	20	
Calcium	2.26	0.100	mg/L	2.500	90	80-120	5	20	
Chromium	225	10.0	ug/L	250.0	90	80-120	8	20	
Copper	224	10.0	ug/L	250.0	90	80-120	7	20	
Iron	1140	50.0	ug/L	1250	91	80-120	7	20	
Lead	219	10.0	ug/L	250.0	88	80-120	6	20	
Magnesium	2.28	0.100	mg/L	2.500	91	80-120	6	20	
Nickel	223	25.0	ug/L	250.0	89	80-120	8	20	
Selenium	387	100	ug/L	500.0	77	80-120	5	20	B-
Silver	115	5.0	ug/L	125.0	92	80-120	7	20	
Zinc	236	25.0	ug/L	250.0	94	80-120	6	20	

Batch CF50812 - 245.1/7470A

Blank



CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: Conley DFC - Exelon

ESS Laboratory Work Order: 1506134

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
---------	--------	-----	-------	-------------	---------------	------	-------------	-----	-----------	-----------

Total Metals

Batch CF50812 - 245.1/7470A

Mercury	ND	0.200	ug/L							
LCS										
Mercury	6.13	0.200	ug/L	6.000		102	80-120			
LCS Dup										
Mercury	6.12	0.200	ug/L	6.000		102	80-120	0.3	20	

Classical Chemistry

Batch CF50501 - General Preparation

Blank										
Hexavalent Chromium	ND	10	ug/L							
LCS										
Hexavalent Chromium	0.5		mg/L	0.4998		98	90-110			
LCS Dup										
Hexavalent Chromium	0.5		mg/L	0.4998		98	90-110	0.2	20	

Batch CF51035 - General Preparation

Blank										
Chloride	ND	3000	ug/L							
LCS										
Chloride	29		mg/L	30.00		98	90-110			



CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: Conley DFC - Exelon

ESS Laboratory Work Order: 1506134

Notes and Definitions

Z16	Aqueous pH measured in water at 13.4 °C.
U	Analyte included in the analysis, but not detected
EL	Elevated Method Reporting Limits due to sample matrix (EL).
D	Diluted.
B-	Blank Spike recovery is below lower control limit (B-).
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report



CERTIFICATE OF ANALYSIS

Client Name: GEI Consultants, Inc.
Client Project ID: Conley DFC - Exelon

ESS Laboratory Work Order: 1506134

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP)

A2LA Accredited: Testing Cert# 2864.01

<http://www.a2la.org/scopepdf/2864-01.pdf>

Rhode Island Potable and Non Potable Water: LAI00179

<http://www.health.ri.gov/find/labs/analytical/ESS.pdf>

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750

http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutOfStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI0002

<http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/documents/AllLabs.xls>

Massachusetts Potable and Non Potable Water: M-RI002

<http://public.dep.state.ma.us/Labcert/Labcert.aspx>

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424

<http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm>

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313

<http://www.wadsworth.org/labcert/elap/comm.html>

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006

http://datamine2.state.nj.us/DEP_Opra/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752

http://www.depweb.state.pa.us/portal/server.pt/community/labs/13780/laboratory_accreditation_program/590095

CHEMISTRY

A2LA Accredited: Testing Cert # 2864.01

Lead in Paint, Phthalates, Lead in Children's Metals Products (Including Jewelry)

<http://www.A2LA.org/dirsearchnew/newsearch.cfm>

CPSC ID# 1141

Lead Paint, Lead in Children's Metals Jewelry

<http://www.cpsc.gov/cgi-bin/labapplist.aspx>

Sample and Cooler Receipt Checklist

Client: GEI Consultants Inc
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 15060134
Date Project Due: 6/11/15
Days For Project: 5 Day

Items to be checked upon receipt:

1. Air Bill Manifest Present?

☒ * No

Air No.:

2. Were Custody Seals Present?

☐ No

3. Were Custody Seals Intact?

☐ N/A

4. Is Radiation count < 100 CPM?

☐ Yes

5. Is a cooler present?

☐ YesCooler Temp: 3.5Iced With: Ice

6. Was COC included with samples?

☐ Yes

7. Was COC signed and dated by client?

☐ Yes

8. Does the COC match the sample

☐ Yes

9. Is COC complete and correct?

☐ Yes

10. Are the samples properly preserved?

☐ Yes

11. Proper sample containers used?

☐ Yes

12. Any air bubbles in the VOA vials?

☐ N/A

13. Holding times exceeded?

☐ No

14. Sufficient sample volumes?

☐ Yes

15. Any Subcontracting needed?

☐ No

16. Are ESS labels on correct containers?

☒ Yes ☐ No

17. Were samples received intact?

☒ Yes ☐ No

ESS Sample IDs: _____

Sub Lab: _____

Analysis: _____

TAT: _____

18. Was there need to call project manager to discuss status? If yes, please explain.

Who was called?: _____

By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	250 ml Plastic	1	HNO3
1	Yes	250 ml Plastic	1	NP
1	Yes	500 ml Plastic	1	NP

Completed By: [Signature]Date/Time: 6/4/15 1830Reviewed By: [Signature]Date/Time: 6/4/15 1840

[illegible]

Temp: 3.5 Ice #4

APPENDIX VIII

TEST METHODS AND MINIMUM LEVELS¹ FOR GROUNDWATER SOURCES

Parameters	Minimum Levels (ug/l) and Test Methods				
	CAS Numbers	ICP/AES ² Methods 200.7,3010A/6010C	ICP/MS ³ ,200.8, 310A/6020A	GFAA ⁴ Method 200.9, 7010	Notes Digestion Methods No.
1. Antimony	7440360	10 ug/L	0.5 ug/L	3 ug/l	200
2. Arsenic	7440382	20 ug/l	1.0 ug/L	3 ug/l	206.5
3. Cadmium	7440439	10 ug/l	0.2 ug/L	0.5 ug/l	200
4. Chromium Total	7440473	15ug/l	1.0 ug/L	1 ug/l	200
5. Chromium VI	18540299				
6. Copper	7440508	15 ug/l	0.5 ug/L	3 ug/l	200
7. Lead	7439921	20 ug/l	0.2 ug/L	3 ug/l	200
8. Mercury	7439976				
9. Nickel	7440020	20 ug/l	0.2 ug/L	5 ug/l	200
10. Selenium	7782492	20 ug/l	2 ug/L	5 ug/l	200
11. Silver	7740224	10 ug/l	0.2 ug/L	1 ug/l	200
12. Zinc	7440666	15 ug/l	5 ug/L		200
13. Iron	7439896	20 ug/L	50 ug/L		200
14. Hardness					Approved Part 136 Methods ²
15. Chloride	16887006				Approved Part 136 Methods ²
16. pH					Approved Part 136 Methods ²

1. 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.
2. Inductively Couple Plasmas/ Atomic (optical) emissions Spectrometry
3. Inductively Couple Plasma/Mass Spectrometry
4. Graphite Furnace Atomic Absorption
5. Standard Method

Appendix C

**MassGIS Map & United States Department of Fish & Wildlife
Letter**

MassDEP - Bureau of Waste Site Cleanup

Site Information:

776 SUMMER STREET BOSTON, MA

NAD83 UTM Meters:

5211987mN, -7907263mE (Zone: 18)

July 15, 2015

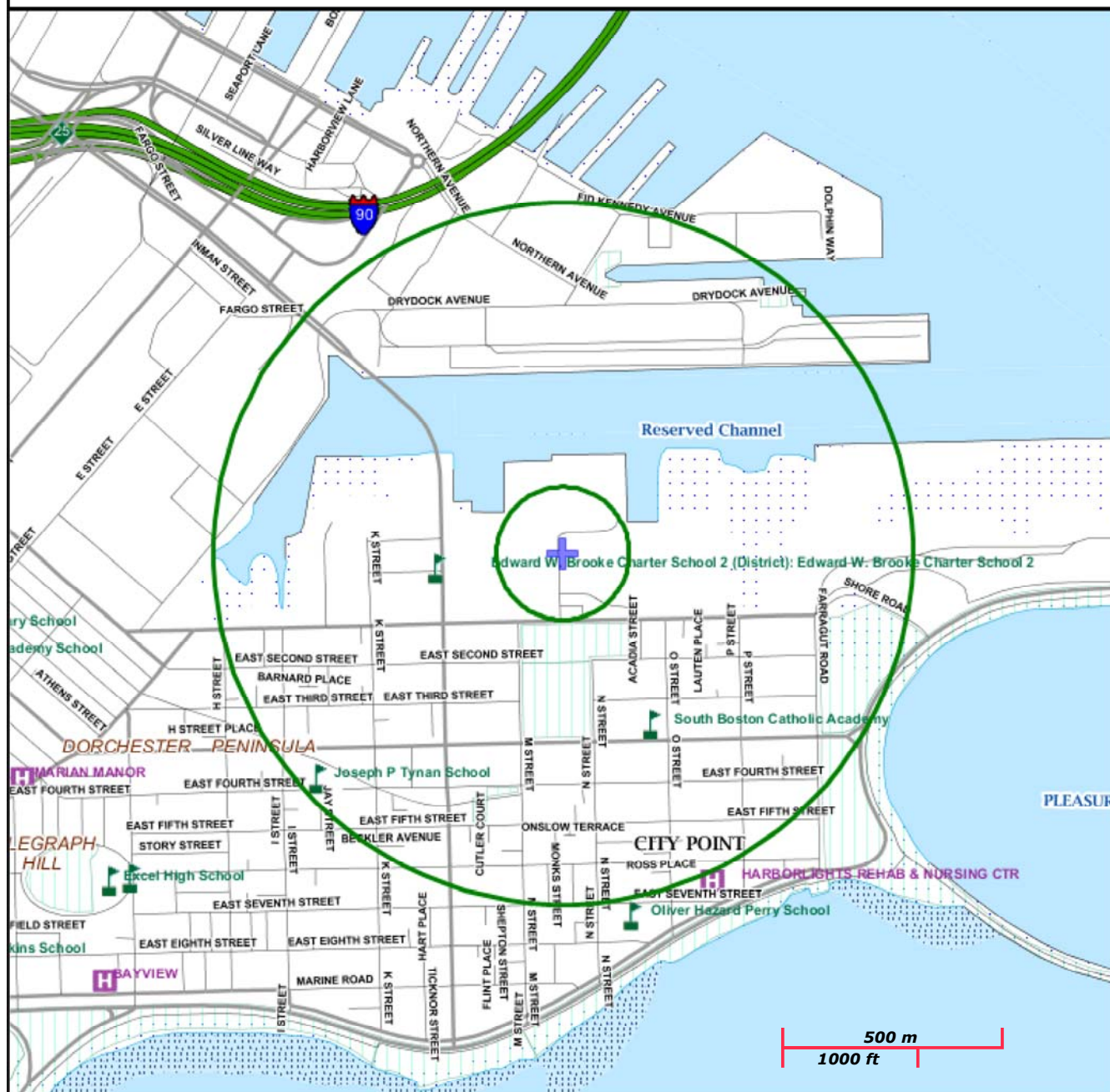
Phase 1 Site Assessment Map: 500 feet & 0.5 Mile Radii

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



MassDEP

Commonwealth of Massachusetts
Department of Environmental Protection



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

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

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

Aquifers: Medium Yield, High Yield, EPA Sole Source

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

PWS Protection Areas: Zone II, IWPA, Zone A

Hydrography: Open Water, PWS Reservoir, Tidal Flat

Wetlands: Freshwater, Saltwater, Cranberry Bog

FEMA 100yr Floodplain; Protected Open Space; ACEC

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

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



United States Department of the Interior



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

Consultation Code: 05E1NE00-2015-SLI-0854

July 16, 2015

Event Code: 05E1NE00-2015-E-01239

Project Name: Conley Terminal Dedicated Freight Corridor

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

To Whom It May Concern:

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

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

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

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

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

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

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

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

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

Attachment



United States Department of Interior
Fish and Wildlife Service

Project name: Conley Terminal Dedicated Freight Corridor

Official Species List

Provided by:

New England Ecological Services Field Office

70 COMMERCIAL STREET, SUITE 300

CONCORD, NH 3301

(603) 223-2541

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

Consultation Code: 05E1NE00-2015-SLI-0854

Event Code: 05E1NE00-2015-E-01239

Project Type: TRANSPORTATION

Project Name: Conley Terminal Dedicated Freight Corridor

Project Description: The Massachusetts Port Authority is constructed a dedicated freight corridor, including a bridge, from Conley Terminal to Summer Street in Boston, Massachusetts. Specifically, the selected area will be dewatered for construction of a bridge abutment.

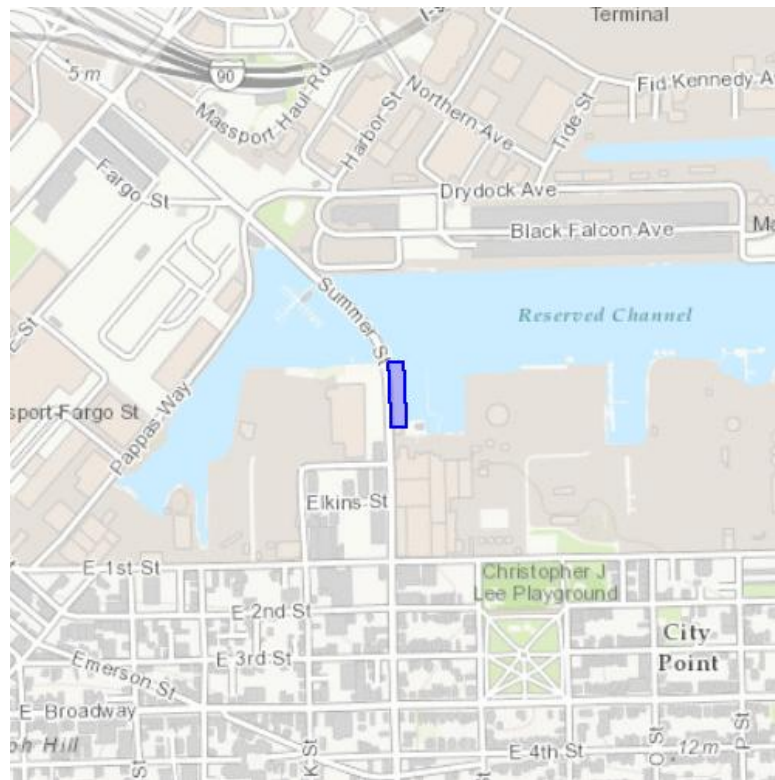
Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your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



United States Department of Interior
Fish and Wildlife Service

Project name: Conley Terminal Dedicated Freight Corridor

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-71.03555381298065 42.34164708121659, -71.03549480438232 42.340528922925024, -71.0351300239563 42.340524957789334, -71.03516757488251 42.341662941474866, -71.03555381298065 42.34164708121659)))

Project Counties: Suffolk, MA



United States Department of Interior
Fish and Wildlife Service

Project name: Conley Terminal Dedicated Freight Corridor

Endangered Species Act Species List

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

Birds	Status	Has Critical Habitat	Condition(s)
Red Knot (<i>Calidris canutus rufa</i>)	Threatened		



United States Department of Interior
Fish and Wildlife Service

Project name: Conley Terminal Dedicated Freight Corridor

Critical habitats that lie within your project area

There are no critical habitats within your project area.