



89 Crawford Street
Leominster, Massachusetts 01453
Tel: 774.450.7177
Fax: 888.835.0617
www.lrt-llc.net

March 1, 2016

U.S. Environmental Protection Agency-Region 1
5 Post Office Square, Suite 100
Mail Code OEP06-4
Boston, Massachusetts 02109-3912
Attn.: Dewatering General Permit NOI Processing

**Reference: Notice of Intent (NOI)
 Dewatering General Permit (DGP)
 Scituate Middle School
 606 Chief Justice Cushing Highway
 Scituate, Massachusetts**

To Whom It May Concern:

On behalf of J. Derenzo Company (JDC), Lockwood Remediation Technologies, LLC (LRT) has prepared this Notice of Intent (NOI) for coverage under the National Pollutant Discharge Elimination System (NPDES) Dewatering General Permit (DGP) (MAG070000). This NOI was prepared in accordance with the general requirements of the NPDES and related guidance documentation provided by the US Environmental Protection Agency (EPA). The completed NOI form is provided in Appendix A.

Site Information

This NOI has been prepared for the management of water generated during the construction of a new middle school in Scituate, Massachusetts (the Site); please refer to Figure 1 for a locus map and an overview of the immediate area surrounding the Site. The work area, located at 606 Chief Justice Cushing Highway, is depicted in Figure 2 along with the proposed treated water discharge location.

Work Summary

The work scope at the site includes the demolition of a portion of the existing high school to allow for the addition of the middle school. Also, construction on site will include a new auditorium, relocation/installation of utilities and a new parking lot. In order to complete portions of this work, dewatering is required. All water generated from the dewatering of the excavations will be pumped to a water treatment system, depicted in Figure 3, prior to discharge to a catch basin that flows into Tack Factory Pond. To characterize water from the excavation, LRT collected a representative groundwater sample from an excavation pit on February 24, 2016. This sample was analyzed for the parameters in accordance with the NPDES DGP, Appendix VIII. Laboratory data reports for this sample are provided in Appendix B.

Discharge and Receiving Surface Water Information

A groundwater sample collected by LRT on February 24, 2016 was submitted for the following analyses: total suspended solids (TSS), selected metals, hardness, pH and chloride. The results of this sampling are below applicable Remediation General Permit (RGP) standards. Refer to Figure 3 for the water treatment system layout.

Consultation with Federal Services

LRT reviewed online electronic data viewers and databases from the Massachusetts Geographical Information System (MassGIS), the Massachusetts Division of Fisheries and Wildlife (MassWildlife; Natural Heritage and Endangered Species Program), and the U.S. National Parks Service Natural Historic Places (NPS). 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, Estimated Habitats of Rare Wildlife, or listed as a National Historic Place.

Coverage under NPDES DGP

It is our opinion that the proposed discharge is eligible for coverage under the NPDES DGP. On behalf of JDC, we are requesting coverage under the NPDES DGP for the discharge of wastewater during construction activities to Tack Factory Pond.

The enclosed NOI form provides required information on the general site conditions, discharge, treatment system, receiving water, and consultation with federal services. For this project, JDC is the operator that has operational control over the construction plans and specifications, including the ability to make modifications to those plans and specifications.

Please feel free to contact us at 774-450-7177 or at plockwood@lrt-llc.net if you have any questions or if you require additional information.

Sincerely,
Lockwood Remediation Technologies, LLC

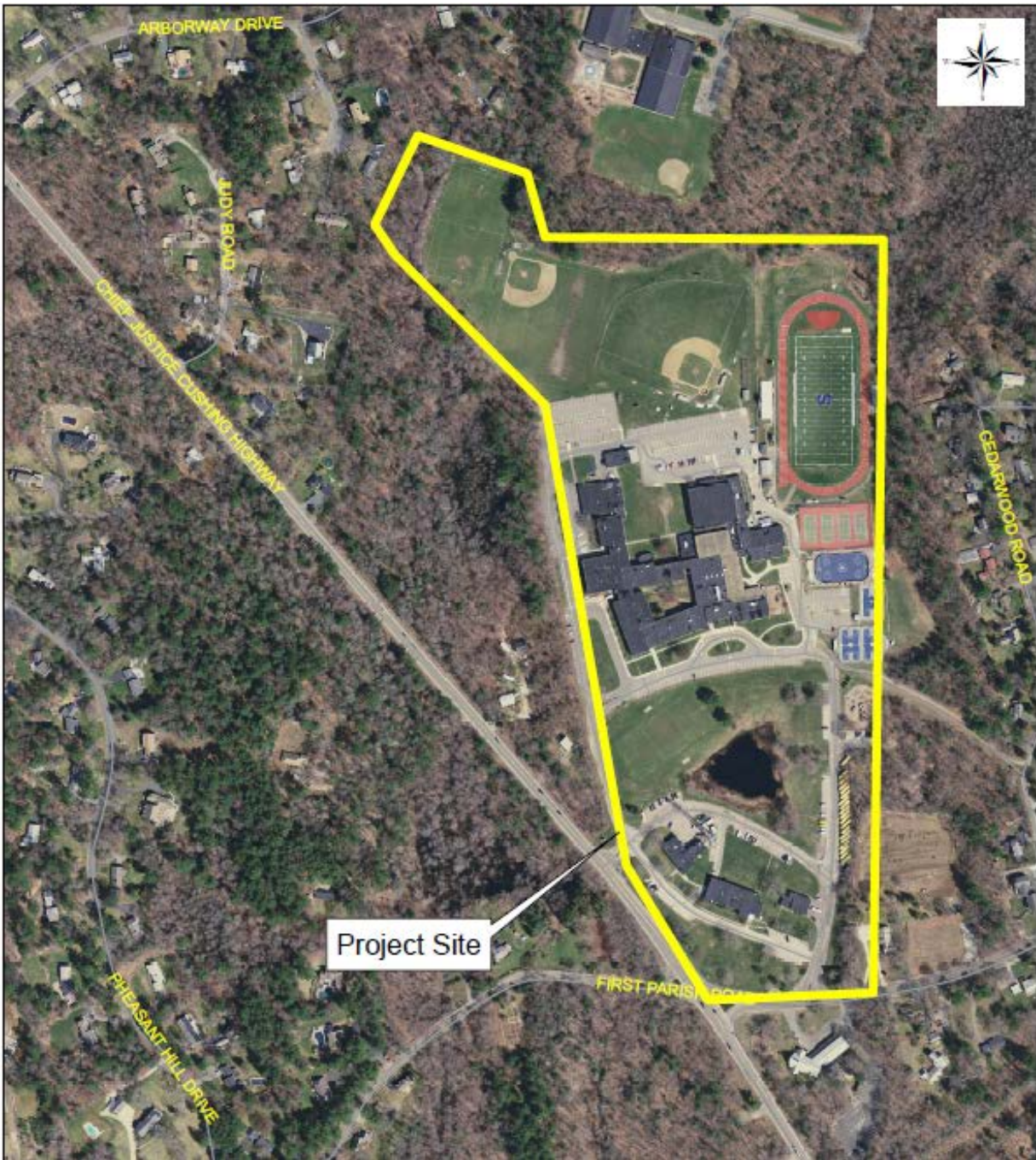
Paul Lockwood

Paul Lockwood
President

Attachments:

- Figure 1 Locus Plan
- Figure 2 Discharge Location
- Figure 3 Outfall Locations
- Figure 4 Water Treatment System Layout
- Appendix A – NOI Form
- Appendix B – Laboratory Data
- Appendix C – Supplemental Information

Figures



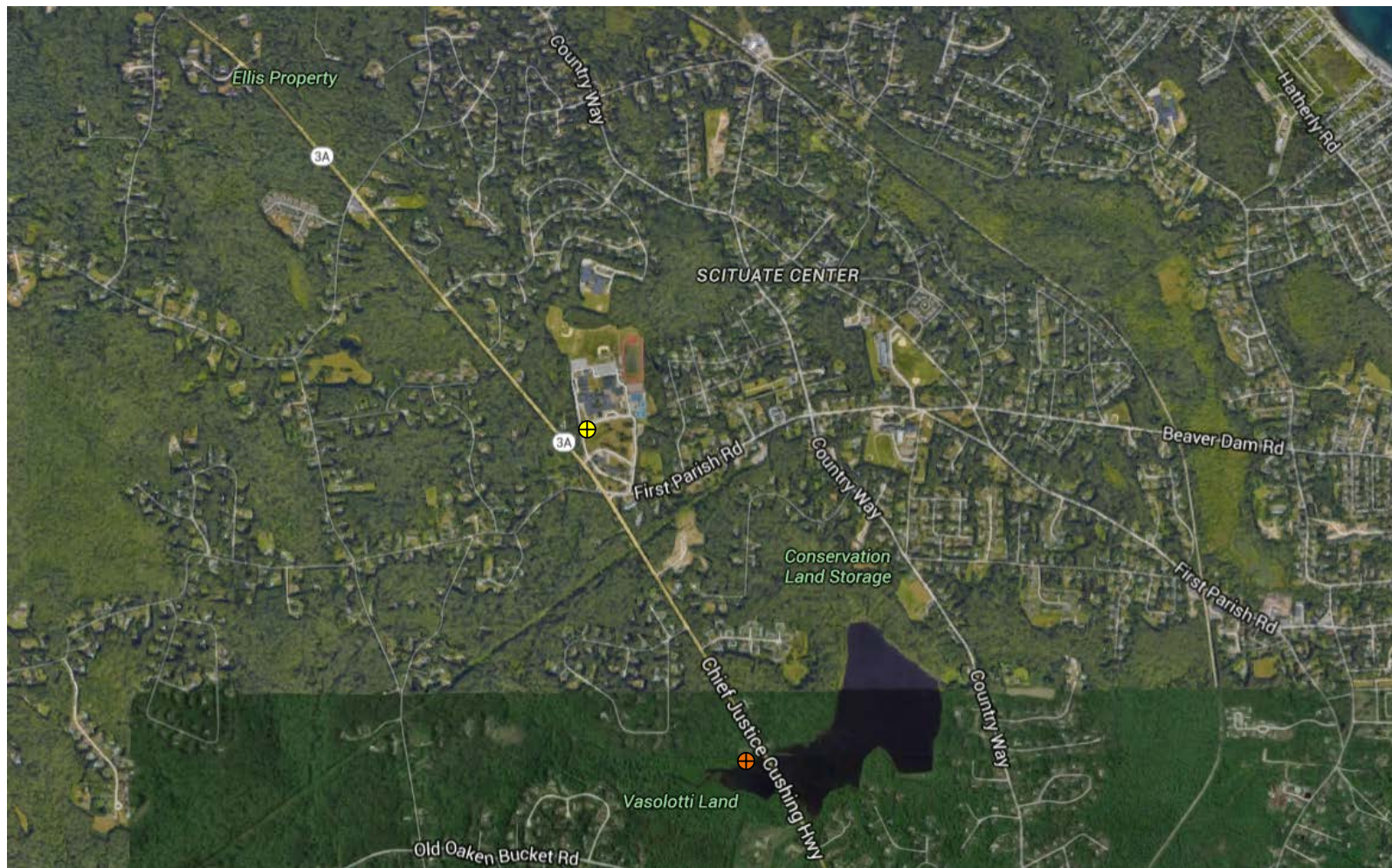
Site Location:

Latitude: 42.196622
 Longitude: -70.768643



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Figure 1 – Locus Map
 Scituate Middle School
 606 Chief Justice Cushing Highway
 Scituate, Massachusetts



Source: Google Maps

KEY

Site 
 Discharge Location 



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Figure 2 - Discharge Location
 Scituate Public Safety Facility
 606 Chief Justice Cushing Highway
 Scituate, Massachusetts



Source: Existing Conditions Plan by Ross Engineering Co. Inc. dated June 30, 2015

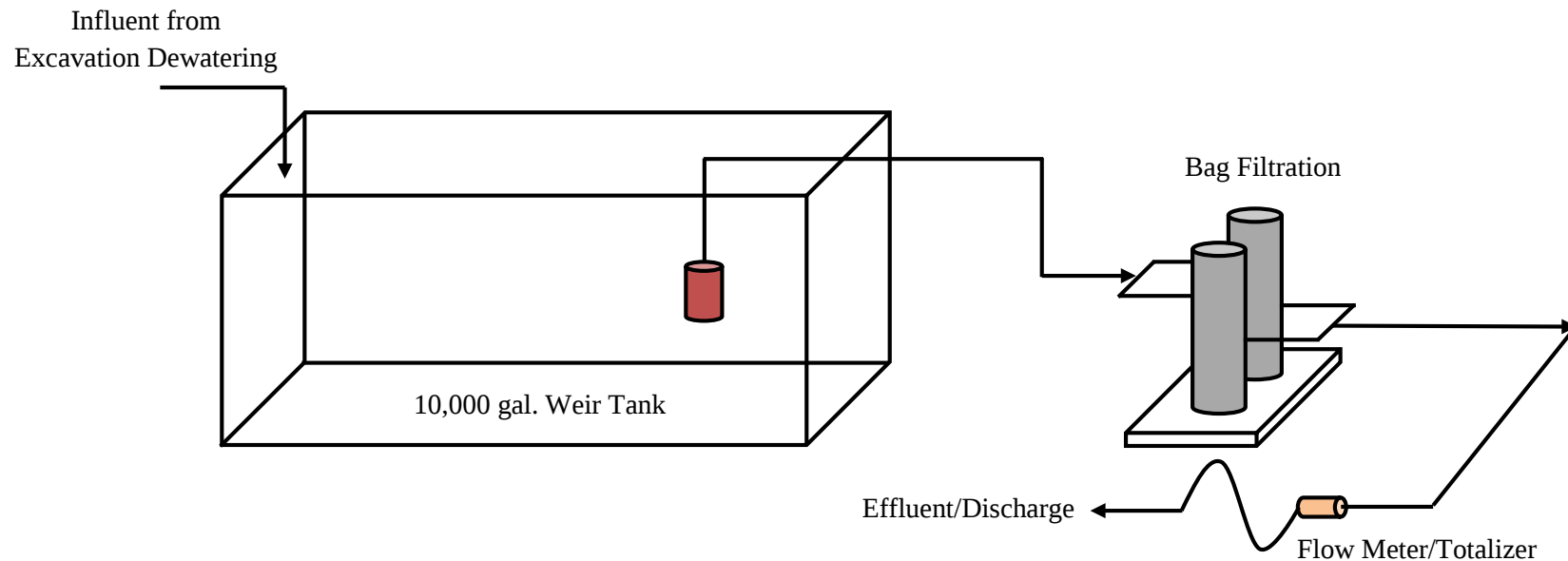
KEY

Outfall 



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Figure 3 - Outfall Locations
Scituate Public Safety Facility
606 Chief Justice Cushing Highway
Scituate, Massachusetts



Notes:

- 1.) Figure is not to scale.
- 2.) The water treatment system is rated for 50 gallons per minute.
- 3.) All dewatering effluent water shall be routed to the treatment system.



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Figure 4 - Water Treatment System Layout
Scituate Public Safety Facility
606 Chief Justice Cushing Highway
Scituate, Massachusetts

Appendix A – NOI Form

II. Suggested Notice of Intent (NOI) Format

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

a) Name of facility:		Mailing Address for the Facility:	
b) Location Address of the Facility (if different from mailing address):	Facility Location	Type of Business:	
	longitude: _____ latitude: _____	Facility SIC codes:	
c) Name of facility owner: _____ Owner's email: _____ Owner's Tel #: _____ Owner's Fax #: _____ Address of owner (if different from facility address) Town of Scituate 600 Chief Justice Highway Scituate, MA 02066 Owner is (check one): 1. Federal _____ 2. State _____ 3. Private _____ 4. Other _____ (Describe) _____			
Legal name of Operator, if not owner: _____ Operator Contact Name: _____ Operator Tel Number: _____ Fax Number: _____ Operator's email: _____ Operator Address (if different from owner) _____			
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. Groundwater

g.) What treatment does the wastewater receive prior to discharge? Weir tank and bag filtration

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. _____. Outfall 4: long. -70.768018 lat. 42.197996 Outfall 5: long. -70.766940 lat. 42.19934

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 _____ 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)). b) Please report any known remediation activities or water-quality issues in the vicinity of the discharge.
--

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? _____ 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 _____ No _____ ; Question 2: No _____ Yes _____ b) Have any State or Tribal historic preservation officers been consulted in this determination? Yes _____ or No _____ If yes, attach the results of the consultation(s). c) Which of the three National Historic Preservation Act eligibility criterion listed in Appendix III, Criterion (A, B, or C) have you met? _____ d) Is the project located on property of religious or cultural significance to an Indian Tribe? Yes _____ or No _____ 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: Scituate Middle School

Operator signature:

Print Full Name and Title:

Date: 03/02/2016

Federal regulations require this application to be signed as follows:

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

Appendix B – Laboratory Data

- ☒ Final Report
☐ Re-Issued Report
☐ Revised Report

Report Date:
29-Feb-16 16:36

Laboratory Report

Lockwood Remediation Technologies, LLC
89 Crawford Street
Leominster, MA 01453
Attn: Paul Lockwood

Project: Scituate Middle School - Scituate, MA
Project #: 2-1345

<u>Laboratory ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>Date Received</u>
SC18465-01	EX022416	Ground Water	24-Feb-16 10:30	25-Feb-16 13:50

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87936
Maine # MA138
New Hampshire # 2538
New Jersey # MA011
New York # 11393
Pennsylvania # 68-04426/68-02924
Rhode Island # LAO00098
USDA # S-51435



Authorized by:



June O'Connor
Laboratory Director

Eurofins Spectrum Analytical holds certification in the State of Massachusetts for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of Massachusetts does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.

Please note that this report contains 10 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Eurofins Spectrum Analytical, Inc.

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Please contact the Laboratory or Technical Director at 800-789-9115 with any questions regarding the data contained in this laboratory report.

CASE NARRATIVE:

Data has been reported to the RDL. This report excludes estimated concentrations detected below the RDL and above the MDL (J-Flag).

All non-detects and all results below the reporting limit are reported as "<" (less than) the reporting limit in this report.

The samples were received 2.3 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of +/- 1.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group.

Analyses for Total Hardness, pH, and Total Residual Chlorine fall under the state of Pennsylvania code Chapter 252.6 accreditation by rule.

See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

SM3500-Cr-B/7196A

Samples:

SC18465-01 EX022416

This sample was analyzed outside the EPA recommended holding time per client request.

Hexavalent Chromium

Sample Acceptance Check Form

Client: Lockwood Remediation Technologies, LLC - MA
Project: Scituate Middle School - Scituate, MA / 2-1345
Work Order: SC18465
Sample(s) received on: 2/25/2016

The following outlines the condition of samples for the attached Chain of Custody upon receipt.

	<u>Yes</u>	<u>No</u>	<u>N/A</u>
Were custody seals present?	☐	☒	☐
Were custody seals intact?	☐	☐	☒
Were samples received at a temperature of $\leq 6^{\circ}\text{C}$?	☒	☐	☐
Were samples refrigerated upon transfer to laboratory representative?	☒	☐	☐
Were sample containers received intact?	☒	☐	☐
Were samples properly labeled (labels affixed to sample containers and include sample ID, site location, and/or project number and the collection date)?	☒	☐	☐
Were samples accompanied by a Chain of Custody document?	☒	☐	☐
Does Chain of Custody document include proper, full, and complete documentation, which shall include sample ID, site location, and/or project number, date and time of collection, collector's name, preservation type, sample matrix and any special remarks concerning the sample?	☒	☐	☐
Did sample container labels agree with Chain of Custody document?	☒	☐	☐
Were samples received within method-specific holding times?	☐	☒	☐

Summary of Hits

Lab ID: SC18465-01

Client ID: EX022416

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Calcium	3.71		0.100	mg/l	EPA 200.7
Iron	0.112		0.0150	mg/l	EPA 200.7
Magnesium	1.37		0.0100	mg/l	EPA 200.7
Zinc	0.0072		0.0050	mg/l	EPA 200.7
Chloride	12.0		1.00	mg/l	EPA 300.0
Hardness	14.9		0.291	mg/l CaCO3	SM 2340B

Please note that because there are no reporting limits associated with hazardous waste characterizations or micro analyses, this summary does not include hits from these analyses if included in this work order

Sample Identification

EX022416	<u>Client Project #</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Received</u>
SC18465-01	2-1345	Ground Water	24-Feb-16 10:30	25-Feb-16

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 200/6000 Series Methods													
	Preservation	Field Preserved		N/A			1	EPA 200/6000 methods			LNB	1603367	
Total Metals by EPA 200 Series Methods													
7440-38-2	Arsenic	< 0.0040		mg/l	0.0040	0.0024	1	EPA 200.7	25-Feb-16	26-Feb-16	TBC	1603370	X
7440-70-2	Calcium	3.71		mg/l	0.100	0.0642	1	"	"	29-Feb-16	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0006	1	"	"	26-Feb-16	"	"	X
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0014	1	"	"	"	"	"	X
7439-89-6	Iron	0.112		mg/l	0.0150	0.0090	1	"	"	"	"	"	X
7439-97-6	Mercury	< 0.00020		mg/l	0.00020	0.00009	1	EPA 245.1/7470A	"	26-Feb-16	TBC	1603371	X
7439-95-4	Magnesium	1.37		mg/l	0.0100	0.0038	1	EPA 200.7	"	26-Feb-16	TBC	1603370	X
7440-02-0	Nickel	< 0.0050		mg/l	0.0050	0.0016	1	"	"	"	"	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0020	1	"	"	29-Feb-16	"	"	X
7440-36-0	Antimony	< 0.0060		mg/l	0.0060	0.0030	1	"	"	26-Feb-16	"	"	X
7782-49-2	Selenium	< 0.0150		mg/l	0.0150	0.0106	1	"	"	"	"	"	X
7440-66-6	Zinc	0.0072		mg/l	0.0050	0.0033	1	"	"	"	"	"	X
General Chemistry Parameters													
	Hardness	14.9	HD	mg/l CaCO3	0.291	0.176	1	SM 2340B	25-Feb-16	29-Feb-16	TBC	[CALC]	
16887-00-6	Chloride	12.0		mg/l	1.00	0.0784	1	EPA 300.0	25-Feb-16	25-Feb-16	MJL	1603372	X
18540-29-9	Hexavalent Chromium	< 0.005	O09	mg/l	0.005	0.002	1	SM3500-Cr-B/71 96A	25-Feb-16 18:15	25-Feb-16 20:02	TDD	1603383	
	Total Suspended Solids	< 5.0		mg/l	5.0	2.8	1	SM2540D	26-Feb-16	27-Feb-16	CMB	1603406	X

This laboratory report is not valid without an authorized signature on the cover page

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1603370 - EPA 200 Series										
<u>Blank (1603370-BLK1)</u>					<u>Prepared: 25-Feb-16 Analyzed: 29-Feb-16</u>					
Magnesium	< 0.0100		mg/l	0.0100						
Lead	< 0.0075		mg/l	0.0075						
Iron	< 0.0150		mg/l	0.0150						
Zinc	< 0.0050		mg/l	0.0050						
Selenium	< 0.0150		mg/l	0.0150						
Nickel	< 0.0050		mg/l	0.0050						
Antimony	< 0.0060		mg/l	0.0060						
Chromium	< 0.0050		mg/l	0.0050						
Calcium	< 0.100		mg/l	0.100						
Cadmium	< 0.0025		mg/l	0.0025						
Arsenic	< 0.0040		mg/l	0.0040						
<u>LCS (1603370-BS1)</u>					<u>Prepared: 25-Feb-16 Analyzed: 26-Feb-16</u>					
Zinc	1.29		mg/l	0.0050	1.25		103	85-115		
Iron	1.25		mg/l	0.0150	1.25		100	85-115		
Magnesium	1.27		mg/l	0.0100	1.25		102	85-115		
Antimony	1.22		mg/l	0.0060	1.25		98	85-115		
Nickel	1.28		mg/l	0.0050	1.25		102	85-115		
Selenium	1.28		mg/l	0.0150	1.25		103	85-115		
Lead	1.33		mg/l	0.0075	1.25		107	85-115		
Cadmium	1.23		mg/l	0.0025	1.25		99	85-115		
Chromium	1.29		mg/l	0.0050	1.25		104	85-115		
Arsenic	1.26		mg/l	0.0040	1.25		101	85-115		
Calcium	6.15		mg/l	0.100	6.25		98	85-115		
<u>Duplicate (1603370-DUP1)</u>				<u>Source: SC18465-01</u>	<u>Prepared: 25-Feb-16 Analyzed: 26-Feb-16</u>					
Nickel	< 0.0050		mg/l	0.0050		BRL				20
Lead	0.0022	J	mg/l	0.0075		0.0026			16.3	20
Zinc	0.0067		mg/l	0.0050		0.0072			6	20
Antimony	< 0.0060		mg/l	0.0060		BRL				20
Magnesium	1.42		mg/l	0.0100		1.37			3	20
Iron	0.108		mg/l	0.0150		0.112			3	20
Selenium	< 0.0150		mg/l	0.0150		BRL				20
Calcium	3.77		mg/l	0.100		3.71			2	20
Chromium	< 0.0050		mg/l	0.0050		BRL				20
Cadmium	< 0.0025		mg/l	0.0025		BRL				20
Arsenic	< 0.0040		mg/l	0.0040		BRL				20
<u>Matrix Spike (1603370-MS1)</u>				<u>Source: SC18465-01</u>	<u>Prepared: 25-Feb-16 Analyzed: 29-Feb-16</u>					
Lead	1.37		mg/l	0.0075	1.25	0.0026	109	70-130		
Iron	1.39		mg/l	0.0150	1.25	0.112	102	70-130		
Magnesium	2.65		mg/l	0.0100	1.25	1.37	102	70-130		
Nickel	1.29		mg/l	0.0050	1.25	BRL	103	70-130		
Antimony	1.25		mg/l	0.0060	1.25	BRL	100	70-130		
Selenium	1.30		mg/l	0.0150	1.25	BRL	104	70-130		
Zinc	1.31		mg/l	0.0050	1.25	0.0072	104	70-130		
Arsenic	1.28		mg/l	0.0040	1.25	BRL	102	70-130		
Calcium	10.0		mg/l	0.100	6.25	3.71	101	70-130		
Chromium	1.34		mg/l	0.0050	1.25	BRL	107	70-130		
Cadmium	1.23		mg/l	0.0025	1.25	BRL	99	70-130		
<u>Post Spike (1603370-PS1)</u>				<u>Source: SC18465-01</u>	<u>Prepared: 25-Feb-16 Analyzed: 26-Feb-16</u>					
Selenium	1.32		mg/l	0.0150	1.25	BRL	106	85-115		
Iron	1.36		mg/l	0.0150	1.25	0.112	100	85-115		
Zinc	1.30		mg/l	0.0050	1.25	0.0072	103	85-115		

This laboratory report is not valid without an authorized signature on the cover page

Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1603370 - EPA 200 Series										
<u>Post Spike (1603370-PS1)</u>				<u>Source: SC18465-01</u>			<u>Prepared: 25-Feb-16 Analyzed: 26-Feb-16</u>			
Magnesium	2.65		mg/l	0.0100	1.25	1.37	102	85-115		
Nickel	1.30		mg/l	0.0050	1.25	BRL	104	85-115		
Antimony	1.25		mg/l	0.0060	1.25	BRL	100	85-115		
Lead	1.31		mg/l	0.0075	1.25	0.0026	105	85-115		
Cadmium	1.22		mg/l	0.0025	1.25	BRL	98	85-115		
Calcium	9.76		mg/l	0.100	6.25	3.71	97	85-115		
Chromium	1.30		mg/l	0.0050	1.25	BRL	104	85-115		
Arsenic	1.29		mg/l	0.0040	1.25	BRL	104	85-115		
Batch 1603371 - EPA200/SW7000 Series										
<u>Blank (1603371-BLK1)</u>							<u>Prepared: 25-Feb-16 Analyzed: 26-Feb-16</u>			
Mercury	< 0.00020		mg/l	0.00020						
<u>LCS (1603371-BS1)</u>							<u>Prepared: 25-Feb-16 Analyzed: 26-Feb-16</u>			
Mercury	0.00520		mg/l	0.00020	0.00500		104	85-115		
<u>Duplicate (1603371-DUP1)</u>				<u>Source: SC18465-01</u>			<u>Prepared: 25-Feb-16 Analyzed: 26-Feb-16</u>			
Mercury	< 0.00020		mg/l	0.00020		BRL				20
<u>Matrix Spike (1603371-MS1)</u>				<u>Source: SC18465-01</u>			<u>Prepared: 25-Feb-16 Analyzed: 26-Feb-16</u>			
Mercury	0.00490		mg/l	0.00020	0.00500	BRL	98	80-120		
<u>Post Spike (1603371-PS1)</u>				<u>Source: SC18465-01</u>			<u>Prepared: 25-Feb-16 Analyzed: 26-Feb-16</u>			
Mercury	0.00492		mg/l	0.00020	0.00500	BRL	98	85-115		

General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1603372 - General Preparation										
<u>Blank (1603372-BLK1)</u>								<u>Prepared: 25-Feb-16 Analyzed: 26-Feb-16</u>		
Chloride	< 1.00		mg/l	1.00						
<u>LCS (1603372-BS1)</u>								<u>Prepared: 25-Feb-16 Analyzed: 26-Feb-16</u>		
Chloride	20.7		mg/l	1.00	20.0		104	90-110		
<u>Calibration Blank (1603372-CCB1)</u>								<u>Prepared & Analyzed: 25-Feb-16</u>		
Chloride	0.515		mg/l							
<u>Calibration Blank (1603372-CCB2)</u>								<u>Prepared & Analyzed: 25-Feb-16</u>		
Chloride	0.504		mg/l							
<u>Calibration Blank (1603372-CCB3)</u>								<u>Prepared & Analyzed: 25-Feb-16</u>		
Chloride	0.505		mg/l							
<u>Calibration Blank (1603372-CCB4)</u>								<u>Prepared & Analyzed: 25-Feb-16</u>		
Chloride	0.504		mg/l							
<u>Calibration Blank (1603372-CCB5)</u>								<u>Prepared: 25-Feb-16 Analyzed: 26-Feb-16</u>		
Chloride	0.504		mg/l							
<u>Calibration Blank (1603372-CCB6)</u>								<u>Prepared: 25-Feb-16 Analyzed: 26-Feb-16</u>		
Chloride	0.504		mg/l							
<u>Calibration Blank (1603372-CCB7)</u>								<u>Prepared: 25-Feb-16 Analyzed: 26-Feb-16</u>		
Chloride	0.504		mg/l							
<u>Calibration Blank (1603372-CCB8)</u>								<u>Prepared: 25-Feb-16 Analyzed: 26-Feb-16</u>		
Chloride	0.505		mg/l							
<u>Calibration Check (1603372-CCV1)</u>								<u>Prepared & Analyzed: 25-Feb-16</u>		
Chloride	20.9		mg/l	1.00	20.0		104	90-110		
<u>Calibration Check (1603372-CCV2)</u>								<u>Prepared & Analyzed: 25-Feb-16</u>		
Chloride	20.8		mg/l	1.00	20.0		104	90-110		
<u>Calibration Check (1603372-CCV3)</u>								<u>Prepared & Analyzed: 25-Feb-16</u>		
Chloride	20.9		mg/l	1.00	20.0		105	90-110		
<u>Calibration Check (1603372-CCV4)</u>								<u>Prepared & Analyzed: 25-Feb-16</u>		
Chloride	20.7		mg/l	1.00	20.0		104	90-110		
<u>Calibration Check (1603372-CCV5)</u>								<u>Prepared: 25-Feb-16 Analyzed: 26-Feb-16</u>		
Chloride	20.7		mg/l	1.00	20.0		104	90-110		
<u>Calibration Check (1603372-CCV6)</u>								<u>Prepared: 25-Feb-16 Analyzed: 26-Feb-16</u>		
Chloride	20.6		mg/l	1.00	20.0		103	90-110		
<u>Calibration Check (1603372-CCV7)</u>								<u>Prepared: 25-Feb-16 Analyzed: 26-Feb-16</u>		
Chloride	20.7		mg/l	1.00	20.0		103	90-110		
<u>Calibration Check (1603372-CCV8)</u>								<u>Prepared: 25-Feb-16 Analyzed: 26-Feb-16</u>		
Chloride	20.7		mg/l	1.00	20.0		103	90-110		
<u>Duplicate (1603372-DUP1)</u>				<u>Source: SC18465-01</u>				<u>Prepared & Analyzed: 25-Feb-16</u>		
Chloride	12.1		mg/l	1.00		12.0			0.3	20
<u>Matrix Spike (1603372-MS1)</u>				<u>Source: SC18465-01</u>				<u>Prepared & Analyzed: 25-Feb-16</u>		
Chloride	20.1		mg/l	1.00	8.00	12.0	101	90-110		
<u>Matrix Spike Dup (1603372-MSD1)</u>				<u>Source: SC18465-01</u>				<u>Prepared & Analyzed: 25-Feb-16</u>		
Chloride	20.0		mg/l	1.00	8.00	12.0	100	90-110	0.5	20
<u>Reference (1603372-SRM1)</u>								<u>Prepared: 25-Feb-16 Analyzed: 26-Feb-16</u>		
Chloride	27.1		mg/l	1.00	25.0		109	90-110		
Batch 1603383 - General Preparation										
<u>Blank (1603383-BLK1)</u>								<u>Prepared & Analyzed: 25-Feb-16</u>		
Hexavalent Chromium	< 0.005		mg/l	0.005						
<u>LCS (1603383-BS1)</u>								<u>Prepared & Analyzed: 25-Feb-16</u>		
Hexavalent Chromium	0.050		mg/l	0.005	0.0500		99	90-111		
<u>Calibration Blank (1603383-CCB1)</u>								<u>Prepared & Analyzed: 25-Feb-16</u>		

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General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1603383 - General Preparation										
<u>Calibration Blank (1603383-CCB1)</u>								<u>Prepared & Analyzed: 25-Feb-16</u>		
Hexavalent Chromium	-0.002		mg/l							
<u>Calibration Blank (1603383-CCB2)</u>								<u>Prepared & Analyzed: 25-Feb-16</u>		
Hexavalent Chromium	-0.002		mg/l							
<u>Calibration Check (1603383-CCV1)</u>								<u>Prepared & Analyzed: 25-Feb-16</u>		
Hexavalent Chromium	0.050		mg/l	0.005	0.0500		101	90-110		
<u>Calibration Check (1603383-CCV2)</u>								<u>Prepared & Analyzed: 25-Feb-16</u>		
Hexavalent Chromium	0.050		mg/l	0.005	0.0500		100	90-110		
<u>Duplicate (1603383-DUP1)</u>				<u>Source: SC18465-01</u>				<u>Prepared & Analyzed: 25-Feb-16</u>		
Hexavalent Chromium	0.002	J	mg/l	0.005		BRL				20
<u>Matrix Spike (1603383-MS1)</u>				<u>Source: SC18465-01</u>				<u>Prepared & Analyzed: 25-Feb-16</u>		
Hexavalent Chromium	0.056		mg/l	0.005	0.0500	BRL	111	85-115		
<u>Matrix Spike Dup (1603383-MSD1)</u>				<u>Source: SC18465-01</u>				<u>Prepared & Analyzed: 25-Feb-16</u>		
Hexavalent Chromium	0.054		mg/l	0.005	0.0500	BRL	108	85-115	3	20
<u>Reference (1603383-SRM1)</u>								<u>Prepared & Analyzed: 25-Feb-16</u>		
Hexavalent Chromium	0.023		mg/l	0.005	0.0250		93	85-115		
Batch 1603406 - General Preparation										
<u>Blank (1603406-BLK1)</u>								<u>Prepared: 26-Feb-16 Analyzed: 27-Feb-16</u>		
Total Suspended Solids	< 5.0		mg/l	5.0						
<u>LCS (1603406-BS1)</u>								<u>Prepared: 26-Feb-16 Analyzed: 27-Feb-16</u>		
Total Suspended Solids	100		mg/l	10.0	100		100	90-110		

Notes and Definitions

O09	This sample was analyzed outside the EPA recommended holding time per client request.
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
HD	Total Hardness is a calculation based on the reported values of Ca and Mg.

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

Validated by:
Kimberly LaPlante
Rebecca Merz

Appendix C – Supplemental Information

Scituate Middle School

IPaC Trust Resource Report

Generated February 29, 2016 03:05 PM MST, IPaC v2.3.2

This report is for informational purposes only and should not be used for planning or analyzing project level impacts. For project reviews that require U.S. Fish & Wildlife Service review or concurrence, please return to the IPaC website and request an official species list from the Regulatory Documents page.



US Fish & Wildlife Service

IPaC Trust Resource Report



NAME

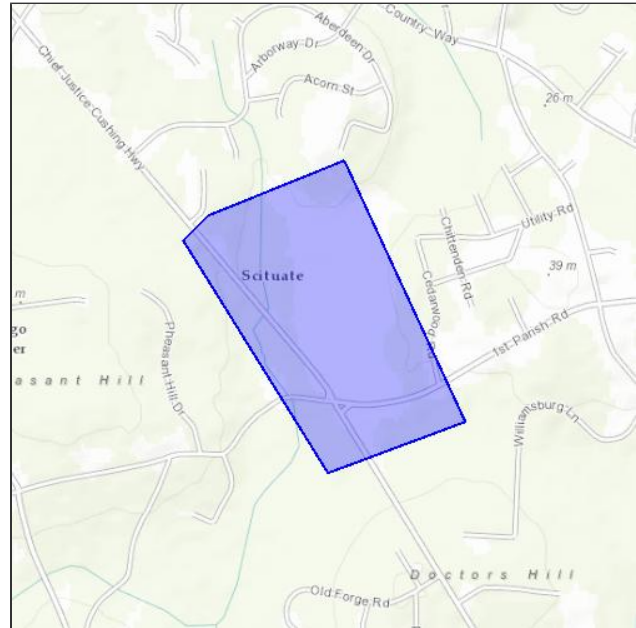
Scituate Middle School

LOCATION

Plymouth County, Massachusetts

IPAC LINK

<http://ecos.fws.gov/ipac/project/CKRSM-V3PVR-EWDFC-ZQ74F-EXFQS4>



U.S. Fish & Wildlife Contact Information

Trust resources in this location are managed by:

New England Ecological Services Field Office

70 Commercial Street, Suite 300

Concord, NH 03301-5094

(603) 223-2541

Endangered Species

Proposed, candidate, threatened, and endangered species are managed by the [Endangered Species Program](#) of the U.S. Fish & Wildlife Service.

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

For project evaluations that require FWS concurrence/review, please return to the IPaC website and request an official species list from the Regulatory Documents section.

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

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

The list of species below are those that may occur or could potentially be affected by activities in this location:

Birds

Red Knot *Calidris canutus rufa*

Threatened

CRITICAL HABITAT

No critical habitat has been designated for this species.

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0DM

Mammals

Northern Long-eared Bat *Myotis septentrionalis*

Threatened

CRITICAL HABITAT

No critical habitat has been designated for this species.

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=A0JE

Critical Habitats

There are no critical habitats in this location

Migratory Birds

Birds are protected by the [Migratory Bird Treaty Act](#) and the [Bald and Golden Eagle Protection Act](#).

Any activity which results in the take of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service ([1](#)). There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

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

Additional information can be found using the following links:

- Birds of Conservation Concern
<http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Conservation measures for birds
<http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Year-round bird occurrence data
<http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/akn-histogram-tools.php>

The following species of migratory birds could potentially be affected by activities in this location:

American Oystercatcher <i>Haematopus palliatus</i>	Bird of conservation concern
Season: Breeding https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0G8	
American Bittern <i>Botaurus lentiginosus</i>	Bird of conservation concern
Season: Breeding https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0F3	
Bald Eagle <i>Haliaeetus leucocephalus</i>	Bird of conservation concern
Year-round https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B008	
Black Skimmer <i>Rynchops niger</i>	Bird of conservation concern
Season: Breeding https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0EO	
Black-billed Cuckoo <i>Coccyzus erythrophthalmus</i>	Bird of conservation concern
Season: Breeding https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HI	
Blue-winged Warbler <i>Vermivora pinus</i>	Bird of conservation concern
Season: Breeding	
Canada Warbler <i>Wilsonia canadensis</i>	Bird of conservation concern
Season: Breeding	

Hudsonian Godwit <i>Limosa haemastica</i> Season: Migrating	Bird of conservation concern
Least Bittern <i>Ixobrychus exilis</i> Season: Breeding	Bird of conservation concern
Least Tern <i>Sterna antillarum</i> Season: Breeding	Bird of conservation concern
Olive-sided Flycatcher <i>Contopus cooperi</i> Season: Breeding https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B0AN	Bird of conservation concern
Peregrine Falcon <i>Falco peregrinus</i> Season: Wintering https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B0FU	Bird of conservation concern
Pied-billed Grebe <i>Podilymbus podiceps</i> Year-round	Bird of conservation concern
Prairie Warbler <i>Dendroica discolor</i> Season: Breeding	Bird of conservation concern
Purple Sandpiper <i>Calidris maritima</i> Season: Wintering	Bird of conservation concern
Saltmarsh Sparrow <i>Ammodramus caudatus</i> Season: Breeding	Bird of conservation concern
Seaside Sparrow <i>Ammodramus maritimus</i> Season: Breeding	Bird of conservation concern
Short-eared Owl <i>Asio flammeus</i> Season: Wintering https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B0HD	Bird of conservation concern
Snowy Egret <i>Egretta thula</i> Season: Breeding	Bird of conservation concern
Upland Sandpiper <i>Bartramia longicauda</i> Season: Breeding https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B0HC	Bird of conservation concern
Willow Flycatcher <i>Empidonax traillii</i> Season: Breeding https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B0F6	Bird of conservation concern
Wood Thrush <i>Hylocichla mustelina</i> Season: Breeding	Bird of conservation concern
Worm Eating Warbler <i>Helmitheros vermivorum</i> Season: Breeding	Bird of conservation concern

Refuges

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

There are no refuges in this location

Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

DATA LIMITATIONS

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

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

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

DATA EXCLUSIONS

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

DATA PRECAUTIONS

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

This location overlaps all or part of the following wetlands:

Freshwater Forested/shrub Wetland

PFO1E	20.3 acres
PFO1C	1.53 acres
PSS1E	0.752 acre

Freshwater Pond

PUBHx	0.962 acre
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A full description for each wetland code can be found at the National Wetlands Inventory website: <http://107.20.228.18/decoders/wetlands.aspx>



Based upon a discussion with Maria Tur of the U.S. Fish & Wildlife Service (USFWS), temporary dewatering activities at the site are not expected to impact the Red Knot and the Northern Long-eared Bat. Northern long-eared bats spend winter hibernating in caves and mines. They use areas in various sized caves or mines with constant temperatures, high humidity, and no air currents. During the summer, northern long-eared bats roost singly or in colonies underneath bark, in cavities or in crevices of both live trees and snags (dead trees). There are no caves and mines located at the site. There are trees in the immediate vicinity of the site; however, tree removal is not part of the scope of work related to this Notice of Intent. Additionally, the developed area is not considered a suitable habitat for the Red Knot. Therefore, temporary dewatering activities at the site are not expected to impact the Red Knot and the Northern Long-eared Bat.

MassDEP - Bureau of Waste Site Cleanup

Site Information:

SCITUATE MIDDLE SCHOOL
606 CHIEF JUSTICE CUSHING HIGHWAY SCITUATE, MA

NAD83 UTM Meters:

4673515mN , 353936mE (Zone: 19)
February 29, 2016

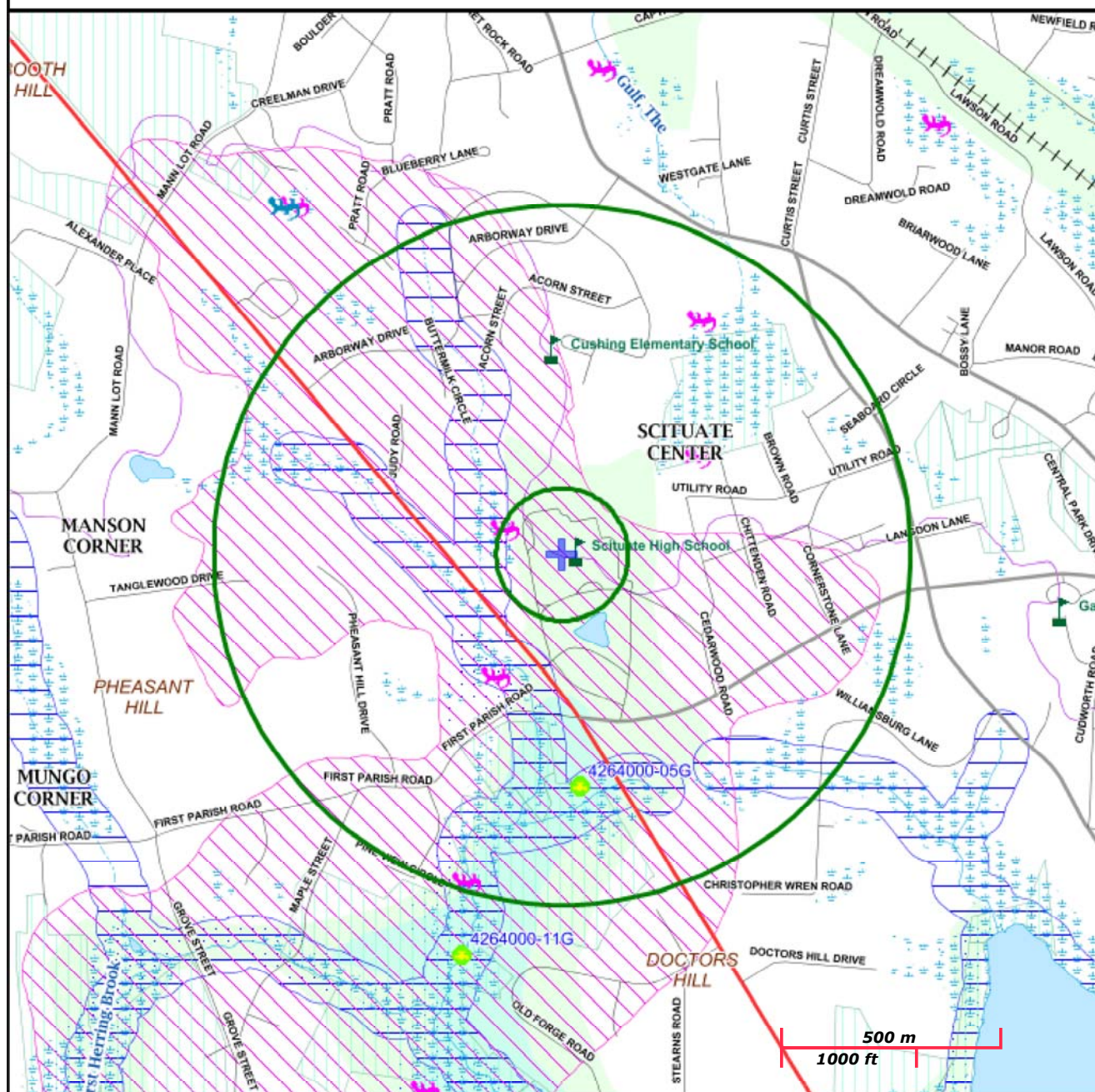
Phase 1 Site Assessment Map: 500 feet & 0.5 Mile Radii

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.

Massachusetts Cultural Resource Information System

MACRIS

MACRIS Search Results

Search Criteria: Town(s): Scituate; Street No: 606; Street Name: Chief Justice Cushing; Resource Type(s): Area, Building, Burial Ground, Object, Structure;

Inv. No.	Property Name	Street	Town	Year
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