ARCADIS

Appendix D

Relevant During-Construction Contractor Submittals

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on reverse side prior to initiating this form)*	DATE 7/30/12	Submittal No. 0001

SECTION I – REQUEST FOR APROVAL OF THE FOLLOWING ITEMS

TO:	FROM:	General Electric Company Purchase Order Number:	CHECK ONE:
Construction Manager ATTN: Mark Gravelding, P.E. ARCADIS 6723 Towpath Road Syracuse, NY 13214 Email: mark.gravelding@arcadis-us.comm	Sevenson Environmental Services, Inc. 2749 Lockport Road Niagara Falls, New York 14305		**X** THIS IS A NEW TRANSMITTAL THIS IS A RESUBMITTAL OF TRANSMITTAL

SPECIFICATION SEC. NO: (Cover only one section with each transmittal) 313219	PROJECT TITLE AND LOCATION: **Silver Lake Removal Action Area** Pittsfield, MA 01201	CHECK ONE: THIS TRANSMITTAL IS FOR FIO X APPROVAL

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.)	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. *(See instruction No. 8)*	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT SPEC. PARA NO.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO.	FOR CONTRACTOR USE CODE	VARIATION (See Instruction No. 6)	FOR CE USE CODE
a.	*b.*	*c.*	*d.*	*e.*	*f.*	*g.*	*h.*	*i.*
8	General Common Fill/Petricca Hinsdale run of bank sand. Identification of proposed source			**312323 (Part 1.04)**	26			
9	General Common Fill/ Petricca Hinsdale run of bank sand. Particle/sieve size analysis results for backfill.			**312323 (Part 1.04)**	26			
	Includes sieve analysis for (3) 500 cu yd samples of general common fill							

REMARKS	I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated. **Name (TITLE)** Michael W. Muth - Project Manager NAME AND SIGNATURE OF CONTRACTOR

SECTION II – APPROVAL ACTION

ENCLOSURES RETURNED *(List by Item No.)*	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

ENG FORM 4025-R, MAR 95 *(ER 415-1-10)* **EDITION OF SEP 93 IS OBSOLETE** (PROPONENT: CEMP-CE)

SHEET __1_ OF _1_

Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	Soil Fill - PHP-07-16-12-2	**Project Number:**	120458
Source:	Petricca Hinsdale Pit	**Lab Number:**	12-0627B
Date Sampled:	7/18/2012	**Sampled By:**	Client
Date Tested:	7/19/2012	**Tested By:**	Justin Rademacher

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-0627B	Soil Fill - PHP-07-16-12-2	In-Place	312323 2.01 A.1

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	100 ✓
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	1.0	99.0	
19.0 mm	3/4"	1.2	97.8	
12.5 mm	1/2"	1.0	96.8	
6.3 mm	1/4"	1.2	95.6	
4.75 mm	#4	0.6	95.0	
2.00 mm	#10	2.1	92.9	
0.850 mm	#20	3.4	89.5	
0.600 mm	#30	2.8	86.7	
0.425 mm	#40	4.5	82.2	
0.150 mm	#100	46.8	35.4	
0.075 mm	#200	24.1	11.3	10/30
Pan		11.3		

REVIEWED
REVIEWED & NOTED
REVISE & RESUBMIT
REJECTED
For information only
Received, no action taken
Reviewed solely for general conformance with contract documents
ARCADIS of New York, Inc.
Signature
PDF
8/2/12
Date

Comments: **Test results comply with specification**
Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	Soil Fill - PHP-07-16-12-8	**Project Number:**	120458
Source:	Pettrica Hinsdale Pit	**Lab Number:**	12-0628C-1
Date Sampled:	7/18/2012	**Sampled By:**	Client
Date Tested:	7/19/2012	**Tested By:**	Justin Rademacher

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-0628C-1	Granular Cap Material - PHP-07-16-12-8	In-Place	312323 2.01 A.1

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	100 ✓
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.6	99.4	
19.0 mm	3/4"	0.5	98.9	
12.5 mm	1/2"	0.7	98.2	
6.3 mm	1/4"	0.9	97.3	
4.75 mm	#4	0.8	96.5	
2.00 mm	#10	2.6	93.9	
0.850 mm	#20	7.2	86.7	
0.600 mm	#30	7.0	79.7	
0.425 mm	#40	8.5	71.2	
0.150 mm	#100	35.8	35.4	
0.075 mm	#200	19.5	15.9	10-30
Pan		15.9		

REVIEWED
REVIEWED NOTED
REVISE & RESUBMIT
REJECTED
For information only
Received, no action taken
Reviewed solely for general conformance with contract documents
ARCADIS of New York, Inc.
Signature
8/21/12
Date

Comments: **Test results comply with specification**
Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

PDF

Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	Soil Fill- PHP-07-16-12-9	**Project Number:**	120458
Source:	Pettrica Hinsdale Pit	**Lab Number:**	12-0628D-1
Date Sampled:	7/18/2012	**Sampled By:**	Client
Date Tested:	7/19/2012	**Tested By:**	Justin Rademacher

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-0628D-1	Granular Cap Material - PHP-07-16-12-9	In-Place	312323 2.01 A.1

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	100
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.0	100.0	
12.5 mm	1/2"	0.1	99.9	
6.3 mm	1/4"	0.6	99.3	
4.75 mm	#4	0.4	98.9	
2.00 mm	#10	1.4	97.5	
0.850 mm	#20	2.2	95.3	
0.600 mm	#30	2.0	93.3	
0.425 mm	#40	3.5	89.8	
0.150 mm	#100	42.5	47.3	
0.075 mm	#200	34.2	13.1	10-30
Pan		13.1		

Comments: **Test results comply with specification**
Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

PDF

REVIEWED
REVIEWED AS NOTED
REVISE & RESUBMIT
REJECTED
For information only
Received, no action taken
Reviewed solely for general conformance with contract documents
ARCADIS of New York, Inc.
Signature
8/2/12
Date

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on reverse side prior to initiating this form)*	DATE 7/30/12	Submittal No. 0002

SECTION I – REQUEST FOR APROVAL OF THE FOLLOWING ITEMS

TO: Construction Manager ATTN: Mark Gravelding, P.E. ARCADIS 6723 Towpath Road Syracuse, NY 13214 Email: mark.gravelding@arcadis-us.comm	FROM: Sevenson Environmental Services, Inc. 2749 Lockport Road Niagara Falls, New York 14305	General Electric Company Purchase Order Number:	CHECK ONE: X THIS IS A NEW TRANSMITTAL THIS IS A RESUBMITTAL OF TRANSMITTAL
SPECIFICATION SEC. NO: (Cover only one section with each transmittal) 313219	PROJECT TITLE AND LOCATION: **Silver Lake Removal Action Area** Pittsfield, MA 01201		CHECK ONE: THIS TRANSMITTAL IS FOR FIO X APPROVAL

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.)	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. *(See instruction No. 8)*	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT		FOR CONTRACTOR USE CODE	VARIATION (See Instruction No. 6)	FOR CE USE CODE
				SPEC. PARA NO.	DRAWING SHEET NO.			
a.	*b.*	*c.*	*d.*	*e.*	*f.*	*g.*	*h.*	*i.*
13	Geotextile Fabric - Manufacturer's data for geotextile fabric including, at a minimum, physical properties, packaging, and installation techniques.			**313219 (Part 1.04)**	26			
14	Geotextile Fabric - The origin (resin supplier's name and resin production plant) and identification (brand name and number) of the resin used to manufacture the geotextile fabric.			**313219 (Part 1.04)**	26			
15	Geotextile Fabric - Material sample of geotextile fabric.			**313219 (Part 1.04)**	26			
16	Geotextile Fabric - Manufacturer's installation procedures and specifications.			**313219 (Part 1.04)**	26			
17	Geotextile Fabric - Manufacturer's QA/QC program.			**313219 (Part 1.04)**	26			
18	Geotextile Fabric - Results of QC tests conducted by the Manufacturer during the manufacturing of the field-delivered geotextile fabric. The results shall identify the sections/panels of the fabric they represent. The Contractor shall also provide the lot and roll identification numbers for the field-delivered geotextile fabric.			**313219 (Part 1.04)**	26			
19	Geotextile Fabric - Written certification that the MARVs provided in the Material Specifications are guaranteed by the Manufacturer.			**313219 (Part 1.04)**	26			
20	Geotextile Fabric - Contractor's proposed transportation, handling, storage, and installation techniques for the geotextile fabric.			**313219 (Part 1.04)**	26			

21								
22	Geotextile Fabric - Manufacturer's standard warranty provided for the geotextile fabric.			**313219 (Part 1.04)**	26			
23				**313219 (Part 1.04)**	26			
24								
25	Geotextile Fabric - Installer's written certification (provided prior to the installation of the geotextile fabric) that the surface on which the geotextile fabric will be installed is acceptable. The certification is subject to the review and approval or rejection by GE or GE's Representative.			**313219 (Part 1.04)**	26			
26	Geotextile Fabric - Results of QC tests conducted by the Manufacturer. The QC test results shall include lot and roll identification numbers representative of the field-delivered material. At a minimum, results shall be given in accordance with the Technical Drawings and Specifications for: • Unit Weight (ASTM D5261). • Grab Strength (ASTM D4632). • Trapezoidal Tear Strength (ASTM D4533). • Puncture (ASTM D4833 or ASTM6241). • Apparent Opening Size (ASTM D4751). • Permeability (ASTM D4491) (not required for cushioning geotextile).			**313219 (Part 1.04)**	26			

REMARKS Please note the following:

Item No 16: Manufacturer's installation procedures still need to be provided

Item No 18: Lot and roll ID#'s will need to be provided for any geotextile delivered to the site, when available

Item No 20: Contractor's transportation, handling, storage, and installation techniques for geotextile fabric still need to be provided.

I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated.

Name (TITLE)

Michael W. Muth - Project Manager

NAME AND SIGNATURE OF CONTRACTOR

SECTION II – APPROVAL ACTION

ENCLOSURES RETURNED *(List by Item No.)*	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

ENG FORM 4025-R, MAR 95 *(ER 415-1-10)* **EDITION OF SEP 93 IS OBSOLETE** (PROPONENT: CEMP-CE)

SHEET _1_ OF _1_

☐ REVIEWED ☐ REJECTED

☑ REVIEWED & NOTED ☐ For information only

☐ REVISE & RESUBMIT ☐ Received, no action taken

Reviewed solely for general conformance with contract documents

ARCADIS of New York, Inc.

Signature

8/2/12

Date

Carthage Mills | Certification of Compliance

7-25-12
Sevenson Environmental Services
Project: Silver Lake Capping, Pittsfield MA

FX®–55

Carthage MillsôFXÉï 55 is a woven geotextile of 100% high-tenacity, slit-film polypropylene yarns which are woven into a stable network such that they retain their relative position, and finished with selvage edges to prevent fraying. Carthage MillsôFXÉï 55 is inert to biological degradation and resistant to naturally encountered chemicals, alkalis, and acids and meets or exceeds the following values.

PROPERTY	TEST METHOD	DATA	
		METRIC	ENGLISH
☐ **Mechanical** Grab Tensile Strength	ASTM D 4632	0.89 kN	200 lbs
Grab Tensile Elongation		15%	
Mullen Burst	ASTM D 3786	2758 kPa	400 psi
Trapezoidal Tear	ASTM D 4533	0.33 kN	75 lbs
Puncture	ASTM D 4833	0.42 kN	95 lbs
CBR Puncture	ASTM D 6241	3.11 kN	700 lbs
☐ **Endurance** UV Resistance	ASTM D 4355	70% @ 500 hrs	
☐ **Hydraulics / Filtration** Permittivity	ASTM D 4491	0.05 sec^{-1}	
Water Flow Rate		204 lpm/m^2	5 gpm/ft^2
Percent Open Area	CW-02215	<1%	
Apparent Opening Size (AOS)	ASTM D 4751	0.425 mm	40 US Std. Sieve

- Unless otherwise stated, all values stated here are Minimum Average Roll Values (MARV), are calculated as the Typical minus two standard deviations and are based on a 97.7% confidence level.

On behalf of Carthage Mills, I hereby certify the above to be true and correct.

Tom Turner
Vice President

4243 Hunt Road
Cincinnati, OH 45242
www.carthagemills.com

513-794-1600 TELEPHONE
800-543-4430 TOLL FREE
513-794-3434 FACSIMILE

Carthage Mills | Certification of Compliance

7-25-12
Sevenson Environmental Services
Project: Silver Lake Capping, Pittsfield MA

FX®–80HS

Carthage MillsôFX[E]ï 80HS is a multipurpose nonwoven geotextile of 100% polypropylene staple fibers which are formed into a random network, needlepunched and heatset for dimensional stability. FX[È]ï 80HS meets or exceeds the following values.

PROPERTY	TEST METHOD	DATA	
		METRIC	ENGLISH
☐ **Mechanical** Grab Tensile Strength	ASTM D 4632	0.91 kN	205 lbs
Grab Tensile Elongation		50%	
Mullen Burst	ASTM D 3786	2410 kPa	350 psi
Trapezoidal Tear	ASTM D 4533	0.36 kN	80 lbs
Puncture	ASTM D 4833	0.49 kN	110 lbs
CBR Puncture	ASTM D 6241	2.34 kN	525 lbs
☐ **Endurance** UV Resistance	ASTM D 4355	70% @ 500 hrs	
☐ **Hydraulics / Filtration** Permittivity	ASTM D 4491	1.40 sec^{-1}	
Water Flow Rate		3657 lpm/m^2	90 gpm/ft^2
Apparent Opening Size (AOS)	ASTM D 4751	0.180 mm	80 US Std. Sieve

- Unless otherwise stated, all values stated here are Minimum Average Roll Values (MARV), are calculated as the Typical minus two standard deviations and are based on a 97.7% confidence level.

On behalf of Carthage Mills, I hereby certify the above to be true and correct.

Tom Turner
Vice President

Carthage Mills
4243 Hunt Road
Cincinnati, OH 45242
www.carthagemills.com

513-794-1600 TELEPHONE
800-543-4430 TOLL FREE
513-794-3434 FACSIMILE
info@carthagemills.com

Quality Control Program Outline

Definition of Lot:

A planned production quantity satisfying all of the following:

- Manufactured under the same material specification, including yarn and weave specifications.
- Identified as the same style (fabric designation).
- When tested, having physical characteristics consistent with published values.

Quality Control Sampling of Each Lot:

As a minimum, a number of production units shall be selected at random from each lot in accordance with Table 1.

TABLE 1 Number of Units to be Selected as Lot Sample Specification Conformance

Number of Units in Lot			Number of Units Selected
1	to	2	1
3	to	8	2
9	to	27	3
28	to	64	4
65	to	125	5
126	to	216	6
217	to	343	7
344	to	512	8
513	to	729	9
730	to	1000	10
1001	to	more	11

Note: A production unit is considered to be a shipment roll.

Typically, the first shipment roll from each loom roll will be sampled. It will be necessary to consider the minimum planned production quantity to determine if more frequent sampling and testing is required.

Quality Control Testing of Each Sample:

Each quality control sample shall be sent to the quality control lab before the end of the shift during which the sample was taken. Full identification of the sampled shipment roll and corresponding loom roll shall be provided with the sample.

The following tests shall be run on every sample received in the Q.C. lab:

Test Property	Test Method
Weight	ASTM D5261
Thickness	ASTM D5261
Grab Tensile	ASTM D4632
Wide Width Tensile	ASTM D4595
Mullen Burst	ASTM D3786
Puncture	ASTM D4833
Trapezoid Tear	ASTM D4533
A.O.S.	ASTM D4751
Permittivity	ASTM D4491
Percent Open Area	C.O.E. 02215

Note: It is not necessary to always run any of these tests which are not listed on the published literature of the material being tested.

Quality Control Test Results:

All quality control test results shall be maintained by the Quality Control Manager with the corresponding shipment roll identification.

The Quality Control Manager will make lot testing summaries available, upon request, detailing the individual test results and aggregate mean, minimum and standard deviations of each test property for the shipment rolls under consideration.

Failing Test Results:

Individual test results falling below published minimums do not of the themselves define failing production. First, duplicate test should be run on the material in question to determine if the problem is in the test procedure. If the retest shows similarly failing results, then the Quality Control Manager shall require an additional sample from an associated loom roll (i.e. common beam and/or fill yarn box depending on the property in question.). If this additional testing shows similarly failing results, then all material from all associated loom rolls will be given a different, unique style number (i.e. downgraded).

If the additional testing produces satisfactory test results, then the additional test results will be averaged with the initial test results and used as representative of the material produced. If the averaged test results fall below published limits, then all material from all associated loom rolls will be downgraded.

Publishing Physical Property Values:

Every manufacturing process has inherent variability. Not only do actual properties of the finished product vary randomly around "target" production values, the "trend" or "drift" of these properties varies with time around the target. Therefore, characteristic properties of material produced during any given time will likely be different than properties of material produced at a later time.

As a result, it is not possible to provide values months in advance of production which will accurately reflect actual material properties at all times. At best, historical results can be reported with hopes that production enhancements can be made to reduce manufacturing availability and improve reported physical properties. Realistically, since so many properties are being "balanced", it is most clear and honest to report manufacturing "target" or "typical" values and "minimum" values below which the material is considered to have physical characteristics excessively different from those of other material in the same lot (i.e. greater than 2.5 to 3 standard deviations below the "target" values).

Minimum Average Roll Values (MARV):

Industry has coined the term MARV to reflect a 95% confidence level. To the Manufacturer this means that 97.5% of all material produced should exceed a given MARV. Statistically, this is equivalent to the mean, x, less two standard deviations, 2σ.

Since x and σ vary over time and are unique to any given period of production the MARV for a given month of production may be significantly higher or lower than a MARV calculated (i.e. averaged) over an entire year.

As a result, it is only possible to confidently certify a MARV specification after referring to the actual test results for the shipment rolls to be provided (and others produced in the same time frame).

Packaging and Shipments:

All geotextile rolls shall be furnished with suitable wrapping for protection against moisture and extended ultraviolet exposure prior to placement. Each roll shall be labeled or tagged to provide product identification sufficient for inventory and quality control purposes. Rolls shall be stored in a manner which protects them from the elements. If stored outdoors, they shall be elevated and protected with a waterproof cover.

Carthage Mills

50 Years of Geosynthetics History

July 25, 2012

Pete Daly
IWT/Cargo-Guard
PO Box 454
Waretown, NJ 08758

Re: Warranty

Pete:

Carthage Mills makes no warranty, expressed or implied, concerning the product furnished hereunder other than at the time of delivery it shall be of the quality and specification stated herein. Any implied warranty of fitness for a particular purpose is expressly excluded, and, to the extent that it is contrary to the foregoing sentence, any implied warranty of merchantability is expressly excluded. Any recommendations made by seller concerning the uses or applications of said product are believed reliable and seller makes no warranty of results to be obtained. If the product does not meet Carthage Mills current published specifications, and the customer gives notice to Carthage Mills before installing the product, then Carthage Mills will replace the product without charge or refund the purchase price.

Sincerely,

Tom Turner
Vice President

4243 Hunt Road
Cincinnati, OH 45242
www.carthagemills.com
www.gxgeogrids.com

513-794-1600 TELEPHONE
800-543-4430 TOLL FREE
513-794-3434 FACSIMILE
info@carthagemills.com

Carthage Mills

50 Years of Geosynthetics History

July 27, 2012

Pete Daly
IWT/Cargo-Guard
PO Box 454
Waretown, NJ 08758

Re: Resin information
Project: Silver Lake Capping, Pittsfield MA

Pete:

Below is the requested information regarding resins used to make the geotextile fabrics that will be included in the project referenced above:

FX-55 Geotextile Fabric section 313219; Item 2.02 (E)

Company:	Hellenic Petroleum S.A.
Location:	Ionia, GR-541 10 Thessaloniki, Greece
Brand:	Ecolen
Number:	HZ10K

FX-80HS Geotextile Fabric section 313219; Item 2.02 (C)

Company:	Total Petrochemicals, Braskem America
Plant Location:	Total-Laporte, TX Braskem- Neal, WV
Brand/Nbr:	Total- 3662 Braskem- D080

Sincerely,

Tom Turner
Vice President

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Carthage Mills | Certification of Compliance

7-27-12
Sevenson Environmental Services
Project: Silver Lake Capping, Pittsfield MA

FX®–55

Carthage MillsôFX[E]ï 55 is a woven geotextile of 100% high-tenacity, slit-film polypropylene yarns which are woven into a stable network such that they retain their relative position, and finished with selvage edges to prevent fraying. Carthage MillsôFX[È]ï 55 is inert to biological degradation and resistant to naturally encountered chemicals, alkalis, and acids and meets or exceeds the following values.

PROPERTY	TEST METHOD	DATA	
		METRIC	ENGLISH
☐ **Mechanical** Grab Tensile Strength	ASTM D 4632	0.89 kN	200 lbs
Grab Tensile Elongation		15%	
Mullen Burst	ASTM D 3786	2758 kPa	400 psi
Trapezoidal Tear	ASTM D 4533	0.33 kN	75 lbs
Puncture	ASTM D 4833	0.42 kN	95 lbs
CBR Puncture	ASTM D 6241	3.11 kN	700 lbs
☐ **Endurance** UV Resistance	ASTM D 4355	70% @ 500 hrs	
☐ **Hydraulics / Filtration** Permittivity	ASTM D 4491	0.05 sec^{-1}	
Water Flow Rate		204 lpm/m^2	5 gpm/ft^2
Percent Open Area	CW-02215	<1%	
Apparent Opening Size (AOS)	ASTM D 4751	0.425 mm	40 US Std. Sieve

- Unless otherwise stated, all values stated here are Minimum Average Roll Values (MARV), are calculated as the Typical minus two standard deviations and are based on a 97.7% confidence level.

On behalf of Carthage Mills, I hereby certify the FX-55 meets the requirements of Section 313219 Geotextile Fabric item 2.02 (E).

Tom Turner
Vice President

4243 Hunt Road
Cincinnati, OH 45242
www.carthagemills.com

513-794-1600 TELEPHONE
800-543-4430 TOLL FREE
513-794-3434 FACSIMILE

Carthage Mills | Certification of Compliance

7-27-12
Sevenson Environmental Services
Project: Silver Lake Capping, Pittsfield MA

FX®–80HS

Carthage MillsôFXEï 80HS is a multipurpose nonwoven geotextile of 100% polypropylene staple fibers which are formed into a random network, needlepunched and heatset for dimensional stability. FXEï 80HS meets or exceeds the following values.

PROPERTY	TEST METHOD	DATA	
		METRIC	ENGLISH
☐ **Mechanical** Grab Tensile Strength	ASTM D 4632	0.91 kN	205 lbs
Grab Tensile Elongation		50%	
Mullen Burst	ASTM D 3786	2410 kPa	350 psi
Trapezoidal Tear	ASTM D 4533	0.36 kN	80 lbs
Puncture	ASTM D 4833	0.49 kN	110 lbs
CBR Puncture	ASTM D 6241	2.34 kN	525 lbs
☐ **Endurance** UV Resistance	ASTM D 4355	70% @ 500 hrs	
☐ **Hydraulics / Filtration** Permittivity	ASTM D 4491	1.40 sec^{-1}	
Water Flow Rate		3657 lpm/m^2	90 gpm/ft^2
Apparent Opening Size (AOS)	ASTM D 4751	0.180 mm	80 US Std. Sieve

- Unless otherwise stated, all values stated here are Minimum Average Roll Values (MARV), are calculated as the Typical minus two standard deviations and are based on a 97.7% confidence level.

On behalf of Carthage Mills, I hereby certify the FX-80HS meets the requirements of Section 313219 Geotextile Fabric item 2.02 (C).

Tom Turner
Vice President

Carthage Mills
4243 Hunt Road
Cincinnati, OH 45242
www.carthagemills.com

513-794-1600 TELEPHONE
800-543-4430 TOLL FREE
513-794-3434 FACSIMILE
info@carthagemills.com

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on reverse side prior to initiating this form)*	**DATE 7/30/12**	**Submittal No. 0003**

SECTION I – REQUEST FOR APROVAL OF THE FOLLOWING ITEMS

TO:	FROM:	General Electric Company Purchase Order Number:	CHECK ONE:
Construction Manager ATTN: Mark Gravelding, P.E. ARCADIS 6723 Towpath Road Syracuse, NY 13214 Email: mark.gravelding@arcadis-us.comm	Sevenson Environmental Services, Inc. 2749 Lockport Road Niagara Falls, New York 14305		**X** THIS IS A NEW TRANSMITTAL THIS IS A RESUBMITTAL OF TRANSMITTAL

SPECIFICATION SEC. NO: (Cover only one section with each transmittal) 313219	PROJECT TITLE AND LOCATION: **Silver Lake Removal Action Area** Pittsfield, MA 01201	CHECK ONE: THIS TRANSMITTAL IS FOR FIO X APPROVAL

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.)	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. *(See instruction No. 8)*	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT SPEC. PARA NO.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO.	FOR CONTRACTOR USE CODE	VARIATION (See Instruction No. 6)	FOR CE USE CODE
a.	*b.*	*c.*	*d.*	*e.*	*f.*	*g.*	*h.*	*i.*
8	General Common Fill and Granular Cap/Petricca Hinsdale. Identification of proposed source			**312323 (Part 1.04)**	26			
9	General Common Fill and Granular Cap/ Petricca Hinsdale. Particle/sieve size analysis results for backfill.			**312323 (Part 1.04)**	26			
	Includes sieve analysis for (4) samples of common fill. Also includes sieve analysis and hydrometer testing for (4) granular cap material.							

REMARKS	I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated. **Name (TITLE)** Michael W. Muth - Project Manager NAME AND SIGNATURE OF CONTRACTOR

SECTION II – APPROVAL ACTION

ENCLOSURES RETURNED *(List by Item No.)*	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

ENG FORM 4025-R, MAR 95 *(ER 415-1-10)* **EDITION OF SEP 93 IS OBSOLETE** SHEET __1_ OF _1_ (PROPONENT: CEMP-CE)

(see each sample)

☐ REVIEWED	☒ REJECTED
☒ REVIEWED & NOTED	☐ For information only
☐ REVISE & RESUBMIT	☐ Received, no action taken

Reviewed solely for general conformance with contract documents

ARCADIS of New York, Inc.

Signature

6/2/12
Date

Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	Soil Fill - PHP-07-16-12-1	**Project Number:**	120458
Source:	Petricca Hinsdale Pit	**Lab Number:**	12-0627A
Date Sampled:	7/18/2012	**Sampled By:**	Client
Date Tested:	7/19/2012	**Tested By:**	Justin Rademacher

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-0627A	Soil Fill - PHP-07-16-12-1	In-Place	312323 2.01 A.1

Sieve Size		%	%	Spec. %	
mm	Inches	Retained	Passing	Pass	
100.0 mm	4"	0.0	100.0		
75.0 mm	3"	0.0	100.0	100	✓
63.0 mm	2 1/2"	0.0	100.0		
50.0 mm	2"	0.0	100.0		
37.5 mm	1 1/2"	0.0	100.0		
25.0 mm	1"	1.1	98.9		
19.0 mm	3/4"	0.8	98.1		
12.5 mm	1/2"	1.0	97.1		
6.3 mm	1/4"	4.1	93.0		
4.75 mm	#4	1.7	91.3		
2.00 mm	#10	10.2	81.1		
0.850 mm	#20	17.9	63.2		
0.600 mm	#30	8.6	54.6		
0.425 mm	#40	9.5	45.1		
0.150 mm	#100	31.7	13.4		
0.075 mm	#200	8.5	4.9	10-30	slightly less than spec (OK)
Pan		4.9			

☐ REJECTED
☐ For information only
☐ Received no action taken
☐ REVIEWED
☒ REVIEWED & NOTED
☐ REVISE & RESUBMIT
Reviewed solely for general conformance with contract documents
ARCADIS of New York, Inc.
7/26/12 Date
Signature

Comments: **Test results do not comply with specification**
Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

PDF

Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	Project:	Silver Lake Removal Action
Item:	Soil Fill - PHP-07-16-12-3	Project Number:	120458
Source:	Petricca Hinsdale Pit	Lab Number:	12-0627C
Date Sampled:	7/18/2012	Sampled By:	Client
Date Tested:	7/19/2012	Tested By:	Justin Rademacher

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-0627C	Soil Fill - PHP-07-16-12-3	In-Place	312323 2.01 A.1 Soil Fill

Sieve Size		% Retained	% Passing	Spec. % Pass
mm	Inches			
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	100.0 ✓
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.8	99.2	
19.0 mm	3/4"	0.9	98.3	
12.5 mm	1/2"	1.8	96.5	
9.5 mm	3/8"	3.5	93.0	
4.75 mm	#4	1.6	91.4	
2.00 mm	#10	5.2	86.2	
0.850 mm	#20	9.1	77.1	
0.600 mm	#30	5.8	71.3	
0.425 mm	#40	6.6	64.7	
0.150 mm	#100	36.4	28.3	
0.075 mm	#200	19.8	8.5	10-30 slightly less than spec (OK)
Pan		8.5		

☐ REVIEWED
☒ REVIEWED & NOTED
☐ REVISE & RESUBMIT
☐ REJECTED
☐ For information only
☐ Received, no action taken

Reviewed solely for general conformance with contract documents
ARCADIS of New York, Inc.
Signature
Date 8/2/12

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Advance Testing

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1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	Project:	Silver Lake Removal Action
Item:	Soil Fill - PHP-07-16-12-4	Project Number:	120458
Source:	Petricca Hinsdale Pit	Lab Number:	12-0627D
Date Sampled:	7/18/2012	Sampled By:	Client
Date Tested:	7/19/2012	Tested By:	Justin Rademacher

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-0627D	Soil Fill - PHP-07-16-12-4	In-Place	312323 2.01 A.1

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	100
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.0	100.0	
12.5 mm	1/2"	0.0	100.0	
6.3 mm	1/4"	0.7	99.3	
4.75 mm	#4	0.0	99.3	
2.00 mm	#10	0.1	99.2	
0.850 mm	#20	0.0	99.2	
0.600 mm	#30	0.0	99.2	
0.425 mm	#40	0.1	99.1	
0.150 mm	#100	10.9	88.2	
0.075 mm	#200	37.7	50.5	10-30
Pan		50.5		

significantly more than spec (rejected)

☐ REVIEWED
☐ REVIEWED & NOTED
☐ REVISE & RESUBMIT
☒ REJECTED
☐ For information only
☐ Received - no action taken

Reviewed solely for general conformance with contract documents
ARCADIS of New York, Inc.
8/2/12 Date
Signature

Comments: **Test results do not comply with specification**
Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Advance Testing

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1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	Project:	Silver Lake Removal Action
Item:	Soil Fill - PHP-07-16-12-5	Project Number:	120458
Source:	Petricca Hinsdale Pit	Lab Number:	12-0627E
Date Sampled:	7/18/2012	Sampled By:	Client
Date Tested:	7/19/2012	Tested By:	Justin Rademacher

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-0627E	Soil Fill - PHP-07-16-12-5	In-Place	312323 2.01 A.1

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	100
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.0	100.0	
12.5 mm	1/2"	0.1	99.9	
9.5 mm	3/8"	0.5	99.4	
4.75 mm	#4	0.3	99.1	
2.00 mm	#10	0.3	98.8	
0.850 mm	#20	0.6	98.2	
0.600 mm	#30	1.7	96.5	
0.425 mm	#40	6.3	90.2	
0.150 mm	#100	70.0	20.2	
0.075 mm	#200	16.6	3.6	10-30
Pan		3.6		

slightly less than spec (OK)

REVIEWED
REVIEWED & NOTED
REVISE & RESUBMIT
REJECTED
For information only
Received, no action taken
Reviewed solely for general conformance with contract documents.
ARCADIS of New York, Inc.
8/2/12
Date
Signature

Comments: **Test results do not comply with specification**
Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	Project:	Silver Lake Removal Action
Item:	Soil Fill - PHP-07-16-12-6	Project Number:	120458
Source:	Petrica Hinsdale Pit	Lab Number:	12-0628A-1
Date Sampled:	7/18/2012	Sampled By:	Client
Date Tested:	7/19/2012	Tested By:	Justin Rademacher

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-0628A-1	Granular Cap Material - PHP-07-16-12-6	In-Place	312323 2.01 A.1

Sieve Size		% Retained	% Passing	Spec. % Pass
mm	Inches			
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	100
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	3.6	96.4	
25.0 mm	1"	4.5	91.9	
19.0 mm	3/4"	1.3	90.6	
12.5 mm	1/2"	3.4	87.2	
6.3 mm	1/4"	6.5	80.7	
4.75 mm	#4	2.8	77.9	
2.00 mm	#10	9.9	68.0	
0.850 mm	#20	10.2	57.8	
0.600 mm	#30	5.2	52.6	
0.425 mm	#40	5.8	46.8	
0.150 mm	#100	24.9	21.9	
0.075 mm	#200	13.2	8.7	10-30
Pan		8.7		

not the spec for cap material

Comments: **Test results do not comply with specification**
Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Advance Testing
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25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Item:	Granular Cap Material - PHP-07-16-12-6	**Project Number:**	120458
Source:	Pettrica Hinsdale Pit	**Lab Number:**	12-0628A
Location:	In-Place	**Item Number:**	312323 2.01 A.2 Granular Cap
Date Sampled:	7/18/2012	**Sampled By:**	Client
Date Tested:	7/23/2012-07/23/2012	**Tested By:**	John Brinsfield

PARTICLE SIZE ANALYSIS BY SIEVE AND HYDROMETER METHOD

Test Method: ASTM D422

Sieve Size	Particle Diameter, mm	Percent Passing	Specification
3/8"	9.50	88.9	
#4	4.75	77.9	
#10	2.00	68.0	
#40	0.425	47.5	
#200	0.075	10.0	
Hydrometer Analysis Results	0.050	5.9	
	0.020	2.4	
	0.010	2.0	
	0.005	1.9	
	0.002	1.4	
	0.001		

SOIL SPECIFIC GRAVITY: 2.67 (As reported separately, or estimated.)

DISPERSION METHOD: Mechanical, 1 min.

SAND & GRAVEL PARTICLES: Hard subrounded particles

Comments:

COMPOSITION SUMMARY (USDA SIZE DESIGNATIONS)			Spec.
Gravel	(3 inches to #10)	32.0%	5%
Fraction Passing #10:			
Sand	(#10 to 0.05 mm) (62% of total)	91.3%	75%
Silt	(0.05 mm to 0.002 mm) 3 (6% of total)	6.6%	20%
Clay	(Less than 0.002 mm)	2.1%	
Total		100.0%	
USDA Soil Textural Class	Sand		

☐ REVIEWED ☐ REJECTED
☒ REVIEWED & NOTED ☐ For information only
☐ REVISE & RESUBMIT ☐ Received, no action taken

REPORT REVIEWED BY: Emily J Rodriguez

Reviewed solely for general conformance with contract documents
ARCADIS of New York, Inc.

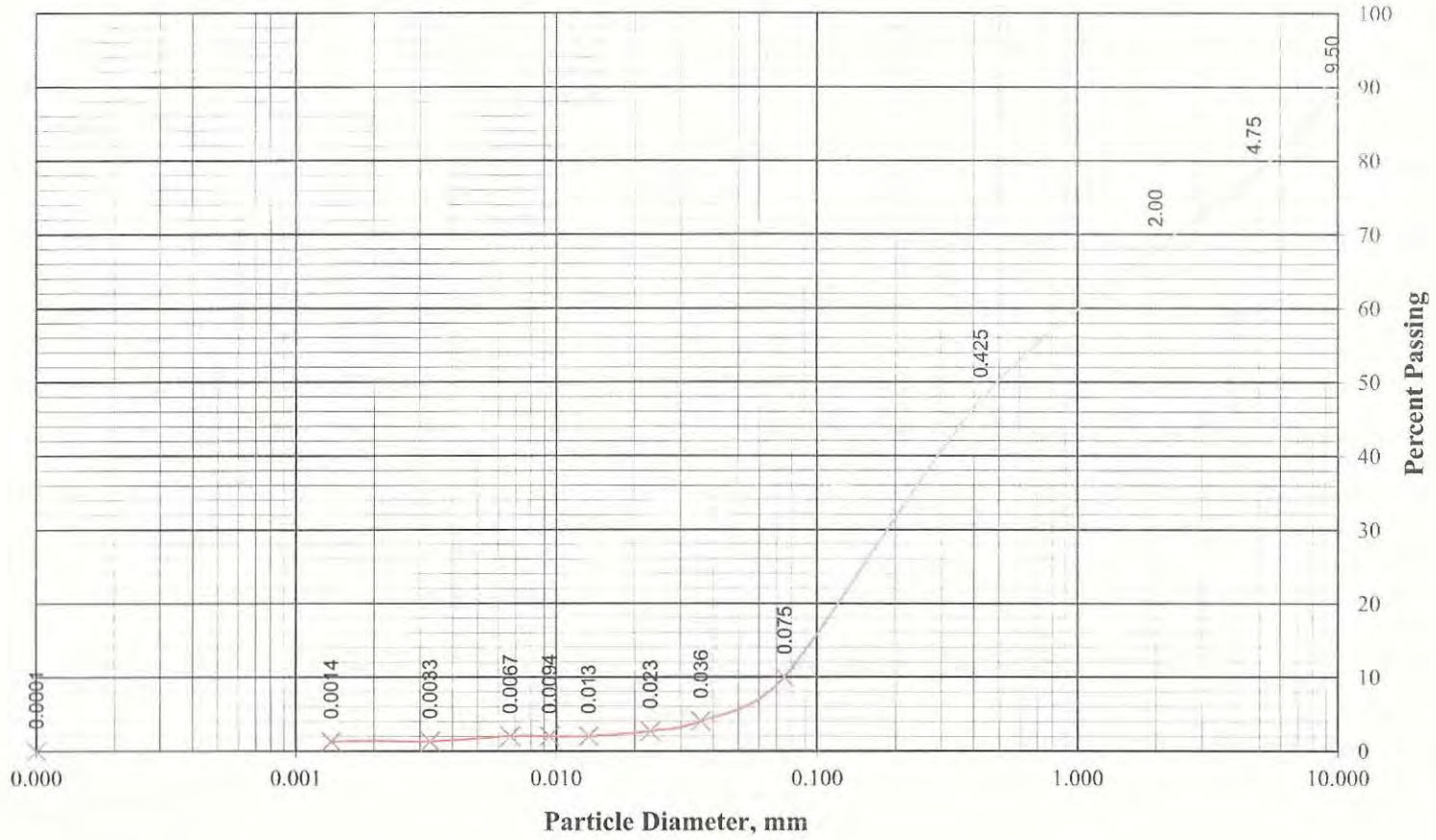
Signature 8/2/12 Date

PDF

Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Item:	Granular Cap Material - PHP-07-16-12-6	**Project Number:**	120458
Source:	Pettrica Hinsdale Pit	**Lab Number:**	12-0628A
Location:	In-Place	**Item Number:**	312323 2.01 A.2 Granular Cap
Date Sampled:	7/18/2012	**Sampled By:**	Client
Date Tested:	7/23/2012-07/23/2012	**Tested By:**	John Brinsfield



Advance Testing

3348 Route 208, Campbell Hall, NY 10916
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25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	Project:	Silver Lake Removal Action
Item:	Soil Fill- PHP-07-16-12-7	Project Number:	120458
Source:	Pettrica Hinsdale Pit	Lab Number:	12-0628B-1
Date Sampled:	7/18/2012	Sampled By:	Client
Date Tested:	7/19/2012	Tested By:	Justin Rademacher

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-0628B-1	Granular Cap Material - PHP-07-16-12-7	In-Place	312323 2.01 A.1

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	100
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	3.6	96.4	
19.0 mm	3/4"	1.0	95.4	
12.5 mm	1/2"	4.0	91.4	
6.3 mm	1/4"	4.7	86.7	
4.75 mm	#4	2.2	84.5	
2.00 mm	#10	6.4	78.1	
0.850 mm	#20	11.0	67.1	
0.600 mm	#30	7.6	59.5	
0.425 mm	#40	8.8	50.7	
0.150 mm	#100	29.5	21.2	
0.075 mm	#200	13.6	7.6	10-30
Pan		7.6		

Not the spec for cap material

Comments: **Test results do not comply with specification**
Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

PDF

Advance Testing
3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	Project:	Silver Lake Removal Action
Item:	Granular Cap Material - PHP-07-16-12-7	Project Number:	120458
Source:	Pettrica Hinsdale Pit	Lab Number:	12-0628B
Location:	In-Place	Item Number:	312323 201 A.2 Granular Cap
Date Sampled:	7/18/2012	Sampled By:	Client
Date Tested:	7/23/2012-07/23/2012	Tested By:	John Brinsfield

PARTICLE SIZE ANALYSIS BY SIEVE AND HYDROMETER METHOD

Test Method: ASTM D422

Sieve Size	Particle Diameter, mm	Percent Passing	Specification
3/8"	9.50	90.1	
#4	4.75	84.5	
#10	2.00	78.1	
#40	0.425	50.7	
#200	0.075	7.6	
Hydrometer Analysis Results	0.050	5.1	
	0.020	4.2	
	0.010	3.2	
	0.005	2.0	
	0.002	1.8	
	0.001		

SOIL SPECIFIC GRAVITY: 2.67 (As reported separately, or estimated.)
DISPERSION METHOD: Mechanical, 1 min.
SAND & GRAVEL PARTICLES: Hard subrounded particles

Comments:

COMPOSITION SUMMARY (USDA SIZE DESIGNATIONS)		
Gravel	(3 inches to #10)	21.9%
	Fraction Passing #10:	
Sand	(#10 to 0.05 mm) (73% of total)	93.5%
Silt	(0.05 mm to 0.002 mm) } (5% of total)	4.2%
Clay	(Less than 0.002 mm)	2.3%
Total		100.0%
USDA Soil Textural Class	Sand	

Spec 5%
75%
} 20%

REVIEWED
REJECTED
REVIEWED & NOTED
For information only
REVISE & RESUBMIT
Received, no action taken

Reviewed solely for general conformance with contract documents
ARCADIS of New York, Inc.
Signature
8/2/12
Date

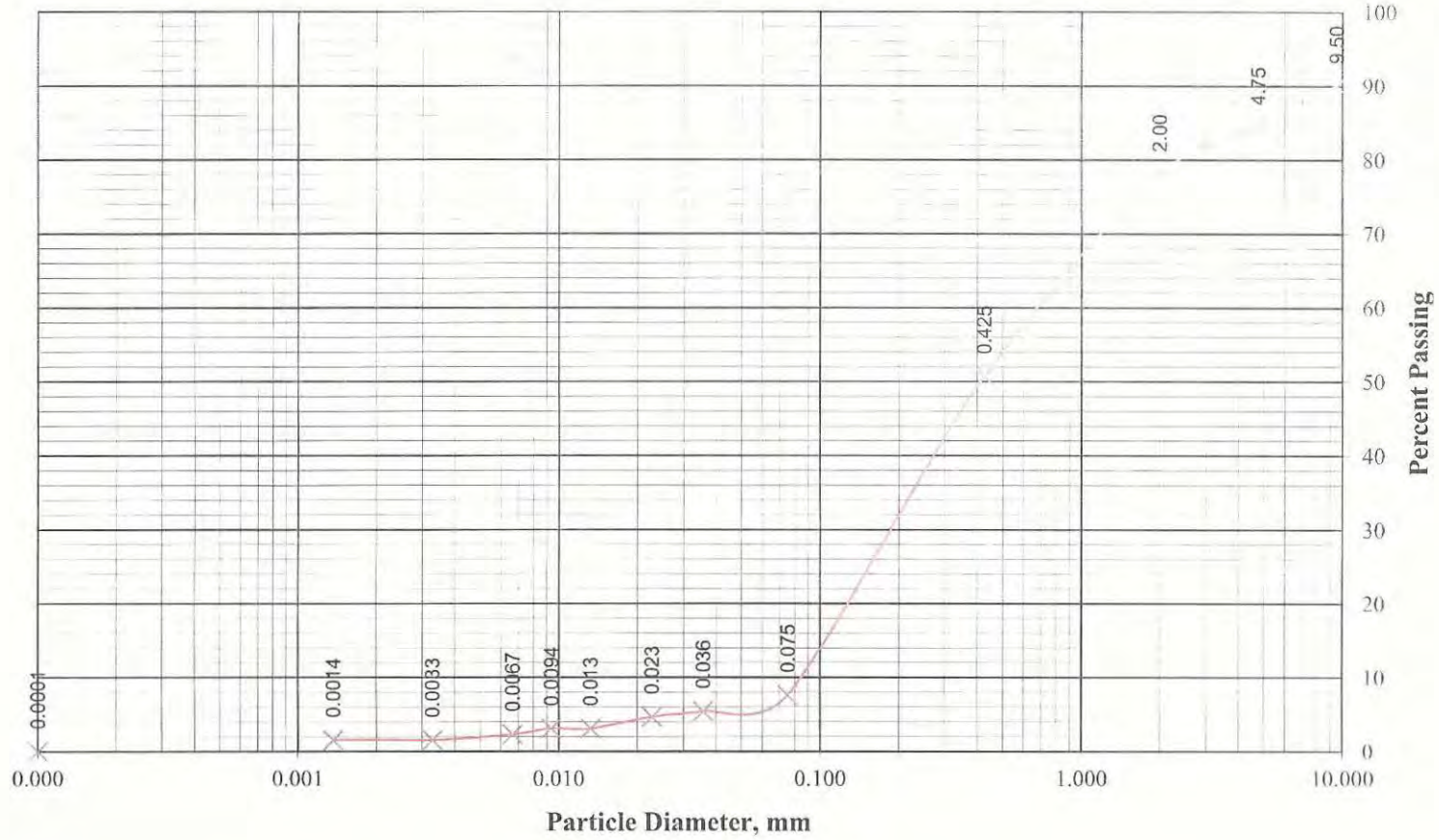
REPORT REVIEWED BY: Emily J. Rodriguez

PDF

Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Item:	Granular Cap Material - PHP-07-16-12-7	**Project Number:**	120458
Source:	Pettrica Hinsdale Pit	**Lab Number:**	12-0628B
Location:	In-Place	**Item Number:**	312323 201 A.2 Granular Cap
Date Sampled:	7/18/2012	**Sampled By:**	Client
Date Tested:	7/23/2012-07/23/2012	**Tested By:**	John Brinsfield



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1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	Project:	Silver Lake Removal Action
Item:	Soil Fill - PHP-07-16-12-8	Project Number:	120458
Source:	Petrica Hinsdale Pit	Lab Number:	12-0628C-1
Date Sampled:	7/18/2012	Sampled By:	Client
Date Tested:	7/19/2012	Tested By:	Justin Rademacher

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-0628C-1	Granular Cap Material PHP-07-16-12-8	In-Place	312323 2.01 A.1

Sieve Size		% Retained	% Passing	Spec. % Pass
mm	Inches			
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	100
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.6	99.4	
19.0 mm	3/4"	0.5	98.9	
12.5 mm	1/2"	0.7	98.2	
6.3 mm	1/4"	0.9	97.3	
4.75 mm	#4	0.8	96.5	
2.00 mm	#10	2.6	93.9	
0.850 mm	#20	7.2	86.7	
0.600 mm	#30	7.0	79.7	
0.425 mm	#40	8.5	71.2	
0.150 mm	#100	35.8	35.4	
0.075 mm	#200	19.5	15.9	10-30
Pan		15.9		

not the spec for cap material

Comments: **Test results comply with specification**
Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

PDF

Advance Testing
3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	Project:	Silver Lake Removal Action
Item:	Granular Cap Material - PHP-07-16-12-8	Project Number:	120458
Source:	Pettrica Hinsdale Pit	Lab Number:	12-0628C
Location:	In-Place	Item Number:	312323 201 A.2 Granular Cap
Date Sampled:	7/18/2012	Sampled By:	Client
Date Tested:	7/23/2012-07/23/2012	Tested By:	John Brinsfield

PARTICLE SIZE ANALYSIS BY SIEVE AND HYDROMETER METHOD

Test Method: ASTM D422

Sieve Size	Particle Diameter, mm	Percent Passing	Specification
3/8"	9.50	97.9	
#4	4.75	96.5	
#10	2.00	93.9	
#40	0.425	71.2	
#200	0.075	15.9	
Hydrometer Analysis Results	0.050	9.8	
	0.020	4.2	
	0.010	3.9	
	0.005	2.3	
	0.002	2.0	
	0.001		

SOIL SPECIFIC GRAVITY: 2.67 (As reported separately, or estimated.)

DISPERSION METHOD: Mechanical, 1 min.

SAND & GRAVEL PARTICLES: Hard subrounded particles

Comments:

COMPOSITION SUMMARY (USDA SIZE DESIGNATIONS)			Spec.
Gravel	(3 inches to #10)	6.1%	5%
	Fraction Passing #10:		
Sand	(#10 to 0.05 mm) (84.1 % of total)	89.6%	75%
Silt	(0.05 mm to 0.002 mm) } (9.8 % of total)	8.3%	20%
Clay	(Less than 0.002 mm) }	2.1%	
Total		100.0%	
USDA Soil Textural Class	Loamy Sand		

Emily J. Rodriguez

REPORT REVIEWED BY:

☐ REVIEWED ☐ REJECTED
☒ REVIEWED & NOTED ☐ For information only
☐ REVISE & RESUBMIT ☐ Received, no action taken

Reviewed solely for general conformance with contract documents
ARCADIS of New York, Inc.

Signature 8/2/12 Date

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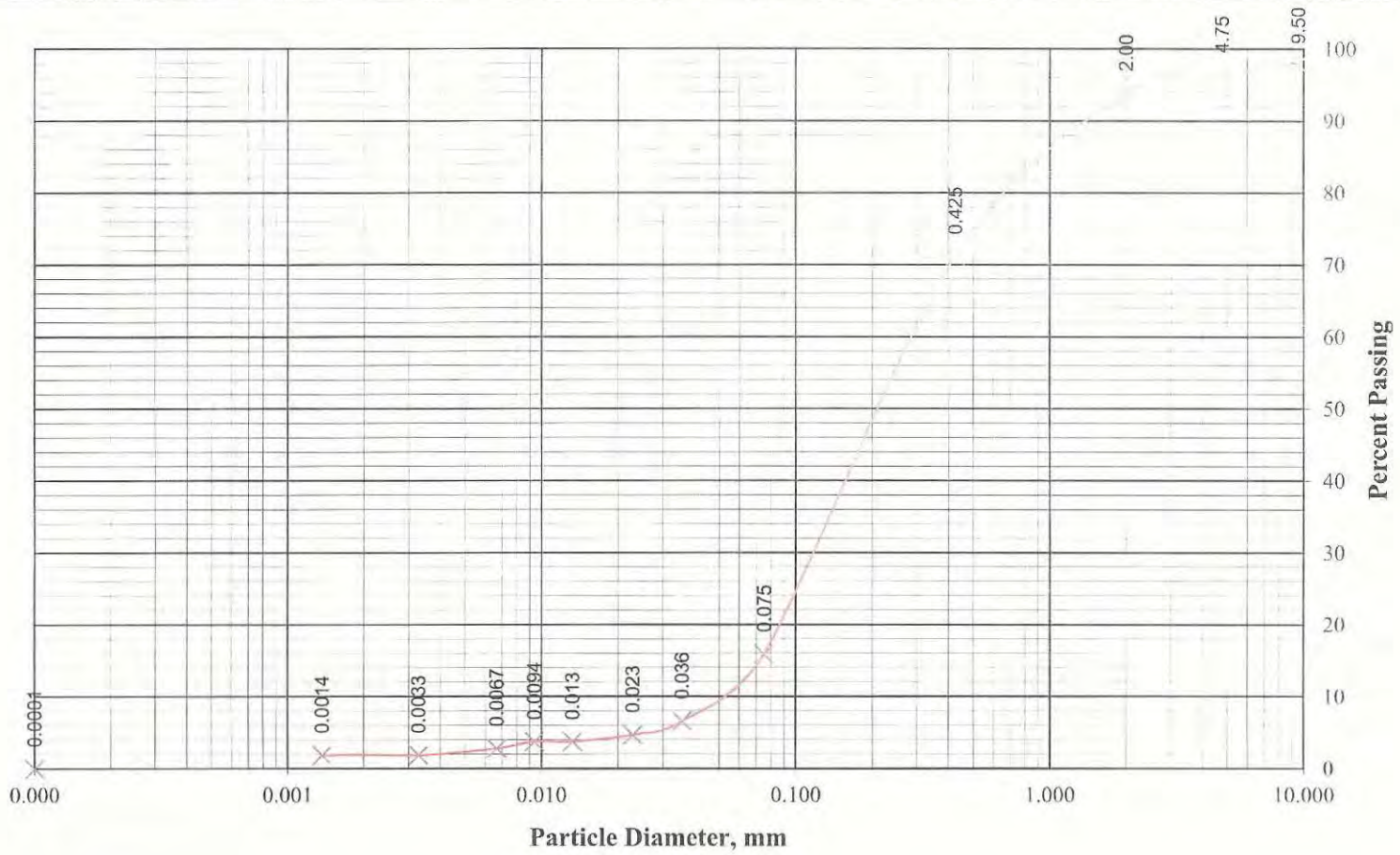
Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Item:	Granular Cap Material - PHP-07-16-12-8	**Project Number:**	120458
Source:	Pettrica Hinsdale Pit	**Lab Number:**	12-0628C
Location:	In-Place	**Item Number:**	312323 201 A.2 Granular Cap
Date Sampled:	7/18/2012	**Sampled By:**	Client
Date Tested:	7/23/2012-07/23/2012	**Tested By:**	John Brinsfield



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25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	Project:	Silver Lake Removal Action
Item:	Soil Fill- PHP-07-16-12-9	Project Number:	120458
Source:	Petrica Hinsdale Pit	Lab Number:	12-0628D-1
Date Sampled:	7/18/2012	Sampled By:	Client
Date Tested:	7/19/2012	Tested By:	Justin Rademacher

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-0628D-1	Granular Cap Material - PHP-07-16-12-9	In-Place	312323 2.01 A.1

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	100
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.0	100.0	
12.5 mm	1/2"	0.1	99.9	
6.3 mm	1/4"	0.6	99.3	
4.75 mm	#4	0.4	98.9	
2.00 mm	#10	1.4	97.5	
0.850 mm	#20	2.2	95.3	
0.600 mm	#30	2.0	93.3	
0.425 mm	#40	3.5	89.8	
0.150 mm	#100	42.5	47.3	
0.075 mm	#200	34.2	13.1	10-30
Pan		13.1		

not the spec for cap material

Comments: **Test results comply with specification**
Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Advance Testing
3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	Project:	Silver Lake Removal Action
Item:	Granular Cap Material - PHP-07-16-12-9	Project Number:	120458
Source:	Pettrica Hinsdale Pit	Lab Number:	12-0628D
Location:	In-Place	Item Number:	312323 201 A.2 Granular Cap
Date Sampled:	7/18/2012	Sampled By:	Client
Date Tested:	7/23/2012-07/23/2012	Tested By:	John Brinsfield

PARTICLE SIZE ANALYSIS BY SIEVE AND HYDROMETER METHOD

Test Method: ASTM D422

Sieve Size	Particle Diameter, mm	Percent Passing	Specification
3/8"	9.50	100.0	
#4	4.75	100.0	
#10	2.00	98.8	
#40	0.425	89.8	
#200	0.075	13.1	
Hydrometer Analysis Results	0.050	6.7	
	0.020	3.8	
	0.010	2.0	
	0.005	2.0	
	0.002	2.0	
	0.001		

SOIL SPECIFIC GRAVITY: 2.67 (As reported separately, or estimated.)

DISPERSION METHOD: Mechanical, 1 min.

SAND & GRAVEL PARTICLES: Rounded Mix of Hard and Weak Particles

Comments:

COMPOSITION SUMMARY (USDA SIZE DESIGNATIONS)			Spec.
Gravel	(3 inches to #10)	1.2%	5%
	Fraction Passing #10:		
Sand	(#10 to 0.05 mm) (92.1% of total)	93.2%	75%
Silt	(0.05 mm to 0.002 mm) & (6.7% of total)	4.8%	20%
Clay	(Less than 0.002 mm)	2.0%	
Total		100.0%	
USDA Soil Textural Class	Sand		

Emily J. Rodriguez

REPORT REVIEWED BY:

☐ REVIEWED ☐ REJECTED
☐ REVIEWED & NOTED ☐ For information only
☐ REVISE & RESUBMIT ☐ Received, no action taken

Reviewed solely for general conformance with contract documents
ARCADIS of New York, Inc.

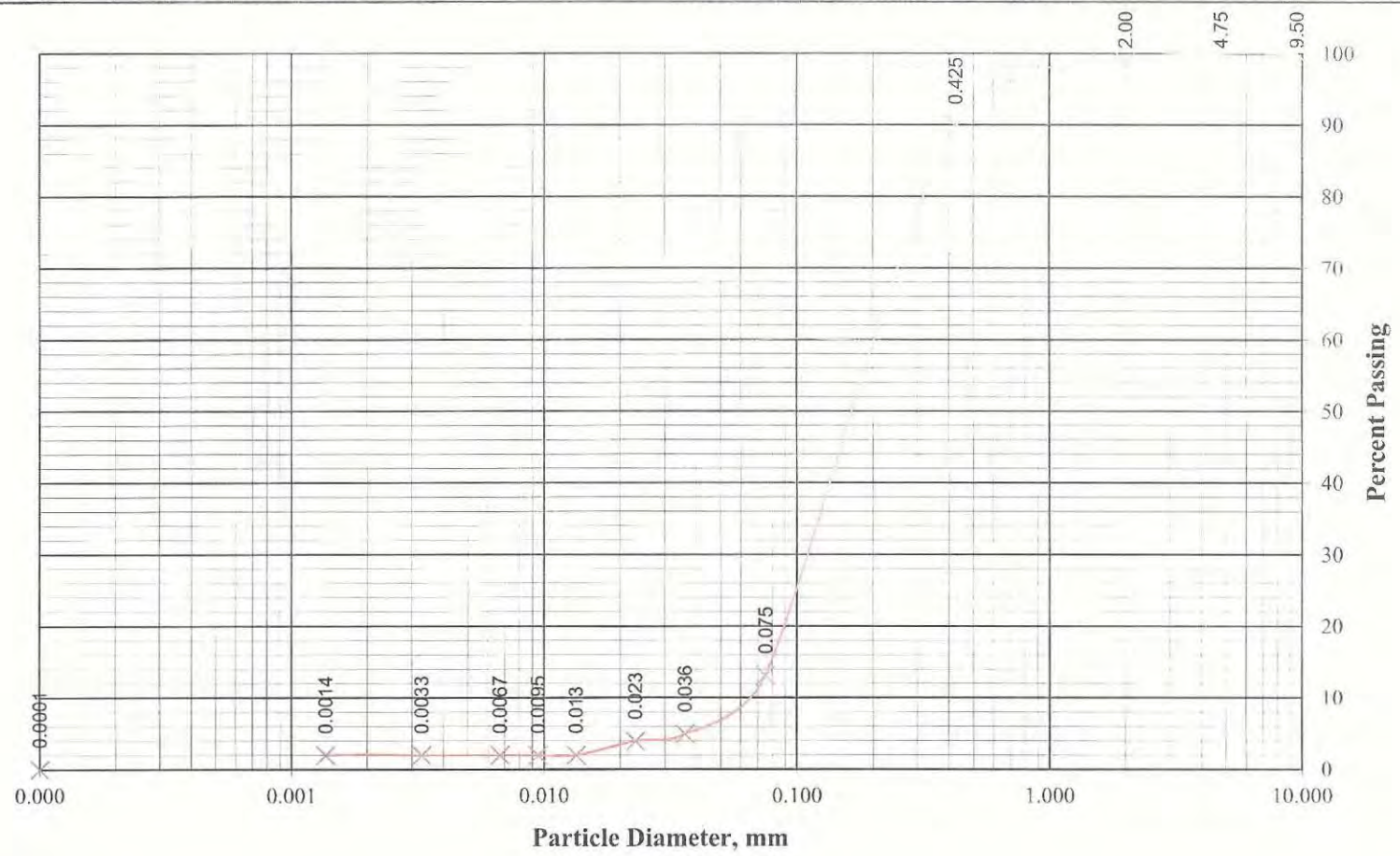
Signature 8/2/12 Date

PDF

Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Item:	Granular Cap Material - PHP-07-16-12-9	**Project Number:**	120458
Source:	Pettrica Hinsdale Pit	**Lab Number:**	12-0628D
Location:	In-Place	**Item Number:**	312323 201 A.2 Granular Cap
Date Sampled:	7/18/2012	**Sampled By:**	Client
Date Tested:	7/23/2012-07/23/2012	**Tested By:**	John Brinsfield



TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on reverse side prior to initiating this form)*	DATE 8/2/12	Submittal No. 0004

SECTION I – REQUEST FOR APROVAL OF THE FOLLOWING ITEMS

TO:	FROM:	General Electric Company Purchase Order Number:	CHECK ONE:
Construction Manager ATTN: Mark Gravelding, P.E. ARCADIS 6723 Towpath Road Syracuse, NY 13214 Email: mark.gravelding@arcadis-us.comm	Sevenson Environmental Services, Inc. 2749 Lockport Road Niagara Falls, New York 14305		**X** THIS IS A NEW TRANSMITTAL THIS IS A RESUBMITTAL OF TRANSMITTAL

SPECIFICATION SEC. NO: (Cover only one section with each transmittal) 312323	PROJECT TITLE AND LOCATION: **Silver Lake Removal Action Area** Pittsfield, MA 01201	CHECK ONE: THIS TRANSMITTAL IS FOR FIO X APPROVAL

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.)	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. *(See instruction No. 8)*	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT: SPEC. PARA NO.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO.	FOR CONTRACTOR USE CODE	VARIATION (See Instruction No. 6)	FOR CE USE CODE
a.	*b.*	*c.*	*d.*	*e.*	*f.*	*g.*	*h.*	*i.*
8	Armor stone/riprap material sample results(D50 3" and 5") Sampled at Lucia pit on Farnum Rd in Cheshire, MA 01225. Identification of proposed source			312323 (Part 1.04)	26			
9	Gradation testing for armor stone/riprap(D50-3" and 5"). Particle size distribution using ASTM D55 19-94			312323 (Part 1.04)	26			
	Includes gradation testing for D50-3" stone and D50-5" stone							

REMARKS	I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated. **Name (TITLE)** Michael W. Muth - Project Manager NAME AND SIGNATURE OF CONTRACTOR

SECTION II – APPROVAL ACTION

ENCLOSURES RETURNED *(List by Item No.)*	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

ENG FORM 4025-R, MAR 95 *(ER 415-1-10)* **EDITION OF SEP 93 IS OBSOLETE** (PROPONENT: CEMP-CE)
SHEET __1_ OF _1_

☐ REVIEWED ☐ REJECTED
☒ REVIEWED & NOTED ☐ For information only
☐ REVISE & RESUBMIT ☐ Received, no action taken

Reviewed solely for general conformance with contract documents
ARCADIS of New York, Inc.

Signature 8/2/12 Date

Since Advance Testing 1984
CONSTRUCTION MATERIALS TESTING & INSPECTION SERVICES

July 31, 2012

Re: Sevenson Environmental
Silver Lake Removal Action
Pittsfield, MA

Mr. Michael Muth,

A representative of Advance Testing Company Inc. was present on the above referenced date to perform a field gradation analysis on material proposed for use as shoreline protection on the Silver Lake Removal Action project.

A representative sample of crushed, processed ledge rock was obtained and evaluated for particle size distribution to determine its acceptability for use as shoreline protection. A summary of the results are listed below, with desired size range.

Particle Size	% Pass	D_{50} = 3"
5"	100	100 ✓
4"	82	
3"	48	50 ✓ slightly coarse; OK
2"	17	
1 ½"	4	0 ✓ slightly fine; OK

Please feel free to contact me with any questions regarding this inspection.

Yours Truly,
Robert Patton

Advance Testing Co. Inc.

☐ REVIEWED ☐ REJECTED
☒ REVIEWED & NOTED ☐ For information only
☐ REVISE & RESUBMIT ☐ Received, no action taken

Reviewed solely for general conformance with contract documents
ARCADIS of New York, Inc.

8/2/12
Date

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With Offices in New York & Massachusetts

Since Advance Testing 1984
CONSTRUCTION MATERIALS TESTING & INSPECTION SERVICES

July 31, 2012

Re: Sevenson Environmental
Silver Lake Removal Action
Pittsfield, MA

Mr. Michael Muth,

A representative of Advance Testing Company Inc. was present on the above referenced date to perform a field gradation analysis on material proposed for use as shoreline protection on the Silver Lake Removal Action project.

A representative sample of crushed, processed ledge rock was obtained and evaluated for particle size distribution to determine its acceptability for use as shoreline protection. A summary of the results are listed below, with desired size range.

Particle Size	% Pass	D_{50} = 5"
8"	100	100 ✓
7"	93	
6"	86	
5"	50	50 ✓
4"	25	
3"	4	0 ✓ slightly fine; OK

Please feel free to contact me with any questions regarding this inspection.

Yours Truly,
Robert Patton

Advance Testing Co. Inc.

☐ REVIEWED ☐ REJECTED
☒ REVIEWED & NOTED ☐ For information only
☐ REVISE & RESUBMIT ☐ Received, no action taken

Reviewed solely for general conformance with contract documents
ARCADIS of New York, Inc.

Signature 8/2/12 Date

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3348 Route 208 • Campbell Hall, NY 10916 • Telephone: 845.496.1600 • Fax: 845.496.1398
With Offices in New York & Massachusetts

DATE: 7/31/2012 PLANT: Lucia TECHNICIAN: Robert Patton

Trial Production

ITEM: D_{50} = 5"

SIEVE SIZE	WT. RET	% RET	% PASS	SPEC
8"	0.00	0.0	100.0	
7"	67.10	7.1	92.9	
6"	69.50	7.3	85.6	
5"	339.60	35.7	49.9	
4"	242.10	25.5	24.5	
3"	199.15	20.9	3.5	
PAN	33.70	3.5	0.0	
TOTAL	951.15	100.0		

ITEM: D_{50} = 3"

SIEVE SIZE	WT. RET	% RET	% PASS	SPEC
		0.0	100.0	
5"	0.00	0.0	100.0	
4"	63.10	17.8	82.2	
3"	122.50	34.6	47.6	
2"	109.95	31.1	16.5	
1 1/2"	45.70	12.9	3.6	
PAN	12.75	3.6	0.0	
TOTAL	354.00	100.0		

ITEM:

SIEVE SIZE	WT. RET	% RET	% PASS	SPEC
PAN				
TOTAL	0.0	0.0		

ITEM:

SIEVE SIZE	WT. RET	% RET	% PASS	SPEC
PAN				
TOTAL	0.0	0.0		

ITEM:

SIEVE SIZE	WT. RET	% RET	% PASS	SPEC
PAN				
TOTAL	0.0	0.0		

ITEM:

SIEVE SIZE	WT. RET	% RET	% PASS	SPEC
PAN				
TOTAL	0.0	0.0		

ITEM:

SIEVE SIZE	WT. RET	% RET	% PASS	SPEC
PAN				
TOTAL	0.0	0.0		

ITEM:

SIEVE SIZE	WT. RET	% RET	% PASS	SPEC
PAN				
TOTAL	0.0	0.0		

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on reverse side prior to initiating this form)*	**DATE 8/13/12**	**Submittal No. 0005**

SECTION I – REQUEST FOR APROVAL OF THE FOLLOWING ITEMS

TO:	FROM:	General Electric Company Purchase Order Number:	CHECK ONE:
Construction Manager ATTN: Mark Gravelding, P.E. ARCADIS 6723 Towpath Road Syracuse, NY 13214 Email: mark.gravelding@arcadis-us.comm	Sevenson Environmental Services, Inc. 2749 Lockport Road Niagara Falls, New York 14305		**X** THIS IS A NEW TRANSMITTAL THIS IS A RESUBMITTAL OF TRANSMITTAL

SPECIFICATION SEC. NO: (Cover only one section with each transmittal) 312323	PROJECT TITLE AND LOCATION: **Silver Lake Removal Action Area** Pittsfield, MA 01201	CHECK ONE: THIS TRANSMITTAL IS FOR FIO X APPROVAL

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.)	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. *(See instruction No. 8)*	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT SPEC. PARA NO.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO.	FOR CONTRACTOR USE CODE	VARIATION (See Instruction No. 6)	FOR CE USE CODE
a.	*b.*	*c.*	*d.*	*e.*	*f.*	*g.*	*h.*	*i.*
8	Gravel Habitat material sample results Sampled at Nichols pit in Hinsdale, MA. Identification of proposed source			**312323 (Part 1.04)**	26			
9	Gradation testing for gravel habitat material. Sieve analysis using ASTM D422			**312323 (Part 1.04)**	26			

REMARKS	I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated. **Name (TITLE)** Michael W. Muth - Project Manager NAME AND SIGNATURE OF CONTRACTOR

SECTION II – APPROVAL ACTION

ENCLOSURES RETURNED *(List by Item No.)*	**NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY**	**DATE**

ENG FORM 4025-R, MAR 95 *(ER 415-1-10)* **EDITION OF SEP 93 IS OBSOLETE** SHEET __1_ OF _1_ (PROPONENT: CEMP-CE)

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	Gravel Habitat Layer NGS-08-07-12-GH1	**Project Number:**	120458
Source:	NGS	**Lab Number:**	12-0694B
Date Sampled:	8/7/2012	**Sampled By:**	Client
Date Tested:	8/9/2012	**Tested By:**	Mark Greenstein

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-0694B	Gravel Habitat Layer NGS-08-07-12-GH1	Stockpile	312323 4.A Gravel Habitat Layer

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	100
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	5.1	94.9	
25.0 mm	1"	11.4	83.5	50-100
19.0 mm	3/4"	5.6	77.9	
12.5 mm	1/2"	7.3	70.6	
6.3 mm	1/4"	11.2	59.4	
4.75 mm	#4	3.7	55.7	
2.00 mm	#10	11.6	44.1	
0.850 mm	#20	12.4	31.7	
0.600 mm	#30	3.6	28.1	
0.425 mm	#40	3.4	24.7	
0.150 mm	#100	10.3	14.4	
0.075 mm	#200	6.2	8.2	0-30
Pan		8.2		

Comments: **Test results comply with specification**
Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	Gravel Habitat Layer NGS-08-07-12-GH2	**Project Number:**	120458
Source:	NGS	**Lab Number:**	12-0694C
Date Sampled:	8/7/2012	**Sampled By:**	Client
Date Tested:	8/9/2012	**Tested By:**	Mark Greenstein

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-0694C	Gravel Habitat Layer NGS-08-07-12-GH2	Stockpile	312323 4.A Gravel Habitat Layer

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	100
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	3.9	96.1	
25.0 mm	1"	14.7	81.4	50-100
19.0 mm	3/4"	7.1	74.3	
12.5 mm	1/2"	9.7	64.6	
6.3 mm	1/4"	9.5	55.1	
4.75 mm	#4	3.6	51.5	
2.00 mm	#10	10.6	40.9	
0.850 mm	#20	9.2	31.7	
0.600 mm	#30	2.7	29.0	
0.425 mm	#40	2.5	26.5	
0.150 mm	#100	8.1	18.4	
0.075 mm	#200	4.8	13.6	0-30
Pan		13.6		

Comments: **Test results comply with specification**
Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	Gravel Habitat Layer NGS-08-07-12-GH3	**Project Number:**	120458
Source:	NGS	**Lab Number:**	12-0694D
Date Sampled:	8/7/2012	**Sampled By:**	Client
Date Tested:	8/9/2012	**Tested By:**	Mark Greenstein

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-0694D	Gravel Habitat Layer NGS-08-07-12-GH3	Stockpile	312323 4.A Gravel Habitat Layer

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	100
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	5.7	94.3	
25.0 mm	1"	8.2	86.1	50-100
19.0 mm	3/4"	4.7	81.4	
12.5 mm	1/2"	7.7	73.7	
6.3 mm	1/4"	11.1	62.6	
4.75 mm	#4	4.6	58.0	
2.00 mm	#10	13.3	44.7	
0.850 mm	#20	12.1	32.6	
0.600 mm	#30	3.6	29.0	
0.425 mm	#40	3.4	25.6	
0.150 mm	#100	10.6	15.0	
0.075 mm	#200	6.2	8.8	0-30
Pan		8.8		

Comments: **Test results comply with specification**
Minus #200 by wash-sieve method.

Emily J. Rodriguez

Report Reviewed By:

PDF

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on reverse side prior to initiating this form)

DATE **8/14/12**

Submittal No. **0006**

SECTION I – REQUEST FOR APROVAL OF THE FOLLOWING ITEMS

TO:	FROM:	General Electric Company Purchase Order Number:	CHECK ONE:
Construction Manager ATTN: Mark Gravelding, P.E. ARCADIS 6723 Towpath Road Syracuse, NY 13214 Email: mark.gravelding@arcadis-us.comm	Sevenson Environmental Services, Inc. 2749 Lockport Road Niagara Falls, New York 14305		**X** THIS IS A NEW TRANSMITTAL THIS IS A RESUBMITTAL OF TRANSMITTAL

SPECIFICATION SEC. NO: (Cover only one section with each transmittal) 312323	PROJECT TITLE AND LOCATION: **Silver Lake Removal Action Area** Pittsfield, MA 01201	CHECK ONE: THIS TRANSMITTAL IS FOR FIO X APPROVAL

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.)	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. *(See instruction No. 8)*	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT		FOR CONTRACTOR USE CODE	VARIATION (See Instruction No. 6)	FOR CE USE CODE
				SPEC. PARA NO.	DRAWING SHEET NO.			
a.	*b.*	*c.*	*d.*	*e.*	*f.*	*g.*	*h.*	*i.*
8	Sand/topsoil material sample results Sampled at Nichols pit in Hinsdale, MA. Identification of proposed source(ID# NGS - 08-07-12-1)			**312323 (Part 1.04)**	26			
9	Gradation, hydrometer, pH and organic content analysis testing for sand/topsoil material. Sieve analysis using ASTM D422 (one sample represents 500 cu yds)			**312323 (Part 1.04)**	26			

REMARKS	I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated. **Name (TITLE)** Michael W. Muth - Project Manager NAME AND SIGNATURE OF CONTRACTOR

SECTION II – APPROVAL ACTION

ENCLOSURES RETURNED *(List by Item No.)*	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

ENG FORM 4025-R, MAR 95 *(ER 415-1-10)* **EDITION OF SEP 93 IS OBSOLETE** (PROPONENT: CEMP-CE)

SHEET __1_ OF _1_

☐ REVIEWED
☒ REVIEWED & NOTED
☐ REVISE & RESUBMIT
☐ REJECTED
☐ For information only
☐ Received, no action taken

Reviewed solely for general conformance with contract documents

ARCADIS of New York, Inc.

Signature

8/17/12
Date

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Item:	Sand/Topsoil NGS-08-07-12-1	**Project Number:**	120458
Source:	NGS	**Lab Number:**	12-0694A
Location:	Stockpile	**Item Number:**	312323 5.A Sand/Topsoil
Date Sampled:	8/7/2012	**Sampled By:**	Client
Date Tested:	8/10/2012-08/13/2012	**Tested By:**	John Brinsfield

PARTICLE SIZE ANALYSIS BY SIEVE AND HYDROMETER METHOD

Test Method: ASTM D422

Sieve Size	Particle Diameter, mm	Percent Passing	Specification
3/8"	9.50	96.2	
#4	4.75	95.9	
#10	2.00	94.0	
#40	0.425	75.7	
#200	0.075	21.9	
Hydrometer Analysis Results	0.050	13.6	
	0.020	4.2	
	0.010	3.9	
	0.005	2.7	
	0.002	2.4	
	0.001	2.0	

SOIL SPECIFIC GRAVITY: 2.67 (As reported separately, or estimated.)

DISPERSION METHOD: Mechanical, 1 min.

SAND & GRAVEL PARTICLES: Hard subrounded particles

Comments:

COMPOSITION SUMMARY (USDA SIZE DESIGNATIONS)		
Gravel	(3 inches to #10)	6.0%
	Fraction Passing #10:	
Sand	(#10 to 0.05 mm)	85.5%
Silt	(0.05 mm to 0.002 mm)	11.9%
Clay	(Less than 0.002 mm)	2.6%
Total		100.0%
USDA Soil Textural Class	Loamy Sand	

REPORT REVIEWED BY: Emily J. Rodriguez

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Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
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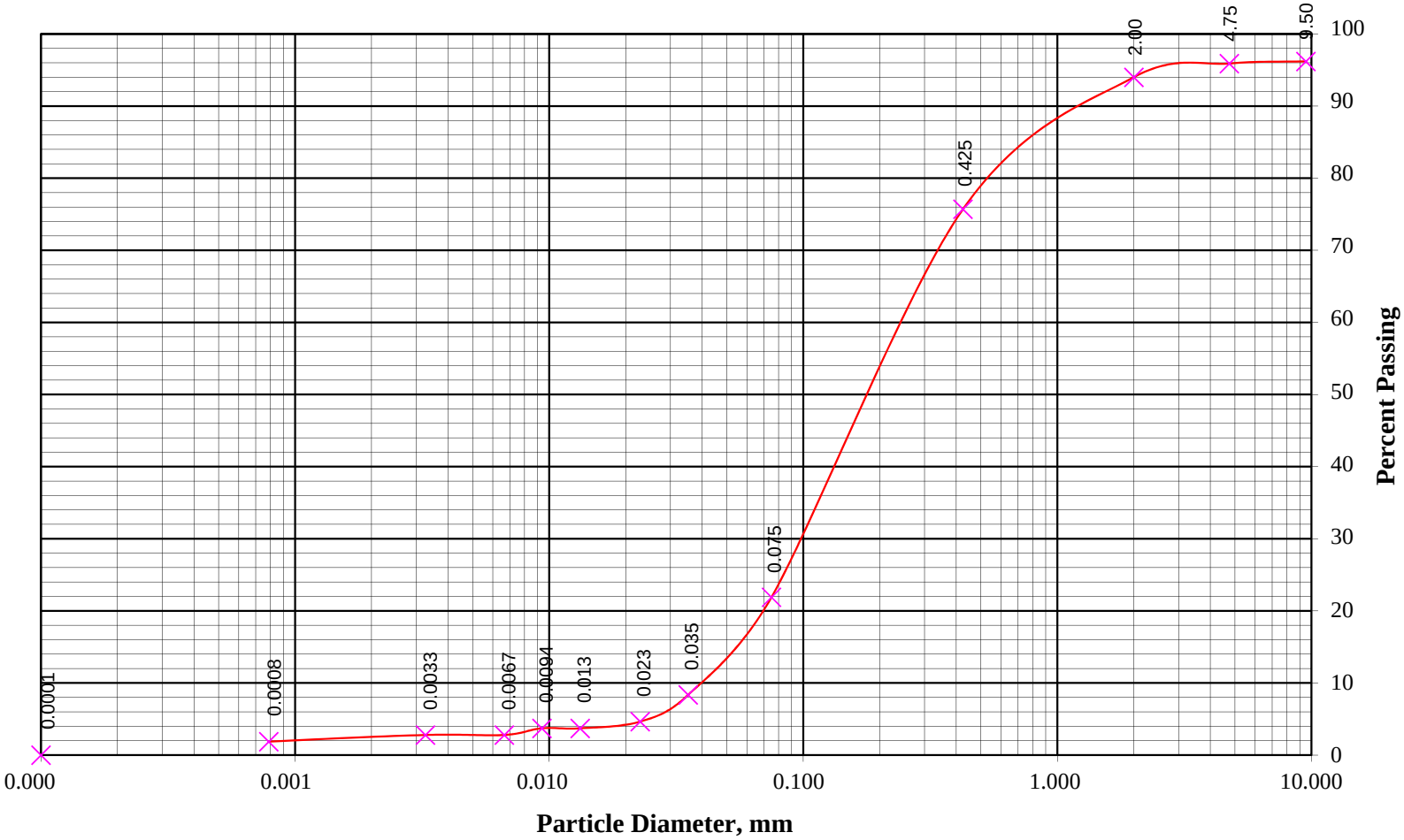
Date Tested:	8/10/2012-08/13/2012	**Tested By:**	John Brinsfield



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25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Material:	Sand/Topsoil NGS-08-07-12-1	**Project Number:**	120458
Source:	NGS	**Lab Number:**	12-0694A
Location:	Stockpile	**Item Number:**	312323 5.A Sand/Topsoil
Date Sampled:	8/7/2012	**Sampled By:**	Client
Date Tested:	8/9/2012	**Tested By:**	John Brinsfield

Report of Organic Content of Soils by Loss on Ignition
Test Method: ASTM D2974 Method C

Inorganic Content: **98.8** **%** (Sand, silt, clay, etc.)
Organic Content: **1.2** **%**

Specification: 1.0-4.0

Comments:

Test results comply with specifications.

Emily J. Rodriguez

Report Reviewed By:

PDF

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Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Services Inc.	**Project:**	Silver Lake Removal Action
Material:	Sand/Topsoil NGS-08-07-12-1	**Project Number:**	120458
Source:	NGS	**Lab Number:**	12-0694A
Location:	Stockpile	**Item Number:**	312323 5.A Sand/Topsoil
Date Sampled:	8/7/2012	**Sampled By:**	Client
Date Tested:	8/9/2012	**Tested By:**	John Brinsfield

Report of pH of Soil

Test Method: ASTM D4972 Method A

pH Test Result: 6.7 (in Distilled Water)

N/A (In Calcium Chloride Solution)

Specification 5.0-7.0

Comments:

Test results comply with specifications.

Report Reviewed By: Emily J. Rodriguez

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Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	Sand/Topsoil NGS-08-07-12-1	**Project Number:**	120458
Source:	NGS	**Lab Number:**	12-0694A
Date Sampled:	8/7/2012	**Sampled By:**	Client
Date Tested:	8/9/2012	**Tested By:**	Mark Greenstein

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-0694A	Sand/Topsoil NGS-08-07-12-1	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	1.8	98.2	
12.5 mm	1/2"	0.7	97.5	
6.3 mm	1/4"	1.6	95.9	
4.75 mm	#4	0.0	95.9	
2.00 mm	#10	1.9	94.0	
0.850 mm	#20	5.9	88.1	
0.600 mm	#30	5.1	83.0	
0.425 mm	#40	7.3	75.7	
0.150 mm	#100	32.1	43.6	
0.075 mm	#200	21.7	21.9	
Pan		21.9		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

PDF

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on reverse side prior to initiating this form)*	DATE 8/14/12	Submittal No. 0007

SECTION I – REQUEST FOR APROVAL OF THE FOLLOWING ITEMS

TO:	FROM:	General Electric Company Purchase Order Number:	CHECK ONE: X THIS IS A NEW TRANSMITTAL THIS IS A RESUBMITTAL OF TRANSMITTAL
Construction Manager ATTN: Mark Gravelding, P.E. ARCADIS 6723 Towpath Road Syracuse, NY 13214 Email: mark.gravelding@arcadis-us.comm	Sevenson Environmental Services, Inc. 2749 Lockport Road Niagara Falls, New York 14305		
SPECIFICATION SEC. NO: (Cover only one section with each transmittal) 312323	PROJECT TITLE AND LOCATION: **Silver Lake Removal Action Area** Pittsfield, MA 01201		CHECK ONE: THIS TRANSMITTAL IS FOR FIO X APPROVAL

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.)	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. *(See instruction No. 8)*	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT		FOR CONTRACTOR USE CODE	VARIATION (See Instruction No. 6)	FOR CE USE CODE
				SPEC. PARA NO.	DRAWING SHEET NO.			
a.	*b.*	*c.*	*d.*	*e.*	*f.*	*g.*	*h.*	*i.*
16	Geotextile fabric-Manufacturer's installation procedures and specifications			**313219 (Part 1.04)**	26			
18	Lot and roll identification numbers for field delivered material			**313219 (Part 1.04)**	26			
20	Contractor's proposed transportation, handling, storage and installation techniques			**313219 (Part 1.04)**	26			

REMARKS	I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated. **Name (TITLE)** Michael W. Muth - Project Manager NAME AND SIGNATURE OF CONTRACTOR

SECTION II – APPROVAL ACTION

ENCLOSURES RETURNED *(List by Item No.)*	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE
	☐ REVISE ☒ REVIEWED & NOTED ☐ REVISE & RESUBMIT ☐ For information only ☐ Received, no action taken	

ENG FORM 4025-R, MAR 95 *(ER 415-1-10)* **EDITION OF SEP 93 IS OBSOLETE** SHEET _1_ OF _1_ (PROPONENT: CEMP-CE)

Reviewed solely for general conformance with contract documents
ARCADIS of New York, Inc.
Signature
8/17/12
Date

Noted:

1. Please provide information on proposed method of pinning the geotextile to the shoreline.

2. Upon delivery of the geotextile to the Site, SES shall provide written certification that the geotextile has not been damaged due to improper transportation, handling, or storage.

3. Prior to placement, SES shall confirm that the ground surface over which the geotextile will be placed is acceptable for approval by GE's representative.

4. To the extent practicable, the bank soil areas shall be backfilled prior to placing cap material in near shore areas.

Geotextile Fabric Storage, Transportation, Handling and Placement Methods

Storage- **Sevenson will store all geotextile fabric at staging area at 100 East Street location next to building 64. All fabric rolls are concealed with manufacturer shrink wrap to withstand weather damage.**

Transportation and Handling Techniques- **Sevenson will utilize a Komatsu WA 380 Front Loader to transport fabric from the staging area at 1000 East Street to the proposed haul road/staging area locations along Silver Lake Blvd., Fourth Street, East Street and the building 65 containment area. The Komatsu WA 380 Front Loader has been registered for on-road usage and has been designated the proper license plates for such tasks.**

Placement/Installation Methods- **Sevenson will utilize the Carthage Mills Installation Guidelines to install all geotextile fabric. Sevenson will prepare subgrade with bull dozer and excavator to grub/ level tree stumps, large stones and sharp objects. Sevenson will then overlap the geotextile fabric utilizing the recommended 1.5' overlapping technique on Table 1 of Carthage Mills Installation Guidelines. "It is assumed that two laborers will place FX® separation/stabilization geotextiles. The fabric should be rolled out onto the subgrade beginning at a point that allows easy access for construction equipment yet is consistent with the layout plan. On very soft subgrades the fabric layout and aggregate placement should begin on firm soil on the site perimeter, to establish an "anchor point." From there the fabric can be rolled onto softer sections. The geotextile should not be dragged across the subgrade. The geotextile is usually laid in the direction of construction traffic; however, specific project dimensions may alter this layout. Geotextile panels should be overlapped both side-to-side and end-to end, in the direction of aggregate placement." Soil fill and crushed stone will be used for haul roads and/or staging pads Lift thickness will be no less than 6'' to avoid rutting. Finally, utilizing the D39 dozer, Sevenson will compact the newly placed aggregate by "walking" the tracked bull dozer back and forth over the aggregate.**

To: Sevenson

Product: FX-55

Project: Silver Lake Capping, Pittsfield MA

Carthage Mills | Certificate of Analysis

Following is test data for the 21 rolls FX-55 shipped to the above referenced jobsite.

Roll No	MD Grab Tensile (lbs) ASTM D4632	CD Grab Tensile (lbs) ASTM D4632	MD Elongation (%) ASTM D4632	MD Elongation (%) ASTM D4632	MD Trap Tear (lbs) ASTM D4533	CD Trap Tear (lbs) ASTM D4533	CBR Puncture (lbs) ASTM D6241	Permittivity (sec-1) ASTM D4491	Water Flow Rate (gal/min-ft2) D4491	AOS US Sieve ASTM D4751
822752011	251	260	20	15	80	107	837	0.08	6.0	40
822752021	251	260	20	15	80	107	837	0.08	6.0	40
822752031	251	260	20	15	80	107	837	0.08	6.0	40
822752811	251	260	20	15	80	107	837	0.08	6.0	40
822752821	251	260	20	15	80	107	837	0.08	6.0	40
822752831	251	260	20	15	80	107	837	0.08	6.0	40
822753211	251	260	20	15	80	107	837	0.08	6.0	40
822753221	251	260	20	15	80	107	837	0.08	6.0	40
822753231	251	260	20	15	80	107	837	0.08	6.0	40
822755111	255	269	21	15	84	106	818	0.08	6.0	40
822755121	255	269	21	15	84	106	818	0.08	6.0	40
822755131	255	269	21	15	84	106	818	0.08	6.0	40
822802911	247	223	21	16	77	99	790	0.08	6.0	40
822802921	247	223	21	16	77	99	790	0.08	6.0	40
822802931	247	223	21	16	77	99	790	0.08	6.0	40
822805111	247	223	21	16	77	99	790	0.08	6.0	40
822805121	247	223	21	16	77	99	790	0.08	6.0	40
822805131	247	223	21	16	77	99	790	0.08	6.0	40
822805611	247	223	21	16	77	99	790	0.08	6.0	40
822805621	247	223	21	16	77	99	790	0.08	6.0	40
822805631	247	223	21	16	77	99	790	0.08	6.0	40

I certify the above to be true and correct
Carthage Mills

James Paulsen
Date 8-13-12

4243 Hunt Road
Cincinnati, OH 45242
www.carthagemills.com

513-794-1600 TELEPHONE
800-543-4430 TOLL FREE
513-794-3434 FACSIMILE

To: Sevenson

Product: FX-80HS

Project: Silver Lake Capping, Pittsfield MA

Carthage Mills | Certificate of Analysis

Following is test data for the 26 rolls FX-80HS shipped to the above referenced jobsite.

Finished Roll Number	Date Tested	MD Grab Tensile ASTM D4632 (lbs)	CD Grab Tensile ASTM D4632 (lbs)	MD Grab Elongation ASTM D4632 (%)	CD Grab Elongation ASTM D4632 (%)	MD Trap Tear ASTM D4533 (lbs)	CD Trap Tear ASTM D4533 (lbs)	CBR Puncture ASTM D6241 (lbs)	AOS ASTM D4751 (U.S. sieve)	Water Flow Rate ASTM D4491 gpm/ft2	Permittivity ASTM D4491 (sec-1)
82212811	7/9/12	234	233	65	67	87	94	605	100	192	2.6
822636311	7/23/12	270	262	80	85	89	111	573	80	120	1.6
822636411	7/23/12	270	262	80	85	89	111	573	80	120	1.6
822636511	7/23/12	270	262	80	85	89	111	573	80	120	1.6
822636611	7/23/12	270	262	80	85	89	111	573	80	120	1.6
822636711	7/23/12	270	262	80	85	89	111	573	80	120	1.6
822636811	7/23/12	270	262	80	85	89	111	573	80	120	1.6
822638111	7/23/12	226	260	71	80	92	102	573	80	118	1.6
822638411	7/23/12	226	260	71	80	92	102	573	80	118	1.6
822638611	7/23/12	226	260	71	80	92	102	573	80	118	1.6
822639011	7/23/12	247	255	81	80	96	116	573	80	118	1.6
822639111	7/23/12	247	255	81	80	96	116	573	80	118	1.6
822639411	7/23/12	247	255	81	80	96	116	573	80	118	1.6
82274831	7/26/12	268	272	71	78	104	121	708	100	121	1.7
82274841	7/26/12	268	272	71	78	104	121	708	100	121	1.7
82274851	7/26/12	268	272	71	78	104	121	708	100	121	1.7
82275001	7/26/12	268	272	71	78	104	121	708	100	121	1.7
82275171	7/26/12	262	269	69	76	101	120	790	100	162	2.2
82275521	7/26/12	262	269	69	76	101	120	790	100	162	2.2
82275531	7/26/12	262	269	69	76	101	120	790	100	162	2.2
82275651	7/26/12	262	269	69	76	101	120	790	100	162	2.2

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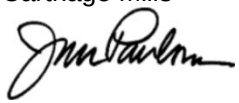
Finished Roll Number	Date Tested	MD Grab Tensile ASTM D4632 (lbs)	CD Grab Tensile ASTM D4632 (lbs)	MD Grab Elongation ASTM D4632 (%)	CD Grab Elongation ASTM D4632 (%)	MD Trap Tear ASTM D4533 (lbs)	CD Trap Tear ASTM D4533 (lbs)	CBR Puncture ASTM D6241 (lbs)	AOS ASTM D4751 (U.S. sieve)	Water Flow Rate ASTM D4491 gpm/ft2	Permit tivity ASTM D4491 (sec-1)
82276661	7/26/12	243	246	67	73	93	95	842	100	162	2.2
82276951	7/26/12	243	246	67	73	93	95	842	100	162	2.2
82276971	7/26/12	243	246	67	73	93	95	842	100	162	2.2
82277021	7/26/12	236	240	64	75	91	94	824	100	162	2.2
82279921	7/27/12	236	233	67	76	98	103	636	100	162	2.2

I certify the above to be true and correct

Carthage Mills



James Paulsen
Date 8-13-12

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Separation/Stabilization Geotextile Fabrics

INTRODUCTION

Carthage Mills' FX® Line of geotextiles can enhance the performance of paved and unpaved roadways, parking lots, airports, loading docks, and storage areas through separation/stabilization of the roadway structure. The geotextiles provide three important functions: separation/stabilization, drainage, and reinforcement. The fabric serves as a permeable separation/stabilization layer, preventing the aggregate and subgrade soils from intermixing while allowing the passage of water. The geotextile also enhances the structural properties of the subgrade and the roadway aggregate to minimize the cost of the road structure.

The successful use of geotextiles in these applications requires proper installation. The four basic steps of proper installation include:

- Subgrade preparation
- Geotextile placement
- Aggregate placement
- Aggregate compaction

Carthage Mills' FX® stabilization geotextiles can be used in most weather and temperature conditions.

Adequate planning and preparation for each installation step will speed construction and ensure good performance.

These guidelines provide recommendations for installation of geotextiles in separation/stabilization applications.

The guidelines are intended to assist the contractor responsible for installation of the specified geotextile.

They are to be considered general guidelines, appropriate for common construction conditions. Specific site conditions, design requirements, or other variables may require modification to these guidelines.

SUBGRADE PREPARATION

Initially, the site should be cleared of tree stumps, large stones, and other sharp objects that could puncture the fabric. This step should be performed regardless of subgrade strength.

Roadway subgrade preparation typically involves removal of all vegetation, roots, and topsoil. Localized soft or otherwise unsuitable subgrade areas may be required to be excavated and backfilled with select material. In some very soft soil applications, it is beneficial to leave vegetation, roots, and topsoil in place to limit subgrade soil disturbance and loss of strength.

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GEOTEXTILE PLACEMENT

Two people can easily place FX® separation/stabilization geotextiles. The fabric should be rolled out onto the subgrade beginning at a point that allows easy access for construction equipment yet is consistent with the layout plan. On very soft subgrades (CBR<I) the fabric layout and aggregate placement should begin on firm soil on the site perimeter, to establish an ''anchor point.'' From there the fabric can be rolled onto softer sections. The geotextile should not be dragged across the subgrade. The geotextile is usually laid in the direction of construction traffic; however, specific project dimensions may alter this layout. Geotextile panels should be overlapped both side-to-side and end-to-end, in the direction of aggregate placement. The recommended overlap ranges from 1.5 to 3 feet, depending on subgrade strength. Overlap recommendations are provided in Table 1.

Table 1. Recommended Geotextile Overlaps

Subgrade CBR Value	Subgrade R-Value (California)	Subgrade Shear Strength (lb/in²)	Field Estimation of CBR	Recommended Minimum Overlap
< 0.5	_____	< 2	_____	Sewn seam required
> 0.5 to 1	_____	> 2 to 4.5	A person can easily walk on the site	3 ft.
> 1 to 2	> 0 to 10	> 4.5 to 8.5	A low ground pressure bulldozer can access the site without significant rutting	2.5 ft.
> 2	> 10	> 8.5	A D4 bulldozer can access the site without significant rutting	1.5 ft.

Alternatively, adjacent fabric edges can be sewn together rather than overlapped. Sewn seams must be used when the geotextile provides significant tensile reinforcement. This is the case, for example, when the subgrade is very soft (CBR<0.5). Sewn seam strength and fabric orientation are important design parameters. In these critical applications, adjacent panels must be placed and sewn in accordance with the specifications provided by the design engineer. Field sewing is performed using a portable sewing machine and typically requires three or four laborers. Pre-sewn panels can be supplied from the factory.

Soil, rocks, or pins can be used to hold fabric edges and overlaps down until aggregate is placed. On curves, the geotextile may be folded or cut to conform to the curve, as shown in Figure 1. The fold or overlap should be in the direction of construction and can be held in place as described above.

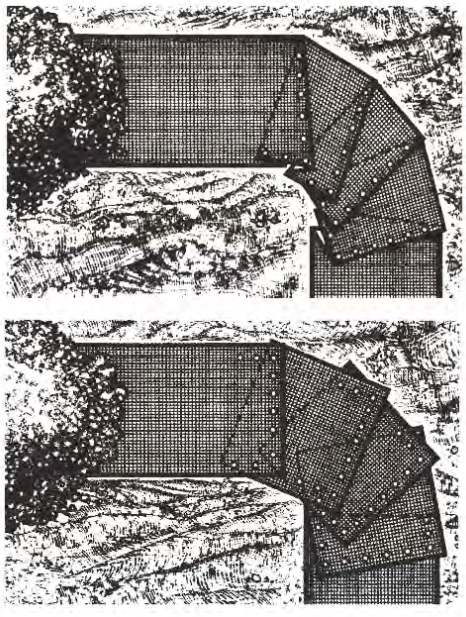

Figure 1: TOP, forming a curve using folds. BOTTOM, forming a curve using cut pieces

AGGREGATE PLACEMENT

Aggregate is placed and spread on the fabric using conventional construction practices and equipment. Soil, rocks, or pins should be used to anchor the leading edge of the fabric to prevent it from lifting during placement of the first aggregate lift. The aggregate is typically back-dumped onto the geotextile, as the truck should not drive directly on the fabric. The aggregate is then spread over the geotextile. A tracked bulldozer is best used for this operation. Low ground pressure models are recommended for work on soft subgrades.

Lift thickness should not be less than 6 inches. The first lift should be as thick as necessary to limit rutting to less than 4 inches. During spreading, the bulldozer should blade into the load and slightly upward to prevent stressing the fabric. This procedure should be followed for each load until the fabric is completely covered. The dozer operator can determine which areas may need additional aggregate for good stability by observing aggregate layer rutting.

On very soft subgrades, care should be taken during aggregate placement to ensure that the fabric is not moved out of position nor the subgrade overstressed. Over some very soft soil conditions, ''mud waves'' may appear during or subsequent to aggregate placement. Mud waves result from overstressing the subgrade during fill placement, causing the subsurface soil to move away and up from the loaded area. They are normally not a problem if they do not heave above the surface of the aggregate base. If severe mud waves are anticipated, a Carthage Mills representative can provide information on construction procedures to minimize their adverse effects.

Sudden stops or turns by equipment operating over the geotextile should be avoided. Under typical conditions, vehicles should not be allowed to drive directly on the geotextile. If space constraints make this impractical, the possible damage from direct vehicle contact should be evaluated on a test section of the geotextile. If the fabric is damaged such that it cannot fulfill project requirements, a more damage-resistant geotextile should be specified. If the fabric is damaged during installation, the damaged section should be exposed and a patch of fabric placed over it. The patch should be large enough to overlap onto undamaged areas as recommended in Table 1. The aggregate is then replaced and compacted.

AGGREGATE COMPACTION

The aggregate must be compacted as required by the project specifications. The aggregate should be initially compacted by ''walking'' the tracked bulldozer back and forth over the aggregate while waiting for the next aggregate load. Construction traffic will then compact the aggregate until reasonable stability is obtained. Final compaction is achieved by rolling the area with a vibratory compactor, first without vibration for several passes and then with full vibration. Any weak areas found during final compaction usually indicate inadequate aggregate thickness in those locations. Do not grade ruts down; simply fill with additional aggregate and compact to the specified density. This also applies to any future rut maintenance that might be required.

CONSTRUCTION MONITORING

It is important that the construction conditions and process be monitored. If the actual subgrade has lower strength than that assumed for design, the structural section design thicknesses must be re-evaluated. Observation of rutting of the aggregate layer, for example, can pinpoint weak subgrade areas, allowing design adjustments to be made on site if necessary. One advantage of an unpaved road is the ability to identify and resurface weak areas to avoid overdesigning the entire road. Aggregate base placed for a new pavement may also be monitored for weak areas and corrected before the pavement layer(s) is placed.

Submittal 0007 - Supplemental information on geotextile pinning and on-site delivery conditions

Geotextile Pinning Method

Woven and non-woven geotextile fabric shall be pinned to the shoreline with 8 gauge 12" long steel sod staples. The staples will be spaced as necessary parallel to the shoreline. Staple spacing may be 1 foot to 10 feet depending on stability of the soil.

Woven and non-woven geotextile fabric has not been damaged or destroyed upon delivery due to improper transportation, handling or storage.

Sevenson Environmental Services Quality Assurance/Quality Control Officer.

Dominic Massaro Dominic Massaro

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on reverse side prior to initiating this form)*	**DATE 8/31/12**	**Submittal No. 0008**

SECTION I – REQUEST FOR APROVAL OF THE FOLLOWING ITEMS

TO:	FROM:	General Electric Company Purchase Order Number:	CHECK ONE:
Construction Manager ATTN: Mark Gravelding, P.E. ARCADIS 6723 Towpath Road Syracuse, NY 13214 Email: mark.gravelding@arcadis-us.comm	Sevenson Environmental Services, Inc. 2749 Lockport Road Niagara Falls, New York 14305		**X** THIS IS A NEW TRANSMITTAL THIS IS A RESUBMITTAL OF TRANSMITTAL

SPECIFICATION SEC. NO: (Cover only one section with each transmittal) 313219	PROJECT TITLE AND LOCATION: **Silver Lake Removal Action Area** Pittsfield, MA 01201	CHECK ONE: THIS TRANSMITTAL IS FOR FIO X APPROVAL

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.)	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. *(See instruction No. 8)*	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT: SPEC. PARA NO.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO.	FOR CONTRACTOR USE CODE	VARIATION (See Instruction No. 6)	FOR CE USE CODE
a.	***b.***	***c.***	***d.***	***e.***	***f.***	***g.***	***h.***	***i.***
8	General Common Fill/Petricca Hinsdale run of bank sand. Identification of proposed source			**312323 (Part 1.04)**	26			
9	General Common Fill/ Petricca Hinsdale run of bank sand. Particle/sieve size analysis results for backfill.			**312323 (Part 1.04)**	26			
	Includes sieve analysis for (12) 500 cu yd samples of general common fill							

REMARKS	I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated. **Name (TITLE)** Michael W. Muth - Project Manager NAME AND SIGNATURE OF CONTRACTOR

SECTION II – APPROVAL ACTION

ENCLOSURES RETURNED *(List by Item No.)*	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

ENG FORM 4025-R, MAR 95 *(ER 415-1-10)* **EDITION OF SEP 93 IS OBSOLETE** SHEET __1_ OF _1_ (PROPONENT: CEMP-CE)

☐ REVIEWED ☐ REJECTED
☒ REVIEWED & NOTED ☐ For information only
☐ REVISE & RESUBMIT ☐ Received, no action taken

Reviewed solely for general conformance with contract documents

ARCADIS of New York, Inc.

Signature 9/14/12 Date

Note: Although some samples collected from Pits 6, 7, 8, and 9 are coarser than the material specified in the Technical Specifications, this material meets the intent of the specification and is acceptable for use on site as Soil Fill.

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25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	PHP-08-20-12-6A	**Project Number:**	120458
Source:	Pettrica Hinsdale Pit	**Lab Number:**	12-0736A
Date Sampled:	8/20/2012	**Sampled By:**	Client
Date Tested:	8/28/2012	**Tested By:**	Liam Foody

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-0736A	PHP-08-20-12-6A	Stockpile	B0040152 2.01A.2 Granular Cap

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	4.3	95.7	
25.0 mm	1"	2.6	93.1	
19.0 mm	3/4"	1.6	91.5	
12.5 mm	1/2"	2.9	88.6	
6.3 mm	1/4"	4.2	84.4	
4.75 mm	#4	2.0	82.4	
2.00 mm	#10	4.1	78.3	
0.850 mm	#20	6.0	72.3	
0.600 mm	#30	3.8	68.5	
0.425 mm	#40	5.3	63.2	
0.150 mm	#100	30.7	32.5	
0.075 mm	#200	19.6	12.9	
Pan		12.9		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	PHP-08-20-12-6B	**Project Number:**	120458
Source:	Pettrica Hinsdale Pit	**Lab Number:**	12-0736B
Date Sampled:	8/20/2012	**Sampled By:**	Client
Date Tested:	8/28/2012	**Tested By:**	Liam Foody

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-0736B	PHP-08-20-12-6B	Stockpile	B0040152 2.01A.2 Granular Cap

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	2.7	97.3	
19.0 mm	3/4"	6.5	90.8	
12.5 mm	1/2"	7.3	83.5	
6.3 mm	1/4"	9.1	74.4	
4.75 mm	#4	3.7	70.7	
2.00 mm	#10	8.2	62.5	
0.850 mm	#20	11.0	51.5	
0.600 mm	#30	6.3	45.2	
0.425 mm	#40	6.9	38.3	
0.150 mm	#100	24.2	14.1	
0.075 mm	#200	9.5	4.6	
Pan		4.6		

Comments:

Minus #200 by wash-sieve method.

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Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	PHP-08-20-12-6C	**Project Number:**	120458
Source:	Sevenson Environmental Services Inc.	**Lab Number:**	12-0736C
Date Sampled:	8/20/2012	**Sampled By:**	Client
Date Tested:	8/28/2012	**Tested By:**	Liam Foody

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-0736C	PHP-08-20-12-6C	Stockpile	B0040152 2.01A.2 Granular Cap

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	2.9	97.1	
12.5 mm	1/2"	2.2	94.9	
6.3 mm	1/4"	2.6	92.3	
4.75 mm	#4	1.3	91.0	
2.00 mm	#10	3.4	87.6	
0.850 mm	#20	4.5	83.1	
0.600 mm	#30	2.6	80.5	
0.425 mm	#40	3.8	76.7	
0.150 mm	#100	40.1	36.6	
0.075 mm	#200	25.5	11.1	
Pan		11.1		

Comments:

Minus #200 by wash-sieve method.

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Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	PHP-08-20-12-7A	**Project Number:**	120458
Source:	Pettrica Hinsdale Pit	**Lab Number:**	12-0736D
Date Sampled:	8/20/2012	**Sampled By:**	Client
Date Tested:	8/28/2012	**Tested By:**	Liam Foody

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-0736D	PHP-08-20-12-7A	Stockpile	B0040152 2.01A.2 Granular Cap

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	3.8	96.2	
12.5 mm	1/2"	6.7	89.5	
6.3 mm	1/4"	9.3	80.2	
4.75 mm	#4	3.0	77.2	
2.00 mm	#10	12.3	64.9	
0.850 mm	#20	13.0	51.9	
0.600 mm	#30	5.6	46.3	
0.425 mm	#40	5.5	40.8	
0.150 mm	#100	18.2	22.6	
0.075 mm	#200	10.5	12.1	
Pan		12.1		

Comments:

Minus #200 by wash-sieve method.

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Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	PHP-08-20-12-7B	**Project Number:**	120458
Source:	Pettrica Hinsdale Pit	**Lab Number:**	12-0736E
Date Sampled:	8/20/2012	**Sampled By:**	Client
Date Tested:	8/30/2012	**Tested By:**	Eric Brousseau

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-0736E	PHP-08-20-12-7B	Stockpile	312417 2.1D Barrier Protection Silty Sand

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	4.8	95.2	100
19.0 mm	3/4"	2.3	92.9	
12.5 mm	1/2"	4.3	88.6	
6.3 mm	1/4"	7.9	80.7	
4.75 mm	#4	2.4	78.3	
2.00 mm	#10	7.7	70.6	
0.850 mm	#20	10.5	60.1	
0.600 mm	#30	5.7	54.4	
0.425 mm	#40	6.4	48.0	
0.150 mm	#100	24.9	23.1	
0.075 mm	#200	12.9	10.2	
Pan		10.2		

Comments: **Test results do not comply with specification**
Minus #200 by wash-sieve method.

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Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	PHP-08-20-12-7C	**Project Number:**	120458
Source:	Pettrica Hinsdale Pit	**Lab Number:**	12-0736F
Date Sampled:	8/20/2012	**Sampled By:**	Client
Date Tested:	8/28/2012	**Tested By:**	Liam Foody

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-0736F	PHP-08-20-12-7C	Stockpile	B0040152 2.01A.2 Granular Cap

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	4.7	95.3	
19.0 mm	3/4"	2.9	92.4	
12.5 mm	1/2"	4.7	87.7	
6.3 mm	1/4"	6.4	81.3	
4.75 mm	#4	2.8	78.5	
2.00 mm	#10	8.9	69.6	
0.850 mm	#20	12.4	57.2	
0.600 mm	#30	6.5	50.7	
0.425 mm	#40	6.9	43.8	
0.150 mm	#100	23.1	20.7	
0.075 mm	#200	11.1	9.6	
Pan		9.6		

Comments:

Minus #200 by wash-sieve method.

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Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	PHP-08-20-12-8A	**Project Number:**	120458
Source:	Pettrica Hinsdale Pit	**Lab Number:**	12-0736G
Date Sampled:	8/20/2012	**Sampled By:**	Client
Date Tested:	8/28/2012	**Tested By:**	Liam Foody

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-0736G	PHP-08-20-12-8A	Stockpile	B0040152 2.01A.2 Granular Cap

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	3.2	96.8	
19.0 mm	3/4"	2.5	94.3	
12.5 mm	1/2"	5.7	88.6	
6.3 mm	1/4"	9.8	78.8	
4.75 mm	#4	2.5	76.3	
2.00 mm	#10	11.2	65.1	
0.850 mm	#20	15.5	49.6	
0.600 mm	#30	7.6	42.0	
0.425 mm	#40	7.1	34.9	
0.150 mm	#100	20.1	14.8	
0.075 mm	#200	7.7	7.1	
Pan		7.1		

Comments:

Minus #200 by wash-sieve method.

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Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	PHP-08-20-12-8B	**Project Number:**	120458
Source:	Pettrica Hinsdale Pit	**Lab Number:**	12-0736H
Date Sampled:	8/20/2012	**Sampled By:**	Client
Date Tested:	8/28/2012	**Tested By:**	Liam Foody

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-0736H	PHP-08-20-12-8B	Stockpile	B0040152 2.01A.2 Granular Cap

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	4.9	95.1	
19.0 mm	3/4"	4.9	90.2	
12.5 mm	1/2"	2.4	87.8	
6.3 mm	1/4"	5.5	82.3	
4.75 mm	#4	0.9	81.4	
2.00 mm	#10	5.6	75.8	
0.850 mm	#20	15.8	60.0	
0.600 mm	#30	10.5	49.5	
0.425 mm	#40	10.0	39.5	
0.150 mm	#100	19.2	20.3	
0.075 mm	#200	4.0	16.3	
Pan		16.3		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	PHP-08-20-12-8C	**Project Number:**	120458
Source:	Pettrica Hinsdale Pit	**Lab Number:**	12-0736I
Date Sampled:	8/20/2012	**Sampled By:**	Client
Date Tested:	8/28/2012	**Tested By:**	Liam Foody

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-0736I	PHP-08-20-12-8C	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	3.2	96.8	
19.0 mm	3/4"	2.4	94.4	
12.5 mm	1/2"	5.6	88.8	
6.3 mm	1/4"	7.9	80.9	
4.75 mm	#4	2.9	78.0	
2.00 mm	#10	10.5	67.5	
0.850 mm	#20	17.0	50.5	
0.600 mm	#30	9.3	41.2	
0.425 mm	#40	8.5	32.7	
0.150 mm	#100	19.6	13.1	
0.075 mm	#200	6.9	6.2	
Pan		6.2		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	PHP-08-20-12-9A	**Project Number:**	120458
Source:	Pettrica Hinsdale Pit	**Lab Number:**	12-0736J
Date Sampled:	8/20/2012	**Sampled By:**	Client
Date Tested:	8/28/2012	**Tested By:**	Liam Foody

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-0736J	PHP-08-20-12-9A	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	3.5	96.5	
25.0 mm	1"	1.1	95.4	
19.0 mm	3/4"	0.7	94.7	
12.5 mm	1/2"	3.1	91.6	
6.3 mm	1/4"	4.5	87.1	
4.75 mm	#4	2.7	84.4	
2.00 mm	#10	11.7	72.7	
0.850 mm	#20	23.2	49.5	
0.600 mm	#30	13.3	36.2	
0.425 mm	#40	12.4	23.8	
0.150 mm	#100	19.7	4.1	
0.075 mm	#200	2.2	1.9	
Pan		1.9		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	PHP-08-20-12-9B	**Project Number:**	120458
Source:	Pettrica Hinsdale Pit	**Lab Number:**	12-0736K
Date Sampled:	8/20/2012	**Sampled By:**	Client
Date Tested:	8/28/2012	**Tested By:**	Liam Foody

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-0736K	PHP-08-20-12-9B	Stockpile	B0040152 2.01A.2 Granular Cap

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.3	99.7	
12.5 mm	1/2"	1.5	98.2	
6.3 mm	1/4"	2.7	95.5	
4.75 mm	#4	2.0	93.5	
2.00 mm	#10	8.0	85.5	
0.850 mm	#20	19.2	66.3	
0.600 mm	#30	13.2	53.1	
0.425 mm	#40	14.8	38.3	
0.150 mm	#100	34.9	3.4	
0.075 mm	#200	1.9	1.5	
Pan		1.5		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	PHP-08-20-12-9C	**Project Number:**	120458
Source:	Pettrica Hinsdale Pit	**Lab Number:**	12-0736L
Date Sampled:	8/20/2012	**Sampled By:**	Client
Date Tested:	8/28/2012	**Tested By:**	Liam Foody

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-0736L	PHP-08-20-12-9C	Stockpile	B0040152 2.01A.2 Granular Cap

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	5.2	94.8	
25.0 mm	1"	0.0	94.8	
19.0 mm	3/4"	0.4	94.4	
12.5 mm	1/2"	1.3	93.1	
6.3 mm	1/4"	1.1	92.0	
4.75 mm	#4	0.5	91.5	
2.00 mm	#10	2.1	89.4	
0.850 mm	#20	5.0	84.4	
0.600 mm	#30	4.3	80.1	
0.425 mm	#40	6.9	73.2	
0.150 mm	#100	41.6	31.6	
0.075 mm	#200	22.3	9.3	
Pan		9.3		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on reverse side prior to initiating this form)*	DATE 9/19/12	Submittal No. 0009

SECTION I – REQUEST FOR APROVAL OF THE FOLLOWING ITEMS

TO: Construction Manager ATTN: Mark Gravelding, P.E. ARCADIS 6723 Towpath Road Syracuse, NY 13214 Email: mark.gravelding@arcadis-us.comm	FROM: Sevenson Environmental Services, Inc. 2749 Lockport Road Niagara Falls, New York 14305	General Electric Company Purchase Order Number:	CHECK ONE: **X** THIS IS A NEW TRANSMITTAL THIS IS A RESUBMITTAL OF TRANSMITTAL
SPECIFICATION SEC. NO: (Cover only one section with each transmittal) 313219	PROJECT TITLE AND LOCATION: **Silver Lake Removal Action Area** Pittsfield, MA 01201		CHECK ONE: THIS TRANSMITTAL IS FOR FIO X APPROVAL

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.)	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. *(See instruction No. 8)*	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT		FOR CONTRACTOR USE CODE	VARIATION (See Instruction No. 6)	FOR CE USE CODE
				SPEC. PARA NO.	DRAWING SHEET NO.			
a.	*b.*	*c.*	*d.*	*e.*	*f.*	*g.*	*h.*	*i.*
8	Granular Cap Material/Nichols Hinsdale Pit Identification of proposed source			**312323 (Part 1.04)**	26			
9	Granular Cap Material/ Nichols Hinsdale. Particle/sieve size and hydrometer analysis results			**312323 (Part 1.04)**	26			
	Includes sieve analysis and hydrometer testing for (1) sampled granular cap material. (1) sample per 500CY							

REMARKS	I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated. **Name (TITLE)** Michael W. Muth - Project Manager NAME AND SIGNATURE OF CONTRACTOR

SECTION II – APPROVAL ACTION

ENCLOSURES RETURNED *(List by Item No.)*	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

ENG FORM 4025-R, MAR 95 *(ER 415-1-10)* **EDITION OF SEP 93 IS OBSOLETE** (PROPONENT: CEMP-CE)

SHEET __1_ OF _1_

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Item:	NSG - GCM - 1 Granular Cap Matl.	**Project Number:**	120458
Source:	Nichols Sand & Gravel	**Lab Number:**	12-0780
Date Sampled:	8/31/2012	**Sampled By:**	Client
Date Tested:	9/10/2012-09/11/2012	**Tested By:**	Maxwell Nicols

PARTICLE SIZE ANALYSIS BY SIEVE AND HYDROMETER METHOD

Test Method: ASTM D422

Sieve Size	Particle Diameter, mm	Percent Passing	Specification
3/8"	9.50	89.0	
#4	4.75	83.8	
#10	2.00	76.9	
#40	0.425	59.0	
#200	0.075	28.4	
Hydrometer Analysis Results	0.050	21.9	
	0.020	13.2	
	0.010	7.9	
	0.005	6.8	
	0.002	5.1	
	0.001		

SOIL SPECIFIC GRAVITY: 2.67 (As reported separately, or estimated.)

DISPERSION METHOD: Mechanical, 1 min.

SAND & GRAVEL PARTICLES: Hard subrounded particles

Comments:

COMPOSITION SUMMARY (USDA SIZE DESIGNATIONS)		
Gravel	(3 inches to #10)	23.1%
Fraction Passing #10:		
Sand	(#10 to 0.05 mm)	71.5%
Silt	(0.05 mm to 0.002 mm)	21.8%
Clay	(Less than 0.002 mm)	6.6%
Total		100.0%
USDA Soil Textural Class	Loamy Sand	

Revised 9/19/12. Source Corrected.

REPORT REVIEWED BY: Emily J. Rodriguez

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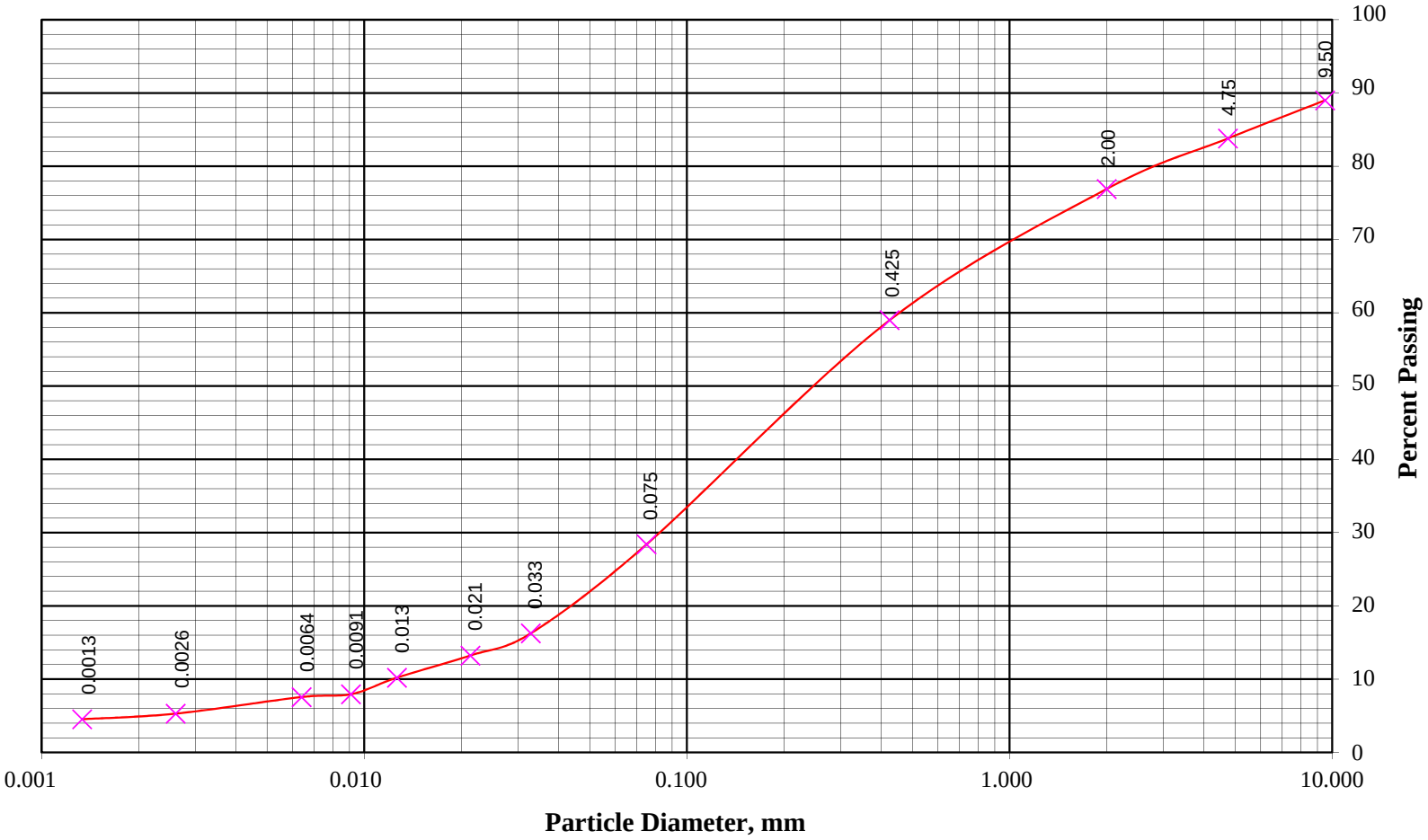
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Item:	NSG - GCM - 1 Granular Cap Material	**Project Number:**	120458
Source:	Nichols Sand & Gravel	**Lab Number:**	12-0780
Date Sampled:	8/31/2012	**Sampled By:**	Client
Date Tested:	9/10/2012-09/11/2012	**Tested By:**	Maxwell Nicols



Revised 9/19/12. Source Corrected.

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on reverse side prior to initiating this form)*	DATE 9/24/12	Submittal No. 0010

SECTION I – REQUEST FOR APROVAL OF THE FOLLOWING ITEMS

TO: Construction Manager ATTN: Mark Gravelding, P.E. ARCADIS 6723 Towpath Road Syracuse, NY 13214 Email: mark.gravelding@arcadis-us.comm	FROM: Sevenson Environmental Services, Inc. 2749 Lockport Road Niagara Falls, New York 14305	General Electric Company Purchase Order Number:	CHECK ONE: **X** THIS IS A NEW TRANSMITTAL THIS IS A RESUBMITTAL OF TRANSMITTAL
SPECIFICATION SEC. NO: (Cover only one section with each transmittal) 313219	PROJECT TITLE AND LOCATION: **Silver Lake Removal Action Area** Pittsfield, MA 01201		CHECK ONE: THIS TRANSMITTAL IS FOR FIO X APPROVAL

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.)	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. *(See instruction No. 8)*	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT		FOR CONTRACTOR USE CODE	VARIATION (See Instruction No. 6)	FOR CE USE CODE
				SPEC. PARA NO.	DRAWING SHEET NO.			
a.	*b.*	*c.*	*d.*	*e.*	*f.*	*g.*	*h.*	*i.*
8	Topsoil /Nichols Hinsdale Pit Identification of proposed source			**312323 (Part 1.04)**	26			
9	Topsoil / Nichols Hinsdale. Particle/sieve size analysis results of (4) samples (1) sample per 500CY			**312323 (Part 1.04)**	26			
9	Includes pH and organic content analysis of (1) sample (1) sample per 500CY			**312323 (Part 1.04)**	26			

REMARKS	I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated. **Name (TITLE)** Michael W. Muth - Project Manager NAME AND SIGNATURE OF CONTRACTOR

SECTION II – APPROVAL ACTION

ENCLOSURES RETURNED *(List by Item No.)*	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

ENG FORM 4025-R, MAR 95 *(ER 415-1-10)* **EDITION OF SEP 93 IS OBSOLETE** (PROPONENT: CEMP-CE)

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25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NGS-08-23-1	**Project Number:**	120458
Source:	NGS	**Lab Number:**	12-0751A
Date Sampled:	8/23/2012	**Sampled By:**	Client
Date Tested:	8/30/2012	**Tested By:**	Eric Brousseau

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-0751A	NGS-08-23-1	Stockpile	Topsoil

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	4.2	95.8	
19.0 mm	3/4"	1.7	94.1	
12.5 mm	1/2"	3.4	90.7	
6.3 mm	1/4"	7.6	83.1	
4.75 mm	#4	3.5	79.6	
2.00 mm	#10	10.2	69.4	
0.850 mm	#20	11.2	58.2	
0.600 mm	#30	4.6	53.6	
0.425 mm	#40	4.4	49.2	
0.150 mm	#100	15.0	34.2	
0.075 mm	#200	10.6	23.6	
Pan		23.6		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NGS-08-23-2	**Project Number:**	120458
Source:	NGS	**Lab Number:**	12-0751B
Date Sampled:	8/23/2012	**Sampled By:**	Client
Date Tested:	8/30/2012	**Tested By:**	Eric Brousseau

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-0751B	NGS-08-23-2	Stockpile	Topsoil

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.9	99.1	
19.0 mm	3/4"	4.6	94.5	
12.5 mm	1/2"	4.3	90.2	
6.3 mm	1/4"	7.5	82.7	
4.75 mm	#4	3.0	79.7	
2.00 mm	#10	11.8	67.9	
0.850 mm	#20	14.0	53.9	
0.600 mm	#30	5.1	48.8	
0.425 mm	#40	5.7	43.1	
0.150 mm	#100	14.4	28.7	
0.075 mm	#200	9.4	19.3	
Pan		19.3		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NGS-08-23-3	**Project Number:**	120458
Source:	NGS	**Lab Number:**	12-0751C
Date Sampled:	8/23/2012	**Sampled By:**	Client
Date Tested:	8/30/2012	**Tested By:**	Eric Brousseau

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-0751C	NGS-08-23-3	Stockpile	Topsoil

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	7.5	92.5	
37.5 mm	1 1/2"	0.0	92.5	
25.0 mm	1"	3.8	88.7	
19.0 mm	3/4"	2.2	86.5	
12.5 mm	1/2"	3.4	83.1	
6.3 mm	1/4"	6.1	77.0	
4.75 mm	#4	2.8	74.2	
2.00 mm	#10	11.1	63.1	
0.850 mm	#20	12.0	51.1	
0.600 mm	#30	4.6	46.5	
0.425 mm	#40	4.1	42.4	
0.150 mm	#100	12.6	29.8	
0.075 mm	#200	9.2	20.6	
Pan		20.6		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NGS-08-23-4	**Project Number:**	120458
Source:	NGS	**Lab Number:**	12-0751D
Date Sampled:	8/23/2012	**Sampled By:**	Client
Date Tested:	8/30/2012	**Tested By:**	Eric Brousseau

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-0751D	NGS-08-23-4	Stockpile	Topsoil

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	1.7	98.3	
25.0 mm	1"	2.8	95.5	
19.0 mm	3/4"	1.5	94.0	
12.5 mm	1/2"	5.3	88.7	
6.3 mm	1/4"	6.0	82.7	
4.75 mm	#4	3.2	79.5	
2.00 mm	#10	12.6	66.9	
0.850 mm	#20	15.2	51.7	
0.600 mm	#30	6.4	45.3	
0.425 mm	#40	5.5	39.8	
0.150 mm	#100	14.2	25.6	
0.075 mm	#200	9.1	16.5	
Pan		16.5		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Material:	NGS-08-23-1	**Project Number:**	120458
Source:	NGS	**Lab Number:**	12-0823
Location:	Stockpile	**Item Number:**	Topsoil
Date Sampled:	8/23/2012	**Sampled By:**	Client
Date Tested:	9/20/2012	**Tested By:**	John Brinsfield

Report of Organic Content of Soils by Loss on Ignition

Test Method: ASTM D2974 Method C

Inorganic Content: **95.7** **%** (Sand, silt, clay, etc.)
Organic Content: **4.3** **%**

Specification: 3.0 to 5.0

Comments:

Test results comply with specifications.

Report Reviewed By:

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25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Services Inc.	**Project:**	Silver Lake Removal Action
Material:	NGS-08-23-1	**Project Number:**	120458
Source:	NGS	**Lab Number:**	12-0823
Location:	Stockpile	**Item Number:**	Topsoil
Date Sampled:	8/23/2012	**Sampled By:**	Client
Date Tested:	9/20/2012	**Tested By:**	John Brinsfield

Report of pH of Soil

Test Method: ASTM D4972 Method A

pH Test Result: 6.9 (in Distilled Water)

N/A (In Calcium Chloride Solution)

Specification 5.0 to 7.0

Comments:

Test results comply with specifications.

Report Reviewed By: 

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TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on reverse side prior to initiating this form)*	DATE 10/25/12	Submittal No. 0011

SECTION I – REQUEST FOR APROVAL OF THE FOLLOWING ITEMS

TO:	FROM:	General Electric Company Purchase Order Number:	CHECK ONE:
Construction Manager ATTN: Mark Gravelding, P.E. ARCADIS 6723 Towpath Road Syracuse, NY 13214 Email: mark.gravelding@arcadis-us.comm	Sevenson Environmental Services, Inc. 2749 Lockport Road Niagara Falls, New York 14305		**X** THIS IS A NEW TRANSMITTAL THIS IS A RESUBMITTAL OF TRANSMITTAL

SPECIFICATION SEC. NO: (Cover only one section with each transmittal) 312323	PROJECT TITLE AND LOCATION: **Silver Lake Removal Action Area** Pittsfield, MA 01201	CHECK ONE: THIS TRANSMITTAL IS FOR FIO X APPROVAL

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.)	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. *(See instruction No. 8)*	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT SPEC. PARA NO.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO.	FOR CONTRACTOR USE CODE	VARIATION (See Instruction No. 6)	FOR CE USE CODE
a.	*b.*	*c.*	*d.*	*e.*	*f.*	*g.*	*h.*	*i.*
8	(3) Sand/topsoil material sample results Sampled at Nichols pit in Hinsdale, MA. Identification of proposed source(ID# NGS - 10-02-12)			**312323 (Part 1.04B)**	26			
9	Gradation and hydrometer analysis testing for sand/topsoil material. Sieve analysis using ASTM D422			**312323 (Part 1.04B)**	26			

REMARKS	I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated. **Name (TITLE)** Michael W. Muth - Project Manager NAME AND SIGNATURE OF CONTRACTOR

SECTION II – APPROVAL ACTION

ENCLOSURES RETURNED *(List by Item No.)*	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

ENG FORM 4025-R, MAR 95 *(ER 415-1-10)* **EDITION OF SEP 93 IS OBSOLETE** SHEET __1_ OF _1_ (PROPONENT: CEMP-CE)

Noted:
This material has slightly more gravel than recommended by the specification, and is still within the specified ranges for sand and silt/clay. This material is considered acceptable for its intended use.

☐ REVIEWED ☐ REJECTED
☒ REVIEWED & NOTED ☐ For information only
☐ REVISE & RESUBMIT ☐ Received, no action taken

Reviewed solely for general conformance with contract documents
ARCADIS of New York, Inc.

Signature 10/30/12 Date

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Item:	NSG-ST-10-17-12-1	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	12-0924A
Location:	Stockpile	**Item Number:**	No Specifications Available
Date Sampled:	10/17/2012	**Sampled By:**	Client
Date Tested:	10/24/2012-09/24/2012	**Tested By:**	John Brinsfield

PARTICLE SIZE ANALYSIS BY SIEVE AND HYDROMETER METHOD

Test Method: ASTM D422

Sieve Size	Particle Diameter, mm	Percent Passing	Specification
3/8"	9.50	95.0	
#4	4.75	89.3	
#10	2.00	80.9	
#40	0.425	63.9	
#200	0.075	19.4	
Hydrometer Analysis Results	0.050	13.9	
	0.020	6.8	
	0.010	5.2	
	0.005	3.1	
	0.002	1.7	
	0.001		

SOIL SPECIFIC GRAVITY: 2.67 (As reported separately, or estimated.)

DISPERSION METHOD: Mechanical, 1 min.

SAND & GRAVEL PARTICLES: Brown Sand Subrounded Mix of hard and weak particles

Comments:

COMPOSITION SUMMARY (USDA SIZE DESIGNATIONS)		
Gravel	(3 inches to #10)	19.1%
	Fraction Passing #10:	
Sand	(#10 to 0.05 mm)	82.8%
Silt	(0.05 mm to 0.002 mm)	15.1%
Clay	(Less than 0.002 mm)	2.1%
Total		100.0%
USDA Soil Textural Class		

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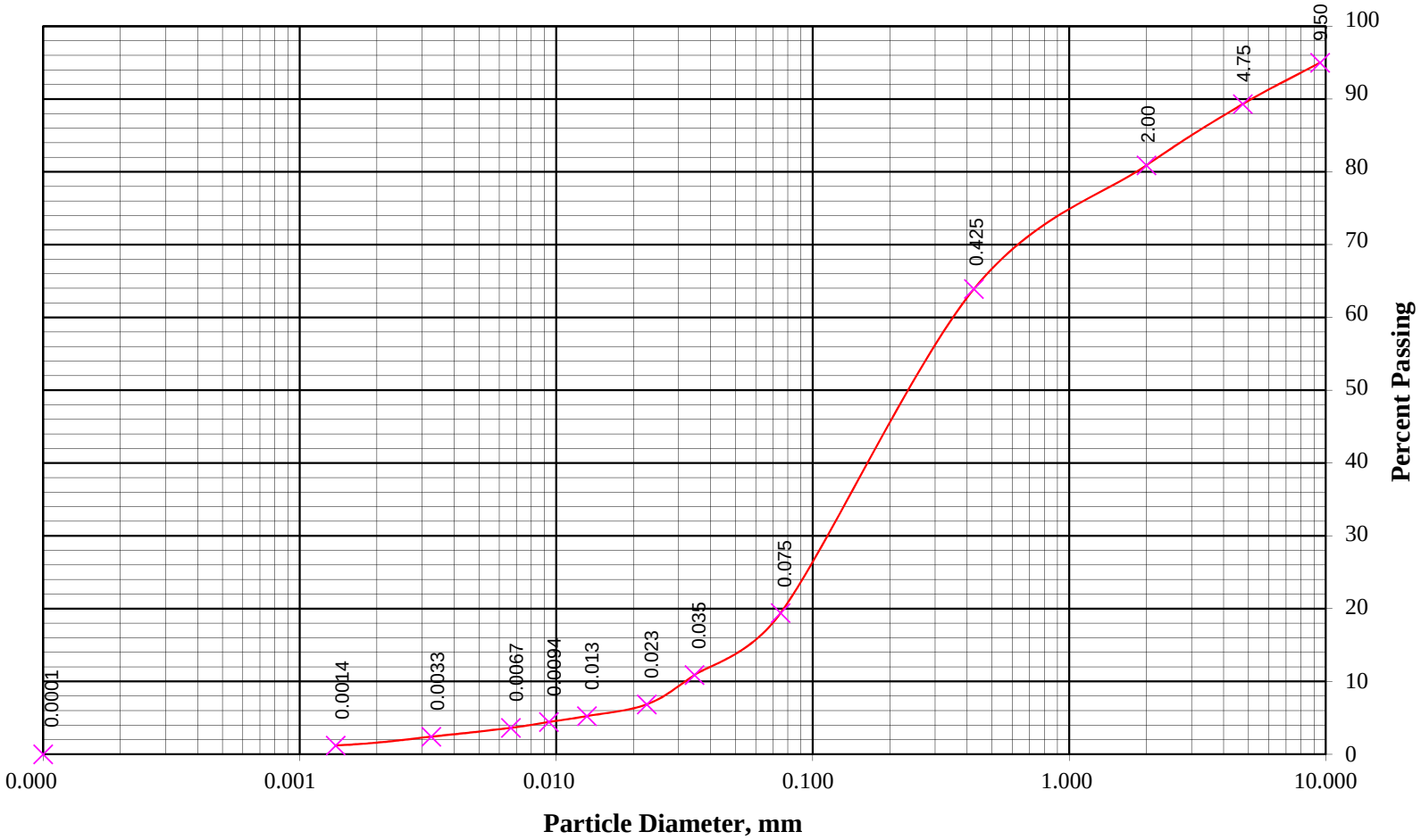
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Item:	NSG-ST-10-17-12-1	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	12-0924A
Location:	Stockpile	**Item Number:**	No Specifications Available
Date Sampled:	10/17/2012	**Sampled By:**	Client
Date Tested:	10/24/2012-09/24/2012	**Tested By:**	John Brinsfield



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Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Item:	NSG-ST-10-17-12-2	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	12-0924B
Location:	Stockpile	**Item Number:**	No Specifications Available
Date Sampled:	10/17/2012	**Sampled By:**	Client
Date Tested:	10/24/2012-10/24/2012	**Tested By:**	John Brinsfield

PARTICLE SIZE ANALYSIS BY SIEVE AND HYDROMETER METHOD

Test Method: ASTM D422

Sieve Size	Particle Diameter, mm	Percent Passing	Specification
3/8"	9.50	94.0	
#4	4.75	90.7	
#10	2.00	82.7	
#40	0.425	64.1	
#200	0.075	19.5	
Hydrometer Analysis Results	0.050	13.9	
	0.020	7.1	
	0.010	4.8	
	0.005	3.1	
	0.002	1.8	
	0.001		

SOIL SPECIFIC GRAVITY: 2.67 (As reported separately, or estimated.)

DISPERSION METHOD: Mechanical, 1 min.

SAND & GRAVEL PARTICLES: Brown Sand Subrounded Mix of hard and weak particles

Comments:

COMPOSITION SUMMARY (USDA SIZE DESIGNATIONS)		
Gravel	(3 inches to #10)	17.3%
	Fraction Passing #10:	
Sand	(#10 to 0.05 mm)	83.2%
Silt	(0.05 mm to 0.002 mm)	14.6%
Clay	(Less than 0.002 mm)	2.2%
Total		100.0%
USDA Soil Textural Class	Loamy Sand	

Emily J. Rodriguez

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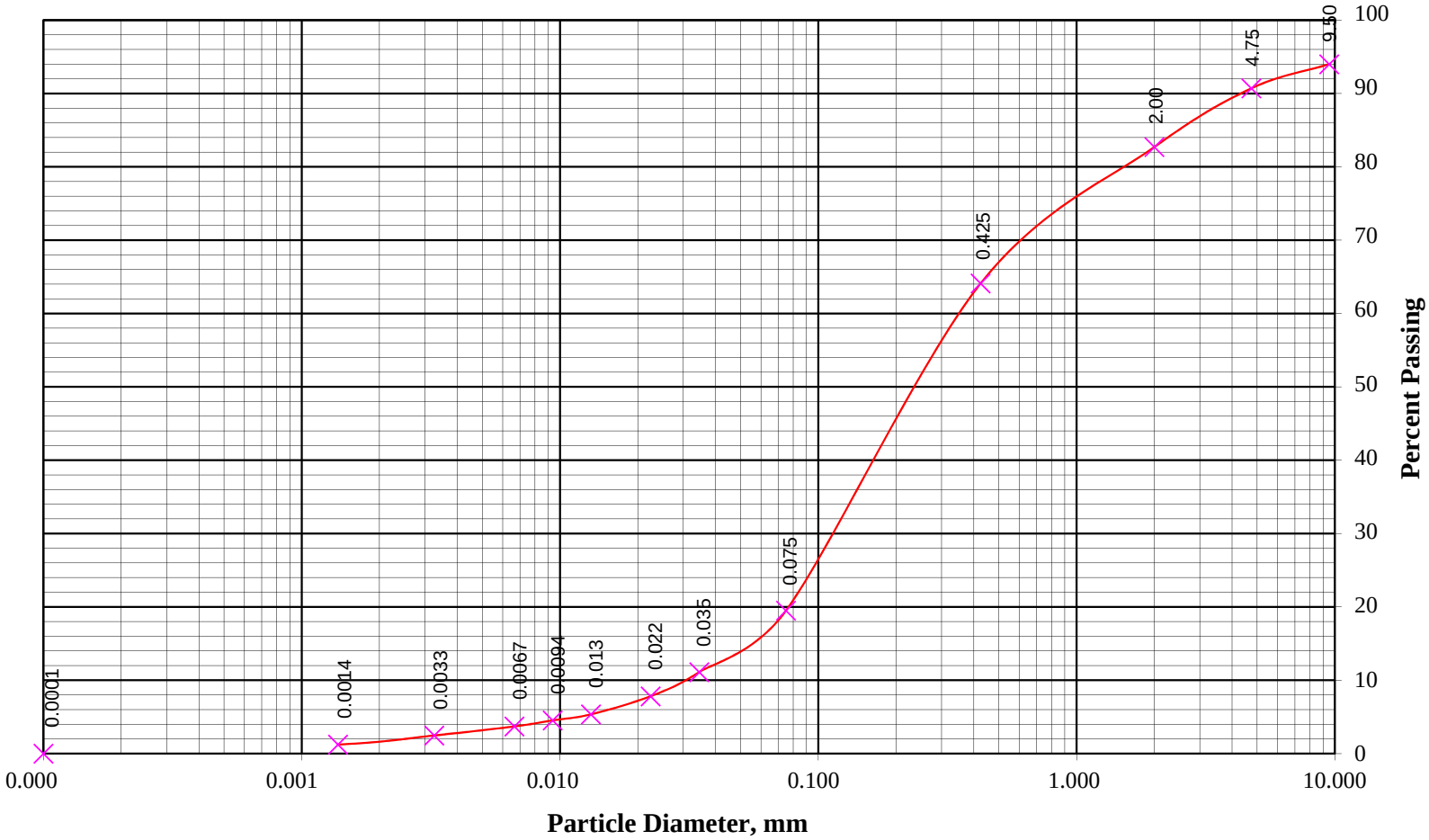
Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Item:	NSG-ST-10-17-12-2	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	12-0924B
Location:	Stockpile	**Item Number:**	No Specifications Available
Date Sampled:	10/17/2012	**Sampled By:**	Client
Date Tested:	10/24/2012-10/24/2012	**Tested By:**	John Brinsfield



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Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Item:	NSG-ST-10-17-12-3	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	12-0924C
Location:	Stockpile	**Item Number:**	No Specifications Available
Date Sampled:	10/17/2012	**Sampled By:**	Client
Date Tested:	10/24/2012-10/24/2012	**Tested By:**	John Brinsfield

PARTICLE SIZE ANALYSIS BY SIEVE AND HYDROMETER METHOD

Test Method: ASTM D422

Sieve Size	Particle Diameter, mm	Percent Passing	Specification
3/8"	9.50	97.0	
#4	4.75	93.3	
#10	2.00	85.3	
#40	0.425	65.9	
#200	0.075	20.0	
Hydrometer Analysis Results	0.050	15.0	
	0.020	8.0	
	0.010	4.7	
	0.005	3.5	
	0.002	1.9	
	0.001		

SOIL SPECIFIC GRAVITY: 2.67 (As reported separately, or estimated.)

DISPERSION METHOD: Mechanical, 1 min.

SAND & GRAVEL PARTICLES: Brown Sand Subrounded Mix of hard and weak particles

Comments:

COMPOSITION SUMMARY (USDA SIZE DESIGNATIONS)		
Gravel	(3 inches to #10)	14.7%
	Fraction Passing #10:	
Sand	(#10 to 0.05 mm)	82.4%
Silt	(0.05 mm to 0.002 mm)	15.4%
Clay	(Less than 0.002 mm)	2.2%
Total		100.0%
USDA Soil Textural Class	Loamy Sand	

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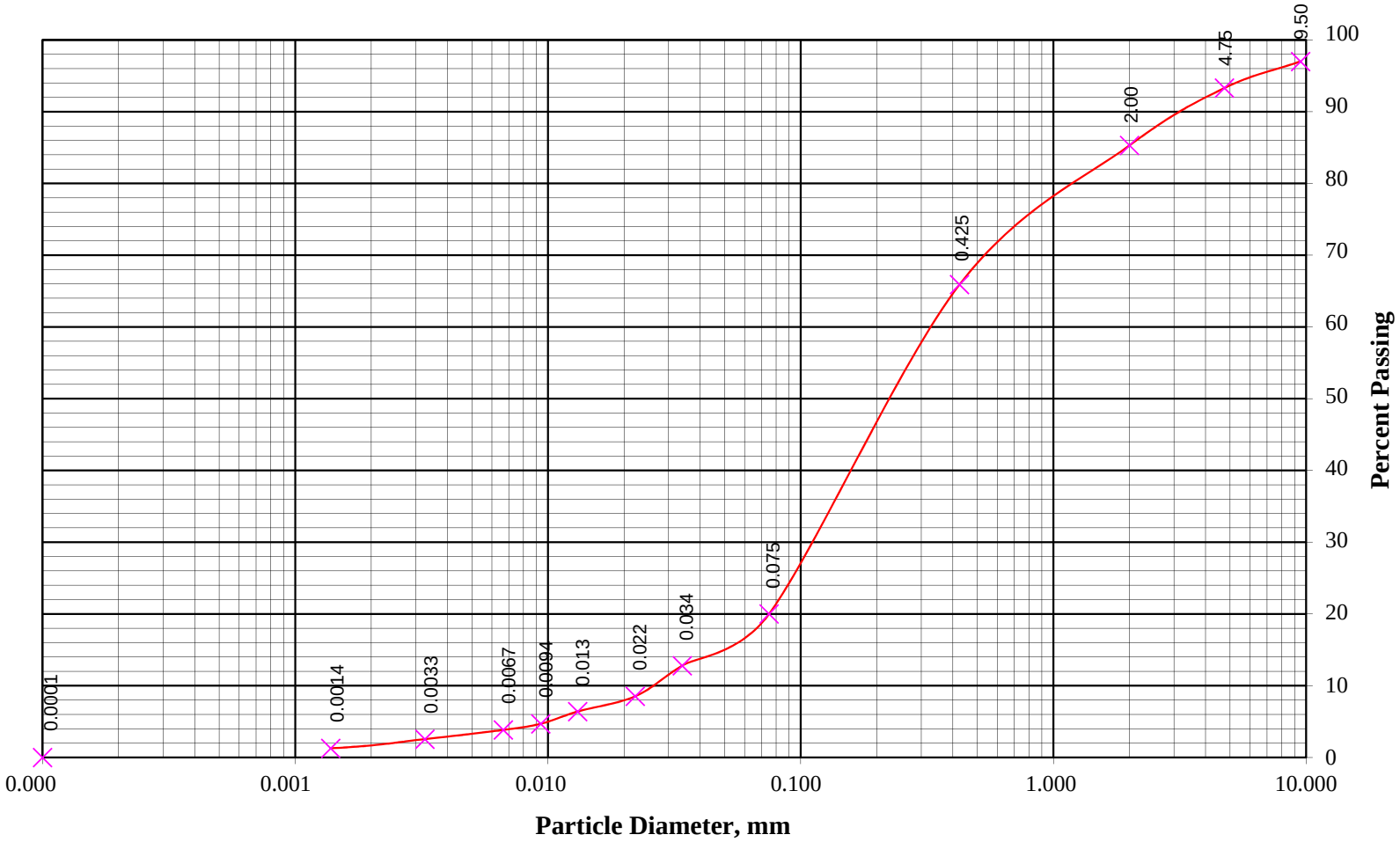
Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Item:	NSG-ST-10-17-12-3	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	12-0924C
Location:	Stockpile	**Item Number:**	No Specifications Available
Date Sampled:	10/17/2012	**Sampled By:**	Client
Date Tested:	10/24/2012-10/24/2012	**Tested By:**	John Brinsfield



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Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NSG-ST-10-17-12-1	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	12-0924A
Date Sampled:	10/17/2012	**Sampled By:**	Client
Date Tested:	10/22/2012	**Tested By:**	John Brinsfield

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-0924A	NSG-ST-10-17-12-1	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.0	100.0	
12.5 mm	1/2"	2.0	98.0	
6.3 mm	1/4"	6.0	92.0	
4.75 mm	#4	2.7	89.3	
2.00 mm	#10	8.4	80.9	
0.850 mm	#20	8.0	72.9	
0.600 mm	#30	3.6	69.3	
0.425 mm	#40	5.4	63.9	
0.150 mm	#100	26.7	37.2	
0.075 mm	#200	17.8	19.4	
Pan		19.4		

Comments:

Minus #200 by wash-sieve method.

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Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NSG-ST-10-17-12-2	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	12-0924B
Date Sampled:	10/17/2012	**Sampled By:**	Client
Date Tested:	10/22/2012	**Tested By:**	John Brinsfield

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-0924B	NSG-ST-10-17-12-2	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.2	99.8	
12.5 mm	1/2"	3.1	96.7	
6.3 mm	1/4"	5.6	91.1	
4.75 mm	#4	0.4	90.7	
2.00 mm	#10	8.0	82.7	
0.850 mm	#20	8.9	73.8	
0.600 mm	#30	4.4	69.4	
0.425 mm	#40	5.3	64.1	
0.150 mm	#100	27.6	36.5	
0.075 mm	#200	17.0	19.5	
Pan		19.5		

Comments:

Minus #200 by wash-sieve method.

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Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NSG-ST-10-17-12-3	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	12-0924C
Date Sampled:	10/17/2012	**Sampled By:**	Client
Date Tested:	10/22/2012	**Tested By:**	John Brinsfield

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-0924C	NSG-ST-10-17-12-3	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.0	100.0	
12.5 mm	1/2"	0.6	99.4	
6.3 mm	1/4"	4.3	95.1	
4.75 mm	#4	1.8	93.3	
2.00 mm	#10	8.0	85.3	
0.850 mm	#20	9.3	76.0	
0.600 mm	#30	4.1	71.9	
0.425 mm	#40	6.0	65.9	
0.150 mm	#100	28.3	37.6	
0.075 mm	#200	17.6	20.0	
Pan		20.0		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on reverse side prior to initiating this form)*	DATE 10/11/12	Submittal No. 0012

SECTION I – REQUEST FOR APROVAL OF THE FOLLOWING ITEMS

TO:	FROM:	General Electric Company Purchase Order Number:	CHECK ONE:
Construction Manager ATTN: Mark Gravelding, P.E. ARCADIS 6723 Towpath Road Syracuse, NY 13214 Email: mark.gravelding@arcadis-us.comm	Sevenson Environmental Services, Inc. 2749 Lockport Road Niagara Falls, New York 14305		**X** THIS IS A NEW TRANSMITTAL THIS IS A RESUBMITTAL OF TRANSMITTAL

SPECIFICATION SEC. NO: (Cover only one section with each transmittal) 312323	PROJECT TITLE AND LOCATION: **Silver Lake Removal Action Area** Pittsfield, MA 01201	CHECK ONE: THIS TRANSMITTAL IS FOR FIO X APPROVAL

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.)	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. *(See instruction No. 8)*	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT		FOR CONTRACTOR USE CODE	VARIATION (See Instruction No. 6)	FOR CE USE CODE
				SPEC. PARA NO.	DRAWING SHEET NO.			
a.	*b.*	*c.*	*d.*	*e.*	*f.*	*g.*	*h.*	*i.*
12	Erosion control blanket equal to the NAGC125 spec material. (ECC-2B Double Net Coconut Biodegradable Rolled Erosion Control Product)			**312514 - 1(1.04, 2.01 & 2.02)**	D-502			
12	ECC-2B Double Net Coconut Biodegradable Rolled Erosion Control Product installation methods			**312514 - 1(1.04, 2.01 & 2.02)**	D-502			

REMARKS	I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated. **Name (TITLE)** Michael W. Muth - Project Manager NAME AND SIGNATURE OF CONTRACTOR

SECTION II – APPROVAL ACTION

ENCLOSURES RETURNED *(List by Item No.)*	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

ENG FORM 4025-R, MAR 95 *(ER 415-1-10)* **EDITION OF SEP 93 IS OBSOLETE** SHEET __1_ OF _1_ (PROPONENT: CEMP-CE)

Noted:
- Pins/staples used for installation must be biodegradable
- Packing information shall be provided to ARCADIS on-site personnel upon delivery to the site for installation

443 Bricker Road Bernville, PA 19506
1.800.582.4005
+1.610.488.8496 Fax +1.610.488.8494
www.eastcoasterosion.com

EASTCOAST erosion blankets

Material and Performance Specification

ECC-2B Double Net Coconut Biodegradable Rolled Erosion Control Product

Description: The ECC-2B is made with uniformly distributed 100% coconut fiber and two organic jute nets securely sewn together with biodegradable thread. The tightly compressed blankets are wrapped and include a product label, code and installation guide. The blankets are palletized for easy transportation.
The ECC-2B has functional longevity of approximately 24 months, but will vary depending on soil and climatic conditions, and is suitable for slopes 1:1 and medium to high flow channels. The ECC-2B meets Type 4 specification requirements established by the Erosion Control Technology Council (ECTC) and Federal Highway Administration's (FHWA) FP-03 Section 713.17.

Materials:

Netting – *Top and Bottom*	**Matrix**	**Thread**
Organic Leno Weave Jute 100% Biodegradable 0.5" x 1.0" Opening	100% Coconut Fiber 0.55 lbs/yd^2 298.4 g/m^2	Biodegradable 1.50" stitch spacing

Roll Sizes:

	Standard	**Mega**
Width:	7.5 ft (2.3 m)	15.0 ft (4.6 m)
Length:	120.0 ft (36.6 m)	120.0 ft (36.6 m)
Weight ±10%:	66.0 lbs (29.9 kg)	132.0 lbs (59.9 kg)
Area:	100 yd^2 (83.6 m^2)	200 yd^2 (167.2 m^2)
#/Pallet:	16	16

Index Value Properties*:

Property	Test Method	Typical
Mass/Unit Area	ASTM D6475	11.0 oz/yd^2 (373.0 g/m^2)
Thickness	ASTM D6525	.31 in (7.9 mm)
Tensile Strength-MD	ASTM D6818	240 lb/ft (3.5 kN/m)
Elongation-MD	ASTM D6818	10.9 %
Tensile Strength-TD	ASTM D6818	164 lb/ft (2.4 kN/m)
Elongation-TD	ASTM D6818	16.0 %
Light Penetration	ASTM D6567	10 %
Water Absorption	ASTM D1117	225 %
* May differ depending upon raw material variations		

Bench-Scale Testing* (NTPEP*):**

Test Method	Parameters	Results
ECTC Method 2 Rainfall	50mm (2in) / hr-30 min	SLR**=14.24
	100mm (4in) / hr-30 min	SLR**=18.58
	150mm (6in) / hr-30 min	SLR**=24.25
ECTC Method 3 Shear Resistance	Shear at .50 in soil loss	2.72 lb/ft^2
ECTC Method 4 Germination	Top soil; Fescue; 21 day incubation	414% improvement

*Bench scale tests should not be used for design purposes.

**Soil Loss Ratio=Soil Loss Bare Soil/Soil Loss with RECP=1/C-Factor

***The preceding test data excerpts were reproduced with the permission of AASHTO, however, this does not constitute endorsement or approval of the product, material or device by AASHTO

Slope Performance Design Values*:

Property	Test Method	Value	
Manning's N		0.025	
C-Factors	ASTM D6459		
Slope Length (L)	**≤ 3:1**	**3:1-2:1**	**≥ 2:1**
< 50 ft (15 m)	0.040	0.053	0.102
50 ft – 100 ft	0.060	0.084	0.120
>100 ft (30 m)	0.094	0.114	0.134
*Large-Scale Results obtained by 3rd Party GAI Accredited Independent Laboratory			

Channel Performance Design Values*:

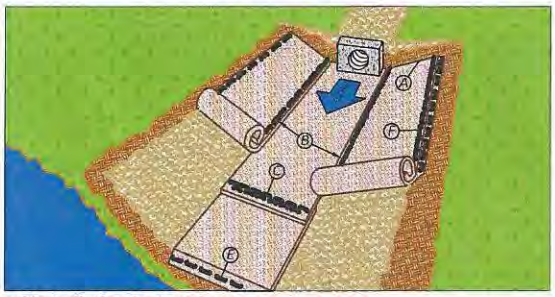
Property	Test Method	Value
Unvegetated Shear Stress	ASTM D 6460	2.25 lbs/ft^2 (108 Pa)
Unvegetated Velocity	ASTM D 6460	9.0 ft/s (2.7 m/s)
Vegetated Shear Stress	NA	NA
Vegetated Velocity	NA	NA
*Large-Scale Results obtained by 3rd Party GAI Accredited Independent Laboratory		

Proud Member of: IECA Corporate Member, ECTC Erosion Control Technology Council, ASTM International

Product Participant of: QDOR Performance Verified **and** Proudly Made in the USA

Revised 01012012

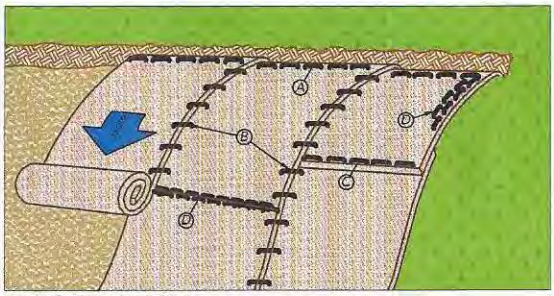
Channel Installation Detail



Channel Installation Instructions:

1. Dig a 6" by 6" trench both up-slope, down-slope, and along the top side of the channel. Prepare the slope soil surface (raking, seeding and fertilizing).Note, if used with stormwater discharge, place the up-slope trench at the face of the discharge structure footer.
2. Begin by placing the center blanket a minimum of 12" down-slope of the up-slope trench. Secure the blanket at the bottom of the trench with staples placed 12" apart. Backfill and compact the trench. Apply seed, and fold the blanket over soil, secure with a row of staples placed 12" apart across the width of the blanket (See Diagram A).
3. Roll the blanket vertically down the slope. Secure using the appropriate staple pattern below, specified by slope. (See Staple Patterns)
4. Continue placing blankets up the slopes on both sides, with a minimum 4" overlapping (Diagram B), and securing each blanket in the beginning trench (Diagram A).
5. Additional horizontal blankets can be joined using a minimum 4" overlapping or shingle style in the direction of water flow. Connect the blankets by placing staples approximately 5" apart across the width of the blankets. (Diagram C)
6. For maximum performance a check slot should be placed at 25'-40' intervals. Place a row of staples 4" apart along the entire width of the channel. A second row should be placed 4" below in a staggered pattern. (Diagram D)
7. The end of the blanket must be secured in a 6" x 6" trench by a row of staples placed at 12" intervals. (Diagram E)
8. At the top edge of the side slope, fasten the blanket in a 6" x 6" trench with staples placed at 12" intervals. Install an additional row of staples 1'-0" down slope of the trench along the width of the fabric. (Diagram F)

Slope Installation Detail



Slope Installation Guidelines:

These guidelines are recommendations only. Any questions with the installation should be confirmed with your local distributor.

1. Dig a 6" by 6" trench both up-slope and down-slope of the area the matting is to be applied. Prepare the slope soil surface (raking, seeding and fertilizing).
2. Begin by placing the blanket a minimum of 12" down-slope of the up-slope trench. Secure the blanket at the bottom of the trench with staples placed 12" apart. Backfill and compact the trench. Apply seed, and fold the blanket over soil, secure with a row of staples placed 12" apart across the width of the blanket. (See Diagram A)
3. Roll the blanket vertically down the slope. Secure using the appropriate staple pattern below, specified by slope. (See Staple Patterns)
4. Parallel blankets must be overlapped by a minimum of 4", and secured with a row of staples placed approximately 3'-0" apart. (See Diagram B)
5. Additional vertical blankets can be joined using a minimum 4" overlapping or shingle style (See Diagrams C) in the direction of water flow. Connect the blankets by placing staples approximately 12" apart across the width of the blankets.
6. For maximum performance a check slot should be placed at 25'-40' intervals. Place a row of staples 4" apart along the entire width of the slope. A second row should be placed 4" below in a staggered pattern. Then continue with general installation. (See Diagrams D)
7. The end of blanket must be secured in a 6" x 6" trench with a row of staples placed at 12" intervals. (Diagram E)

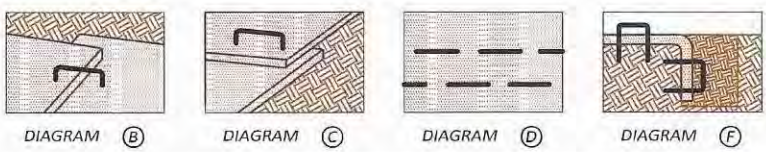
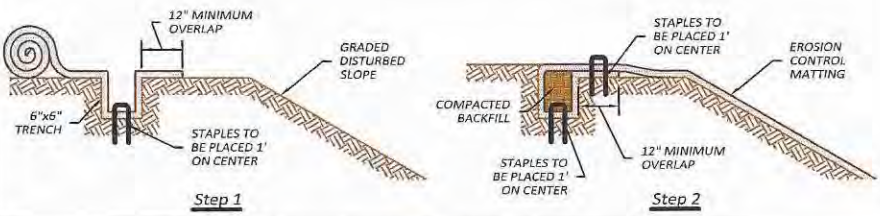
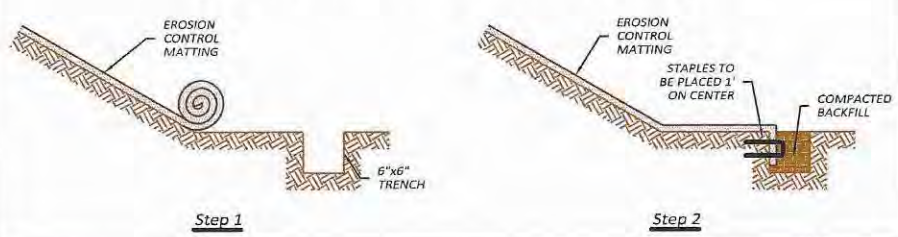


DIAGRAM (B) DIAGRAM (C) DIAGRAM (D) DIAGRAM (F)

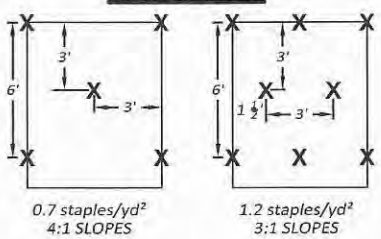
Up-slope Trench Installation Detail (Diagram A)

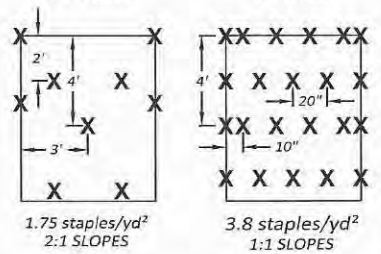


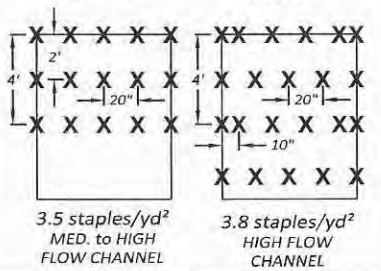
Down-slope Trench Installation Detail (Diagram E)



Staple Patterns:







EASTCOAST
erosion blankets

443 Bricker Road Bernville, PA 19506
Toll Free: 1-800-582-4005 * Phone: +1-610-488-8496 * Fax: +1-610-488-8494

Proud Member of:

IECA Corporate Member
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ASTM International
NAHB National Association of Home Builders

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on reverse side prior to initiating this form)*	DATE 10/25/12	Submittal No. 0013

SECTION I – REQUEST FOR APROVAL OF THE FOLLOWING ITEMS

TO:	FROM:	General Electric Company Purchase Order Number:	CHECK ONE:
Construction Manager ATTN: Mark Gravelding, P.E. ARCADIS 6723 Towpath Road Syracuse, NY 13214 Email: mark.gravelding@arcadis-us.comm	Sevenson Environmental Services, Inc. 2749 Lockport Road Niagara Falls, New York 14305		**X** THIS IS A NEW TRANSMITTAL THIS IS A RESUBMITTAL OF TRANSMITTAL

SPECIFICATION SEC. NO: (Cover only one section with each transmittal) 313219	PROJECT TITLE AND LOCATION: **Silver Lake Removal Action Area** Pittsfield, MA 01201	CHECK ONE: THIS TRANSMITTAL IS FOR FIO X APPROVAL

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.)	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. *(See instruction No. 8)*	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT SPEC. PARA NO.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO.	FOR CONTRACTOR USE CODE	VARIATION (See Instruction No. 6)	FOR CE USE CODE
a.	*b.*	*c.*	*d.*	*e.*	*f.*	*g.*	*h.*	*i.*
8	Granular Cap Material/Nichols Hinsdale Pit Identification of proposed source			**312323 (Part 1.04)**	26			
9	Granular Cap Material/ Nichols Hinsdale. Particle/sieve size and hydrometer analysis results			**312323 (Part 1.04)**	26			
	Includes sieve analysis, hydrometer, pH and organic content testing for (1) sampled granular cap material. (1) sample per 500CY							

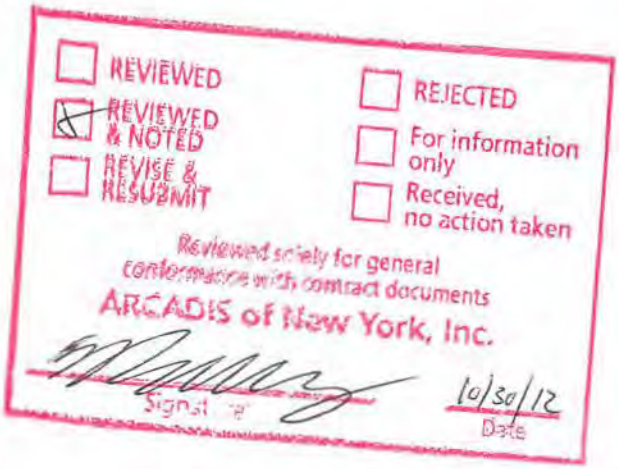
REMARKS	I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated. **Name (TITLE)** Michael W. Muth - Project Manager NAME AND SIGNATURE OF CONTRACTOR

SECTION II – APPROVAL ACTION

ENCLOSURES RETURNED *(List by Item No.)*	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

ENG FORM 4025-R, MAR 95 *(ER 415-1-10)* **EDITION OF SEP 93 IS OBSOLETE** SHEET __1_ OF _1_ (PROPONENT: CEMP-CE)

Noted:
This material has slightly more gravel than recommended by the specification, and therefore slightly less sand and silt/clay. This material is considered acceptable for its intended use.



3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Item:	NSG-GCM-10-17-12-1	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	12-0924G
Location:	Stockpile	**Item Number:**	No Specifications Available
Date Sampled:	10/17/2012	**Sampled By:**	Client
Date Tested:	10/24/2012-10/24/2012	**Tested By:**	John Brinsfield

PARTICLE SIZE ANALYSIS BY SIEVE AND HYDROMETER METHOD

Test Method: ASTM D422

Sieve Size	Particle Diameter, mm	Percent Passing	Specification
3/8"	9.50	85.0	
#4	4.75	79.4	
#10	2.00	69.8	
#40	0.425	49.7	
#200	0.075	16.5	
Hydrometer Analysis Results	0.050	13.5	
	0.020	10.6	
	0.010	7.6	
	0.005	4.9	
	0.002	3.4	
	0.001		

SOIL SPECIFIC GRAVITY: 2.67 (As reported separately, or estimated.)

DISPERSION METHOD: Mechanical, 1 min.

SAND & GRAVEL PARTICLES: Brown Sand Subrounded Mix of hard and weak particles

Comments:

COMPOSITION SUMMARY (USDA SIZE DESIGNATIONS)			
Gravel	(3 inches to #10)		30.2%
Fraction Passing #10:			
Sand	(#10 to 0.05 mm)	56.3% of total	80.7%
Silt	(0.05 mm to 0.002 mm)	13.5% of total	14.5%
Clay	(Less than 0.002 mm)		4.9%
Total			100.0%
USDA Soil Textural Class	Loamy Sand		

Using USCS Size Designations
20.6% gravel
62.9% sand
16.5% silt/clay

REPORT REVIEWED BY: Emily J. Rodriguez

PDF

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25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Material:	NSG-GCM-10-17-12-1	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	12-0924G
Location:	Stockpile	**Item Number:**	Topsoil
Date Sampled:	10/17/2012	**Sampled By:**	Client
Date Tested:	10/22/2012	**Tested By:**	John Brinsfield

Report of Organic Content of Soils by Loss on Ignition

Test Method: AASHTO T267

Inorganic Content: **95.8** **%** (Sand, silt, clay, etc.)
Organic Content: **4.2** **%**

Specification: 3.0-5.0

Comments:

Test results comply with specifications.

Report Reviewed By: Emily J. Rodriguez

PDF

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Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Services Inc.	**Project:**	Silver Lake Removal Action
Material:	NSG-GCM-10-17-12-1	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	12-0924G
Location:	Stockpile	**Item Number:**	Topsoil
Date Sampled:	10/17/2012	**Sampled By:**	Client
Date Tested:	10/22/2012	**Tested By:**	John Brinsfield

Report of pH of Soil

Test Method: ASTM D4972 Method A

pH Test Result: 6.7 (in Distilled Water)

N/A (In Calcium Chloride Solution)

Specification 5.0-7.0

Comments:

Test results comply with specifications.

Report Reviewed By: Emily J. Rodriguez

PDF

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NSG-GCM-10-17-12-1	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	12-0924G
Date Sampled:	10/17/2012	**Sampled By:**	Client
Date Tested:	10/22/2012	**Tested By:**	John Brinsfield

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-0924G	NSG-GCM-10-17-12-1	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	2.9	97.1	
19.0 mm	3/4"	2.5	94.6	
12.5 mm	1/2"	5.9	88.7	
6.3 mm	1/4"	7.4	81.3	
4.75 mm	#4	1.9	79.4	
2.00 mm	#10	9.6	69.8	
0.850 mm	#20	10.5	59.3	
0.600 mm	#30	4.4	54.9	
0.425 mm	#40	5.2	49.7	
0.150 mm	#100	19.9	29.8	
0.075 mm	#200	13.3	16.5	
Pan		16.5		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

PDF

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on reverse side prior to initiating this form)*	**DATE 10/26/12**	**Submittal No. 0014**

SECTION I – REQUEST FOR APROVAL OF THE FOLLOWING ITEMS

TO:	FROM:	General Electric Company Purchase Order Number:	CHECK ONE:
Construction Manager ATTN: Mark Gravelding, P.E. ARCADIS 6723 Towpath Road Syracuse, NY 13214 Email: mark.gravelding@arcadis-us.comm	Sevenson Environmental Services, Inc. 2749 Lockport Road Niagara Falls, New York 14305		**X** THIS IS A NEW TRANSMITTAL THIS IS A RESUBMITTAL OF TRANSMITTAL

SPECIFICATION SEC. NO: (Cover only one section with each transmittal) 312323	PROJECT TITLE AND LOCATION: **Silver Lake Removal Action Area** Pittsfield, MA 01201	CHECK ONE: THIS TRANSMITTAL IS FOR FIO X APPROVAL

ITEM NO.	**DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.)**	**MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO.** *(See instruction No. 8)*	**NO. OF COPIES**	**CONTRACT REFERENCE DOCUMENT: SPEC. PARA NO.**	**CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO.**	**FOR CONTRACTOR USE CODE**	**VARIATION (See Instruction No. 6)**	**FOR CE USE CODE**
a.	*b.*	*c.*	*d.*	*e.*	*f.*	*g.*	*h.*	*i.*
8	Armor stone/riprap material sample results(D50 14'') Sampled at Lucia pit on Farnum Rd in Cheshire, MA 01225. Identification of proposed source			**312323 (Part 1.04)**	26			
9	Gradation testing for armor stone/riprap(D50-14''). Particle size distribution using ASTM D55 19-94			**312323 (Part 1.04)**	26			
	Includes gradation testing for D50-3'' stone and D50-5'' stone							

REMARKS	I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated. **Name (TITLE)** Michael W. Muth - Project Manager NAME AND SIGNATURE OF CONTRACTOR

SECTION II – APPROVAL ACTION

ENCLOSURES RETURNED *(List by Item No.)*	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

ENG FORM 4025-R, MAR 95 *(ER 415-1-10)* **EDITION OF SEP 93 IS OBSOLETE** SHEET __1_ OF _1_ (PROPONENT: CEMP-CE)

Date: 10/25/2012 Technician: Joe Mahoney
Item: D50 = 14"
Plant: Lucia

Sieve Size	# Retained	% Retained	% Passing		SPEC
22"	0	0.00	100.00		
21"	3	4.41	95.59		100
20"	4	5.88	89.71		
19"	3	4.41	85.29		
18"	3	4.41	80.88		
17"	5	7.35	73.53		
16"	6	8.82	64.71		
15"	8	11.76	52.94		
14"	5	7.35	45.59		50
13"	8	11.76	33.82		
12"	7	10.29	23.53		
11"	4	5.88	17.65		
10"	2	2.94	14.71		
9"	4	5.88	8.82		
8"	4	5.88	2.94		
7"	2	2.94	0.00		0
6"	0	0.00	0.00		
Total	68	100.00			

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on reverse side prior to initiating this form)*	DATE 11/8/12	Submittal No. 0015

SECTION I – REQUEST FOR APROVAL OF THE FOLLOWING ITEMS

TO: Construction Manager ATTN: Mark Gravelding, P.E. ARCADIS 6723 Towpath Road Syracuse, NY 13214 Email: mark.gravelding@arcadis-us.comm	FROM: Sevenson Environmental Services, Inc. 2749 Lockport Road Niagara Falls, New York 14305	General Electric Company Purchase Order Number:	CHECK ONE: X THIS IS A NEW TRANSMITTAL THIS IS A RESUBMITTAL OF TRANSMITTAL
SPECIFICATION SEC. NO: (Cover only one section with each transmittal) 312323	PROJECT TITLE AND LOCATION: **Silver Lake Removal Action Area** Pittsfield, MA 01201		CHECK ONE: THIS TRANSMITTAL IS FOR FIO X APPROVAL

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.)	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. *(See instruction No. 8)*	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT		FOR CONTRACTOR USE CODE	VARIATION (See Instruction No. 6)	FOR CE USE CODE
				SPEC. PARA NO.	DRAWING SHEET NO.			
a.	*b.*	*c.*	*d.*	*e.*	*f.*	*g.*	*h.*	*i.*
30	Seeding Source: New England Wetland Plants, Inc. 820 West Amherst, MA 01002. 15# of New England Wet Mix and 50# of New England Conservation/Wildlife Seed Mix			**329000 (Part 1.03)**	Hill D-502			
31	Seeding analysis results for Wet Mix and Conservation/Wildlife Mix			**329000 (Part 1.03)**	Hill D-502			

☐ REVIEWED ☐ REJECTED
☒ REVIEWED & NOTED ☐ For information only
☐ REVISE & RESUBMIT ☐ Received, no action taken

Reviewed solely for general conformance with contract documents

ARCADIS of New York, Inc.

Signature 11-9-12 Date

Note: ARCADIS has reviewed the species components submitted by Sevenson for the New England Conservation/Wildlife Mix (NEC/WM - April 2012) and the New England Wet Mix (NEWM - May 2012) and compared them to the seed mixes specified on Hill Engineers Drawing D-502, dated 8/31/10. It appears the commercially available seed mixes (at this time) by the same names include five different species in the NEC/WM and six different species in the NEWM. ARCADIS suggests that the substituted species are similarly adapted to the environmental conditions of the replaced species in both mixes and are therefore considered acceptable for use at Silver Lake.

REMARKS	I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated. **Name (TITLE)** Michael W. Muth - Project Manager NAME AND SIGNATURE OF CONTRACTOR

SECTION II – APPROVAL ACTION

ENCLOSURES RETURNED *(List by Item No.)*	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

ENG FORM 4025-R, MAR 95 *(ER 415-1-10)* **EDITION OF SEP 93 IS OBSOLETE** (PROPONENT: CEMP-CE)

New England Wetland Plants Inc

820 West Street
Amherst,MA 01002

New England Wet Mix

Item	Botanical Name	Purity	Germ	Hard	Dorm	Origin	Origin
Fox Sedge, PA Ecotype	*Carex vulpinoidea, PA Ecotype*	33.56%	34.0%		53.0%	PA	
Lurid (Shallow) Sedge, PA Ecotype	*Carex lurida, PA Ecotype*	15.89%	81.0%		8.0%	PA	
Green Bulrush, WI Ecotype	*Scirpus atrovirens, WI Ecotype*	7.94%	1.0%		31.0%	WI	
Cosmos (Bristly) Sedge, PA Ecotype	*Carex comosa, PA Ecotype*	6.98%	19.0%		66.0%	PA	
Fringed (Nodding) Sedge, PA Ecotype	*Carex crinita, PA Ecotype*	6.80%	28.0%		56.0%	PA	
Blue Vervain, PA Ecotype	*Verbena hastata, PA Ecotype*	6.49%	93.0%			PA	
Hop Sedge, PA Ecotype	*Carex lupulina, PA Ecotype*	4.89%	1.0%		87.0%	PA	
Soft Rush	*Juncus effusus*	2.98%	1.0%		89.0%	PA	
American Mannagrass PA Ecotype	*Glyceria grandis, PA Ecotype*	1.99%	24.0%			PA	
Bluefing, PA Ecotype	*Iris versicolor, PA Ecotype*	1.98%	1.0%		56.0%	PA	
Boneset, PA Ecotype	*Eupatorium perfoliatum, PA Eco*	1.57%	63.0%		28.0%	PA	
Woolgrass, Coastal Plain NC Ecotype	*Scirpus cyperinus, Coastal Pla*	1.49%	1.0%		14.0%	NC	
Softstem Bulrush, PA Ecotype	*Scirpus validus (Schoenoplectus*	1.00%	1.0%		85.0%	PA	
Mud Plantain (Water Plantain), PA Ecotype	*Alisma subcordatum (A. plantag*	0.95%	1.0%		79.0%	PA	
Rattlesnake Grass, PA Ecotype	*Glyceria canadensis PA Ecotyp*	0.99%	1.0%		74.0%	PA	
Purplestem Aster, PA Ecotype	*Aster puniceus (Symphyotrichum*	0.97%	18.0%		4.0%	PA	
Swamp Milkweed, WI Ecotype	*Asclepias incarnata, WI Ecotyp*	0.49%	36.0%		54.0%	WI	

Other Crop: 0.03%
Inert Matter: 3.17%
Weed Seed: 0.00%

Net Weight: 15 LB
Lot Number: NEWE00214 **AMS 1039**
Date Tested: May 2012

New England Wetland Plants Inc

820 West Street
Amherst,MA 01002

New England Conservation/Wildlife Mix

Name	Botanical Name	Purity	Germ	Hard	Dorm	Production Origin	Genetic Origin
Virginia Wildrye, PA Ecotype	*Elymus virginicus PA Ecotype*	19.97%	95.0%			PA	
Little Bluestem, Fort Indiantown Gap PA Ecotype	*Schizachyrium scoparium, Fort*	15.94%	20.8%		72.2%	PA	
Creeping Red Fescue 'Pennlawn'	*Festuca rubra 'Pennlawn'*	10.85%	86.0%			OR	
Big Bluestem, 'Niagara'	*Andropogon gerardii, 'Niagara'*	12.46%	45.0%		28.0%	PA	
Partridge Pea, PA Ecotype	*Chamaecrista fasciculata (Cass*	2.99%	47.0%	31.0%		PA	
Switchgrass, 'Cave-In-Rock'	*Panicum virgatum 'Cave-In-Roc*	6.87%	5.0%		78.0%	PA	
Deertongue, 'Tioga'	*Panicum clandestinum 'Dichanth*	4.56%	5.0%		36.0%	PA	
Oxeye Sunflower, PA Ecotype	*Heliopsis helianthoides, PA Ec*	1.93%	85.0%			PA	
Golden Alexanders, PA Ecotype	*Zizia aurea, PA Ecotype*	1.50%	4.0%		88.0%	PA	
Spotted Joe Pye Weed, PA Ecotype	*Eupatorium maculatum 'Eupator*	1.38%	68.0%			PA	
Blue Vervain, PA Ecotype	*Verbena hastata, PA Ecotype*	1.00%	93.0%			PA	
Flat Topped White Aster, PA Ecotype	*Aster umbellatus 'Doellingeria*	0.48%	31.0%		56.0%	PA	
Early Goldenrod PA Ecotype	*Solidago juncea, PA Ecotype*	0.41%	83.0%			PA	

Other Crop: [illegible]%
Inert Matter: 10.20%
Weed Seed: 0.01%

Net Weight: 50 LB
Lot Number: NEWE00205
Date Tested: April 2012

AMS 1039

NEW ENGLAND WETLAND PLANTS, INC
820 WEST STREET
AMHERST, MA 01002
PHONE: 413.548.8000 FAX: 413.549.4000
WEB ADDRESS: WWW.NEWP.COM

INVOICE

NUMBER: 12403
DATE: Nov 2, 2012
PAGE: 1

SOLD TO:

SEVENSON ENVIRONMENTAL
SERVICES, INC
2749 LOCKPORT ROAD
NIAGARA FALLS, NY 14305

SHIP TO:

SEVENSON ENVIRONMENTAL
SERVICES, INC
1000 EAST STREET
PITTSFIELD, MA 01201

PHONE: 413-236-5676
FAX: 413-236-5964

CUSTOMER ID		PO NUMBER	PAYMENT TERMS	
SEVENSON ENVIRONMENT		268102 JOE	C.O.D.	
REF		SHIPPING METHOD	SHIP DATE	DUE DATE
66		UPS Ground	11/2/12	11/2/12

QUANTITY	DESCRIPTION	UNIT PRICE	EXTENSION
15	New England WETMIX (Wetland Seed Mix)	125.00	1875.00
50	New England Conservation/Wildlife Seed Mix	30.00	1500.00
1	Shipping & Handling	65.00	65.00

JOB NO. 1077
P.O. NO. 268102
CODE 01107709
AMOUNT 3440.00
DATE SENT 11/8/12
APPROVED _____

RECEIVED NOV - 5 2012

Overdue invoices will be assessed a finance charge of 18% per annum

SUBTOTAL	3440.00
SALES TAX	
TOTAL INVOICE AMOUNT	3440.00
PAYMENT RECEIVED	
TOTAL DUE	3,440.00

check #:_____

Signature_____ Date:_____

Print Name:_____

I take full responsibility that the plant count and amount charged are correct and invoice will be paid in full.

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on reverse side prior to initiating this form)*	DATE 11/9/12	Submittal No. 0016

SECTION I – REQUEST FOR APROVAL OF THE FOLLOWING ITEMS

TO: Construction Manager ATTN: Mark Gravelding, P.E. ARCADIS 6723 Towpath Road Syracuse, NY 13214 Email: mark.gravelding@arcadis-us.comm	FROM: Sevenson Environmental Services, Inc. 2749 Lockport Road Niagara Falls, New York 14305	General Electric Company Purchase Order Number:	CHECK ONE: **X** THIS IS A NEW TRANSMITTAL THIS IS A RESUBMITTAL OF TRANSMITTAL
SPECIFICATION SEC. NO: (Cover only one section with each transmittal) 313219	PROJECT TITLE AND LOCATION: **Silver Lake Removal Action Area** Pittsfield, MA 01201		CHECK ONE: THIS TRANSMITTAL IS FOR FIO X APPROVAL

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.)	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. *(See instruction No. 8)*	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT		FOR CONTRACTOR USE CODE	VARIATION (See Instruction No. 6)	FOR CE USE CODE
				SPEC. PARA NO.	DRAWING SHEET NO.			
a.	*b.*	*c.*	*d.*	*e.*	*f.*	*g.*	*h.*	*i.*
8	Granular Cap Material/Nichols Hinsdale Pit Identification of proposed source			**312323 (Part 1.04)**	26			
9	Granular Cap Material/ Nichols Hinsdale. Particle/sieve size and hydrometer analysis results for (2) samples			**312323 (Part 1.04)**	26			
	Includes sieve analysis and hydrometer for the third and fourth samples of granular cap material. (1) sample per 500CY							

REMARKS	I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated. **Name (TITLE)** Michael W. Muth - Project Manager NAME AND SIGNATURE OF CONTRACTOR

SECTION II – APPROVAL ACTION

ENCLOSURES RETURNED *(List by Item No.)*	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

ENG FORM 4025-R, MAR 95 *(ER 415-1-10)* **EDITION OF SEP 93 IS OBSOLETE** SHEET __1_ OF _1_ (PROPONENT: CEMP-CE)

Noted:
This material has slightly more gravel than recommended by the specification, and therefore slightly less sand and silt/clay; however the percentage of gravel is still less than 25% and the percentage of silt/clay is still more than 16%. This material is considered acceptable for its intended use.

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NGS-GCM-10-26-12-1	**Project Number:**	120458
Source:	Senenson Envrionmental	**Lab Number:**	12-0950A
Date Sampled:	10/26/2012	**Sampled By:**	Client
Date Tested:	11/2/2012	**Tested By:**	John Brinsfield

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-0950A	NGS-GCM-10-26-12-1	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	1.4	98.6	
19.0 mm	3/4"	2.4	96.2	
12.5 mm	1/2"	4.1	92.1	
6.3 mm	1/4"	6.5	85.6	
4.75 mm	#4	1.8	83.8	
2.00 mm	#10	8.4	75.4	
0.850 mm	#20	9.8	65.6	
0.600 mm	#30	3.9	61.7	
0.425 mm	#40	4.8	56.9	
0.150 mm	#100	18.5	38.4	
0.075 mm	#200	14.2	24.2	
Pan		24.2		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Item:	NGS-GCM-10-26-12-1	**Project Number:**	120458
Source:	Senenson Envrionmental	**Lab Number:**	12-0950A
Location:	Stockpile	**Item Number:**	No Specifications Available
Date Sampled:	10/26/2012	**Sampled By:**	Client
Date Tested:	11/6/2012-11/06/2012	**Tested By:**	John Brinsfield

PARTICLE SIZE ANALYSIS BY SIEVE AND HYDROMETER METHOD

Test Method: ASTM D422

Sieve Size	Particle Diameter, mm	Percent Passing	Specification
3/8"	9.50	89.7	
#4	4.75	83.8	
#10	2.00	75.4	
#40	0.425	56.9	
#200	0.075	24.2	
Hydrometer Analysis Results	0.050	18.0	
	0.020	9.8	
	0.010	6.1	
	0.005	2.3	
	0.002		
	0.001		

SOIL SPECIFIC GRAVITY: 2.67 (As reported separately, or estimated.)

DISPERSION METHOD: Mechanical, 1 min.

SAND & GRAVEL PARTICLES: Hard subrounded particles

Comments:

COMPOSITION SUMMARY (USDA SIZE DESIGNATIONS)		
Gravel	(3 inches to #10)	24.6%
	Fraction Passing #10:	
Sand	(#10 to 0.05 mm)	76.1%
Silt	(0.05 mm to 0.002 mm)	23.9%
Clay	(Less than 0.002 mm)	0.0%
Total		100.0%
USDA Soil Textural Class	Loamy Sand	

REPORT REVIEWED BY: Emily J. Rodriguez

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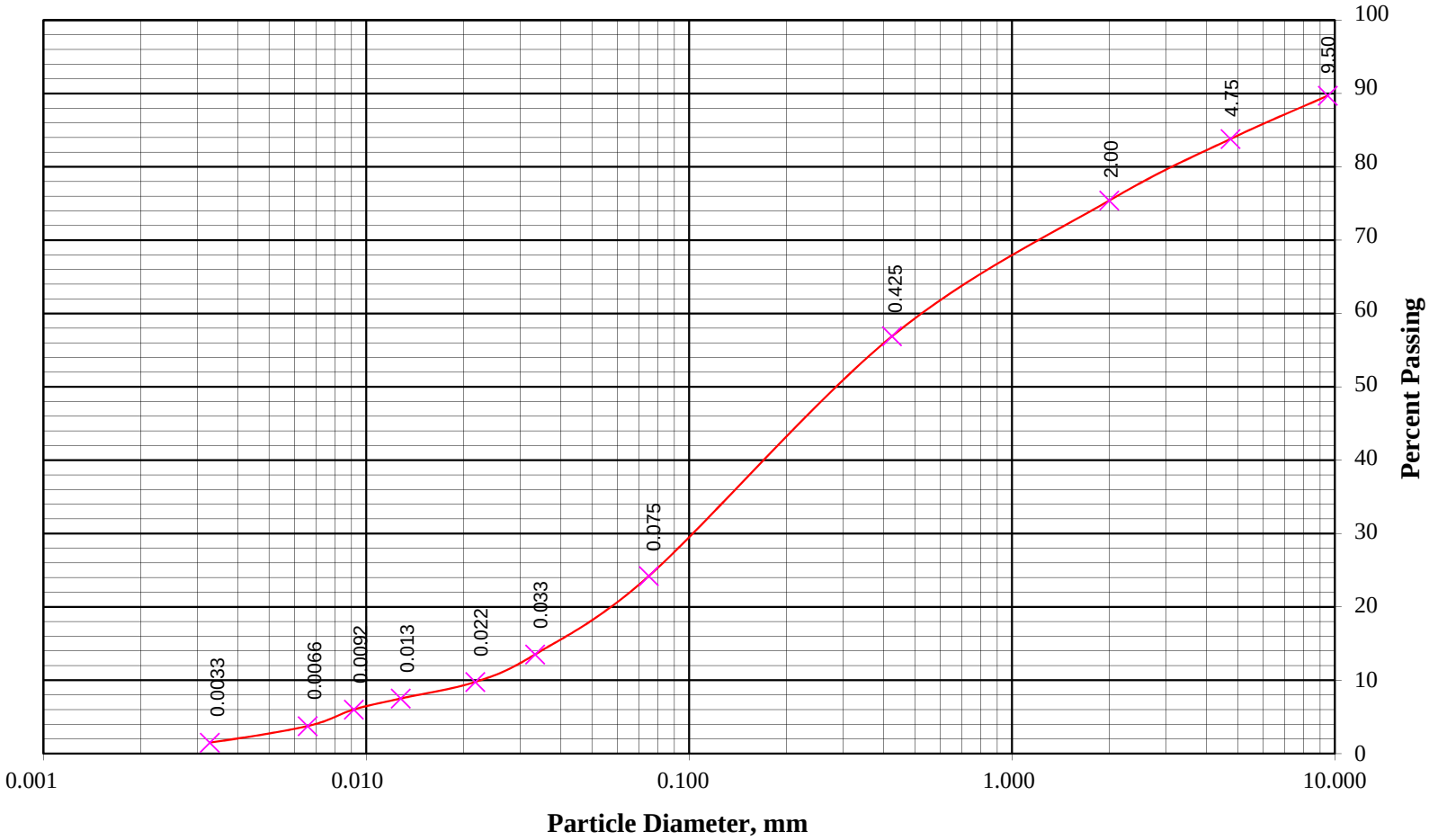
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Item:	NGS-GCM-10-26-12-1	**Project Number:**	120458
Source:	Senenson Envrionmental	**Lab Number:**	12-0950A
Location:	Stockpile	**Item Number:**	No Specifications Available
Date Sampled:	10/26/2012	**Sampled By:**	Client
Date Tested:	11/6/2012-11/06/2012	**Tested By:**	John Brinsfield



3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NGS-GCM-10-26-12-2	**Project Number:**	120458
Source:	Senenson Envrionmental	**Lab Number:**	12-0950B
Date Sampled:	10/26/2012	**Sampled By:**	Client
Date Tested:	11/2/2012	**Tested By:**	John Brinsfield

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-0950B	NGS-GCM-10-26-12-2	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	4.8	95.2	
19.0 mm	3/4"	3.1	92.1	
12.5 mm	1/2"	4.2	87.9	
6.3 mm	1/4"	5.4	82.5	
4.75 mm	#4	0.8	81.7	
2.00 mm	#10	6.0	75.7	
0.850 mm	#20	8.5	67.2	
0.600 mm	#30	4.8	62.4	
0.425 mm	#40	4.6	57.8	
0.150 mm	#100	20.1	37.7	
0.075 mm	#200	17.0	20.7	
Pan		20.7		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Item:	NGS-GCM-10-26-12-2	**Project Number:**	120458
Source:	Senenson Envrionmental	**Lab Number:**	12-0950B
Location:	Stockpile	**Item Number:**	No Specifications Available
Date Sampled:	10/26/2012	**Sampled By:**	Client
Date Tested:	11/6/2012-11/06/2012	**Tested By:**	John Brinsfield

PARTICLE SIZE ANALYSIS BY SIEVE AND HYDROMETER METHOD

Test Method: ASTM D422

Sieve Size	Particle Diameter, mm	Percent Passing	Specification
3/8"	9.50	85.7	
#4	4.75	81.7	
#10	2.00	75.7	
#40	0.425	57.8	
#200	0.075	20.7	
Hydrometer Analysis Results	0.050	16.0	
	0.020	8.2	
	0.010	5.9	
	0.005	2.6	
	0.002		
	0.001		

SOIL SPECIFIC GRAVITY: 2.67 (As reported separately, or estimated.)

DISPERSION METHOD: Mechanical, 1 min.

SAND & GRAVEL PARTICLES: Hard subrounded particles

Comments:

COMPOSITION SUMMARY (USDA SIZE DESIGNATIONS)		
Gravel	(3 inches to #10)	24.3%
	Fraction Passing #10:	
Sand	(#10 to 0.05 mm)	78.9%
Silt	(0.05 mm to 0.002 mm)	21.1%
Clay	(Less than 0.002 mm)	0.0%
Total		100.0%
USDA Soil Textural Class	Loamy Sand	

REPORT REVIEWED BY: Emily J. Rodriguez

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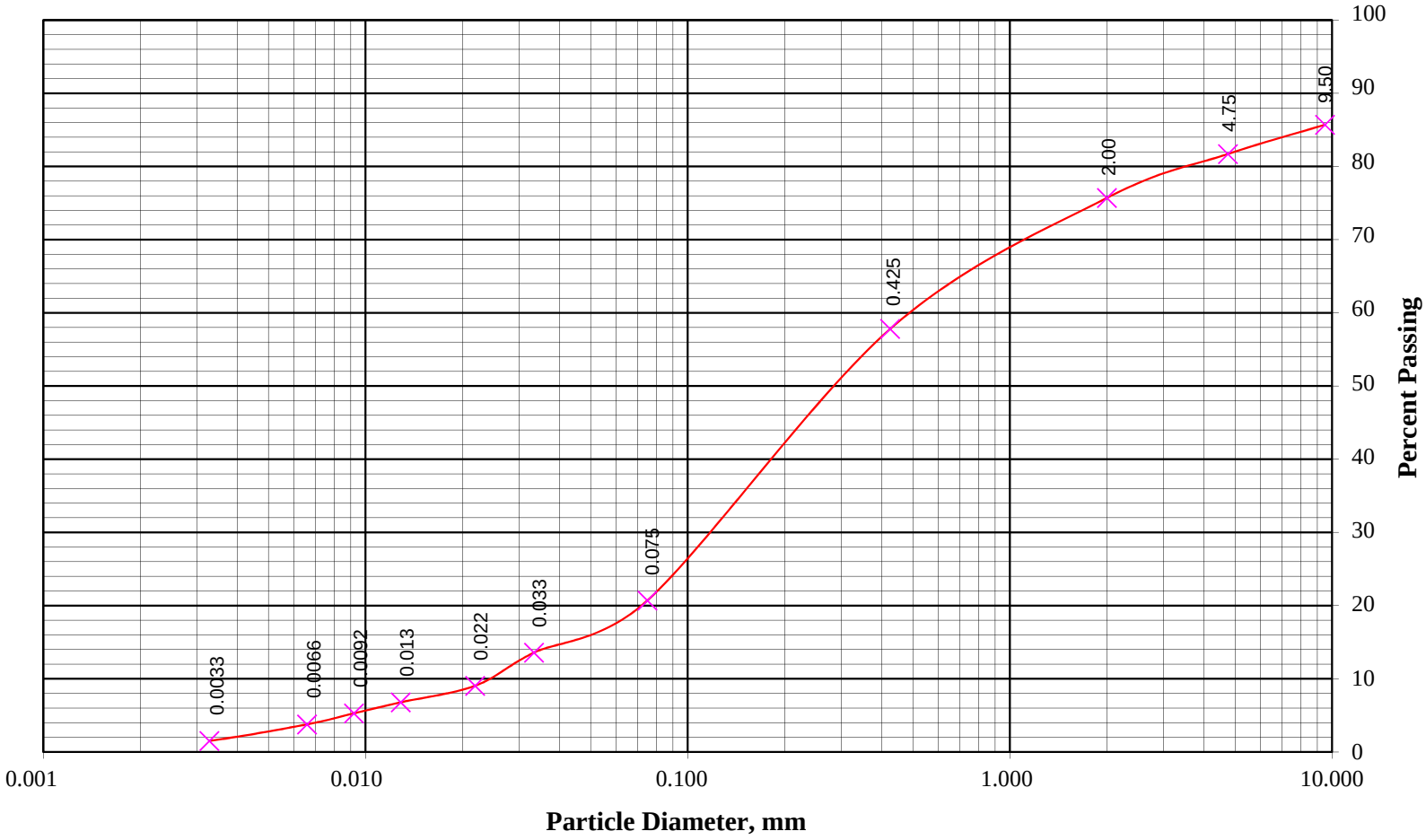
3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Item:	NGS-GCM-10-26-12-2	**Project Number:**	120458
Source:	Senenson Envrionmental	**Lab Number:**	12-0950B
Location:	Stockpile	**Item Number:**	No Specifications Available
Date Sampled:	10/26/2012	**Sampled By:**	Client
Date Tested:	11/6/2012-11/06/2012	**Tested By:**	John Brinsfield



TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read Instructions on reverse side prior to initiating this form)*	DATE 12/4/12	Submittal No. 0017

SECTION I – REQUEST FOR APROVAL OF THE FOLLOWING ITEMS

TO: Construction Manager ATTN: Mark Gravelding, P.E. ARCADIS 6723 Towpath Road Syracuse, NY 13214 Email: mark.gravelding@arcadis-us.comm	FROM: Sevenson Environmental Services, Inc. 2749 Lockport Road Niagara Falls, New York 14305	General Electric Company Purchase Order Number:	CHECK ONE: X THIS IS A NEW TRANSMITTAL THIS IS A RESUBMITTAL OF TRANSMITTAL
SPECIFICATION SEC. NO: (Cover only one section with each transmittal) 312323	PROJECT TITLE AND LOCATION: **Silver Lake Removal Action Area** Pittsfield, MA 01201		CHECK ONE: THIS TRANSMITTAL IS FOR FIO X APPROVAL

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.)	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. *(See Instruction No. 8)*	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT		FOR CONTRACTOR USE CODE	VARIATION (See Instruction No. 6)	FOR CE USE CODE
				SPEC. PARA NO.	DRAWING SHEET NO.			
a.	*b.*	*c.*	*d.*	*e.*	*f.*	*g.*	*h.*	*i.*
8	Sand/topsoil blend for voids in the armor stone layer sample results sampled at Nichols Sand and Gravel pit in Hinsdale, MA. Identification of proposed source(ID# NGS –ST-11-14-12-1)			312323 (Part 1.04)	26			
9	Organic content analysis testing for (1) sand/topsoil material sample			312323 (Part 1.04)	26			

[X] REVIEWED
[ ] REVIEWED & NOTED
[ ] REVISE & RESUBMIT
[ ] REJECTED
[ ] For information only
[ ] Received, no action taken

Reviewed solely for general conformance with contract documents

ARCADIS of New York, Inc.

Signature

12/6/12
Date

REMARKS	I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated. **Name (TITLE)** Michael W. Muth - Project Manager NAME AND SIGNATURE OF CONTRACTOR

SECTION II – APPROVAL ACTION

ENCLOSURES RETURNED *(List by Item No.)*	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

ENG FORM 4025-R, MAR 95 *(ER 415-1-10)* **EDITION OF SEP 93 IS OBSOLETE** (PROPONENT: CEMP-CE)

SHEET __1_ OF _1_

Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Material:	NSG-ST-11-14-12-1	**Project Number:**	120458
Source:	Sevenson Envrionmental	**Lab Number:**	12-0993A
Location:	Stockpile	**Item Number:**	No Specifications Available
Date Sampled:	11/14/2012	**Sampled By:**	Client
Date Tested:	11/27/2012	**Tested By:**	Jared Vassell

Report of Organic Content of Soils by Loss on Ignition

Test Method: AASHTO T267

Inorganic Content: 96.9 % (Sand, silt, clay, etc.)

Organic Content: 3.1 %

Specification: _____

Comments:

Report Reviewed By: Emily J. Rodriguez

PDF

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on reverse side prior to initiating this form)*	DATE 12/4/12	Submittal No. 0018

SECTION I – REQUEST FOR APROVAL OF THE FOLLOWING ITEMS

TO:	FROM:	General Electric Company Purchase Order Number:	CHECK ONE:
Construction Manager ATTN: Mark Gravelding, P.E. ARCADIS 6723 Towpath Road Syracuse, NY 13214 Email: mark.gravelding@arcadis-us.comm	Sevenson Environmental Services, Inc. 2749 Lockport Road Niagara Falls, New York 14305		X THIS IS A NEW TRANSMITTAL THIS IS A RESUBMITTAL OF TRANSMITTAL

SPECIFICATION SEC. NO: (Cover only one section with each transmittal) 312323	PROJECT TITLE AND LOCATION: **Silver Lake Removal Action Area** Pittsfield, MA 01201	CHECK ONE: THIS TRANSMITTAL IS FOR FIO X APPROVAL

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.)	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. *(See instruction No. 8)*	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT SPEC. PARA NO.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO.	FOR CONTRACTOR USE CODE	VARIATION (See Instruction No. 6)	FOR CE USE CODE
a.	*b.*	*c.*	*d.*	*e.*	*f.*	*g.*	*h.*	*i.*
8	Gravel Habitat material sample results Sampled at Nichols pit in Hinsdale, MA. Identification of proposed source. Sample ID's(NGS-GH-11-14-12-1, NGS-GH-11-14-12-2, NGS-GH-11-14-12-3)			312323 (Part 1.04)	26			
9	(3) Gradation samples for gravel habitat material. Sieve analysis using ASTM D422			312323 (Part 1.04)	26			
	Each sample represents 200CY							

REMARKS	I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated. **Name (TITLE)** Michael W. Muth - Project Manager NAME AND SIGNATURE OF CONTRACTOR

SECTION II – APPROVAL ACTION

ENCLOSURES RETURNED *(List by Item No.)*	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

ENG FORM 4025-R, MAR 95 *(ER 415-1-10)* **EDITION OF SEP 93 IS OBSOLETE** SHEET __1_ OF _1_ (PROPONENT: CEMP-CE)

Noted for Submittal #0018: The material is slightly outside of the specified % passing range. This material is considered acceptable for its intended use.

Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NSG-GH-11-14-12-1	**Project Number:**	120458
Source:	Sevenson Envrionmental	**Lab Number:**	12-0993D
Date Sampled:	11/14/2012	**Sampled By:**	Client
Date Tested:	11/19/2012	**Tested By:**	Eric Brousseau

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-0993D	NSG-GH-11-14-12-1	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	7.8	92.2	
25.0 mm	1"	16.6	75.6	
19.0 mm	3/4"	11.5	64.1	
12.5 mm	1/2"	8.0	56.1	
6.3 mm	1/4"	8.5	47.6	
4.75 mm	#4	1.9	45.7	
2.00 mm	#10	7.7	38.0	
0.850 mm	#20	7.9	30.1	
0.600 mm	#30	2.9	27.2	
0.425 mm	#40	2.9	24.3	
0.150 mm	#100	9.5	14.8	
0.075 mm	#200	6.4	8.4	
Pan		8.4		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NSG-GH-11-14-12-2	**Project Number:**	120458
Source:	Sevenson Envrionmental	**Lab Number:**	12-0993E
Date Sampled:	11/14/2012	**Sampled By:**	Client
Date Tested:	11/19/2012	**Tested By:**	Eric Brousseau

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-0993E	NSG-GH-11-14-12-2	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	6.0	94.0	
25.0 mm	1"	13.3	80.7	
19.0 mm	3/4"	6.3	74.4	
12.5 mm	1/2"	5.2	69.2	
6.3 mm	1/4"	8.1	61.1	
4.75 mm	#4	2.8	58.3	
2.00 mm	#10	8.8	49.5	
0.850 mm	#20	10.5	39.0	
0.600 mm	#30	4.3	34.7	
0.425 mm	#40	3.8	30.9	
0.150 mm	#100	12.5	18.4	
0.075 mm	#200	7.8	10.6	
Pan		10.6		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NSG-GH-11-14-12-3	**Project Number:**	120458
Source:	Sevenson Envrionmental	**Lab Number:**	12-0993F
Date Sampled:	11/14/2012	**Sampled By:**	Client
Date Tested:	11/19/2012	**Tested By:**	Eric Brousseau

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-0993F	NSG-GH-11-14-12-3	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	3.6	96.4	
19.0 mm	3/4"	5.2	91.2	
12.5 mm	1/2"	8.1	83.1	
6.3 mm	1/4"	10.1	73.0	
4.75 mm	#4	3.2	69.8	
2.00 mm	#10	11.9	57.9	
0.850 mm	#20	13.2	44.7	
0.600 mm	#30	5.1	39.6	
0.425 mm	#40	4.5	35.1	
0.150 mm	#100	14.2	20.9	
0.075 mm	#200	8.8	12.1	
Pan		12.1		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on reverse side prior to initiating this form)*	DATE 12/4/12	Submittal No. 0019

SECTION I – REQUEST FOR APROVAL OF THE FOLLOWING ITEMS

TO:	FROM:	General Electric Company Purchase Order Number:	CHECK ONE:
Construction Manager ATTN: Mark Gravelding, P.E. ARCADIS 6723 Towpath Road Syracuse, NY 13214 Email: mark.gravelding@arcadis-us.comm	Sevenson Environmental Services, Inc. 2749 Lockport Road Niagara Falls, New York 14305		X THIS IS A NEW TRANSMITTAL THIS IS A RESUBMITTAL OF TRANSMITTAL

SPECIFICATION SEC. NO: (Cover only one section with each transmittal) 313219	PROJECT TITLE AND LOCATION: **Silver Lake Removal Action Area** Pittsfield, MA 01201	CHECK ONE: THIS TRANSMITTAL IS FOR FIO X APPROVAL

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.)	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. *(See instruction No. 8)*	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT: SPEC. PARA NO.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO.	FOR CONTRACTOR USE CODE	VARIATION (See Instruction No. 6)	FOR CE USE CODE
a.	*b.*	*c.*	*d.*	*e.*	*f.*	*g.*	*h.*	*i.*
8	Granular Cap Material/Nichols Sand and Gravel Hinsdale Pit Identification of proposed source. Sample ID's (NSG-GCM-11-14-12-1, NSG-GCM-11-14-12-2)			312323 (Part 1.04)	26			
9	Granular Cap Material article/sieve analysis (ASTM D 422), hydrometer analysis, and USCS Classification method (ASTM D 2487) results for (2) samples			312323 (Part 1.04)	26			
	(1) sample per 500CY							

REMARKS	I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated. **Name (TITLE)** Michael W. Muth - Project Manager NAME AND SIGNATURE OF CONTRACTOR

SECTION II – APPROVAL ACTION

ENCLOSURES RETURNED *(List by Item No.)*	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

ENG FORM 4025-R, MAR 95 *(ER 415-1-10)* **EDITION OF SEP 93 IS OBSOLETE** (PROPONENT: CEMP-CE)
SHEET _1_ OF _1_

Noted for Submittal #0019:
This material has slightly more gravel than recommended by the specification, and therefore slightly less sand and silt/clay; however, when the USCS and USDA size designations are considered, the percentage of gravel is still less than 25% and the percentage of silt/clay is still more than 16%. This material is considered acceptable for its intended use.

Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NSG-GCM-11-14-12-1	**Project Number:**	120458
Source:	Sevenson Envrionmental	**Lab Number:**	12-0993B
Date Sampled:	11/14/2012	**Sampled By:**	Client
Date Tested:	11/19/2012	**Tested By:**	Eric Brousseau

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-0993B	NSG-GCM-11-14-12-1	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	3.0	97.0	
19.0 mm	3/4"	4.2	92.8	
12.5 mm	1/2"	3.8	89.0	
6.3 mm	1/4"	5.4	83.6	
4.75 mm	#4	1.7	81.9	
2.00 mm	#10	5.7	76.2	
0.850 mm	#20	7.7	68.5	
0.600 mm	#30	3.9	64.6	
0.425 mm	#40	4.1	60.5	
0.150 mm	#100	19.0	41.5	
0.075 mm	#200	17.1	24.4	
Pan		24.4		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stoekbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Item:	NSG-GCM-11-14-12-1	**Project Number:**	120458
Source:	Sevenson Envrionmental	**Lab Number:**	12-0993B
Location:	Stockpile	**Item Number:**	No Specifications Available
Date Sampled:	11/14/2012	**Sampled By:**	Client
Date Tested:	11/20/2012-11/21/2012	**Tested By:**	Maxwell Nicols

PARTICLE SIZE ANALYSIS BY SIEVE AND HYDROMETER METHOD

Test Method: ASTM D422

Sieve Size	Particle Diameter, mm	Percent Passing	Specification
3/8"	9.50	86.7	
#4	4.75	81.9	
#10	2.00	76.2	
#40	0.425	60.5	
#200	0.075	24.4	
Hydrometer Analysis Results	0.050	19.6	
	0.020	12.9	
	0.010	9.4	
	0.005	6.3	
	0.002	4.2	
	0.001		

SOIL SPECIFIC GRAVITY: 2.67 (As reported separately, or estimated.)

DISPERSION METHOD: Mechanical, 1 min.

SAND & GRAVEL PARTICLES: Hard subrounded particles

Comments:

COMPOSITION SUMMARY (USDA SIZE DESIGNATIONS)		
Gravel	(3 inehes to #10)	23.8%
Fraction Passing #10:		
Sand	(#10 to 0.05 mm)	74.3%
Silt	(0.05 mm to 0.002 mm)	20.2%
Clay	(Less than 0.002 mm)	5.5%
Total		100.0%
USDA Soil Textural Class	Loamy Sand	

REPORT REVIEWED BY: Emily J. Rodriguez

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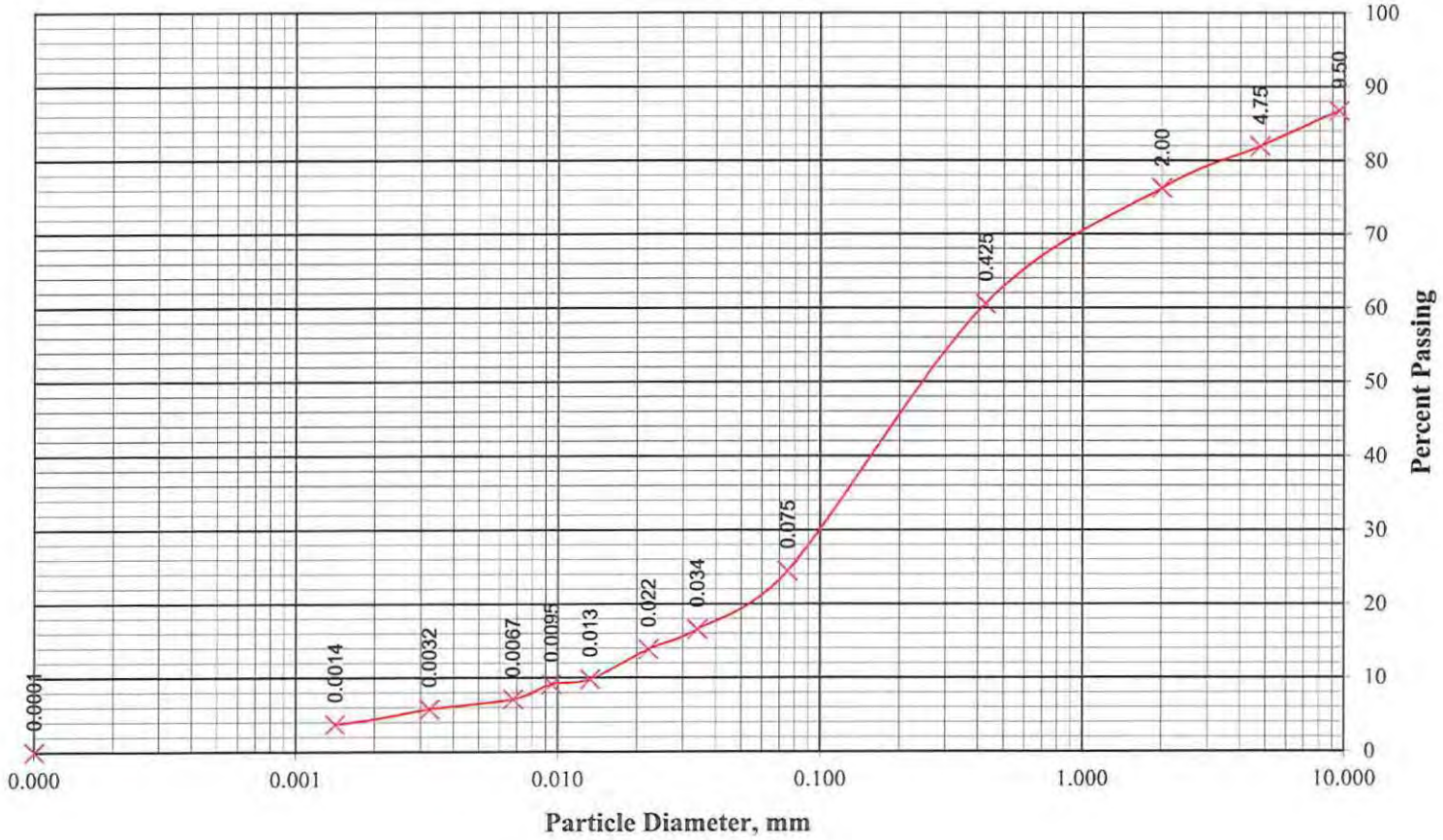
Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Item:	NSG-GCM-11-14-12-1	**Project Number:**	120458
Source:	Sevenson Envrionmental	**Lab Number:**	12-0993B
Location:	Stockpile	**Item Number:**	No Specifications Available
Date Sampled:	11/14/2012	**Sampled By:**	Client
Date Tested:	11/20/2012-11/21/2012	**Tested By:**	Maxwell Nicols



Advance Testing
3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services	**Project**	Silver Lake Removal Action
Material:	NSG-GCM-11-14-12-1	**Project Number:**	120458
Source:	Sevenson Envrionmental	**Lab Number:**	12-0993B
Location:	Stockpile	**Item Number:**	No Specifications Available
Date Sampled:	11/14/2012	**Sampled By:**	Client
Date Tested:	11/26/2012	**Tested By:**	Emily Rodriguez

Report for Unified Soil Classification

Test Method: ASTM D2487

USCS Group Symbol: **SM**

USCS Group Name: **Silty Sand with Gravel**

Specifications:

Comments:

Report Reviewed By: Emily J. Rodriguez

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Advance Testing

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25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NSG-GCM-11-14-12-2	**Project Number:**	120458
Source:	Sevenson Envrionmental	**Lab Number:**	12-0993C
Date Sampled:	11/14/2012	**Sampled By:**	Client
Date Tested:	11/19/2012	**Tested By:**	Eric Brousseau

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-0993C	NSG-GCM-11-14-12-2	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	8.7	91.3	
19.0 mm	3/4"	1.7	89.6	
12.5 mm	1/2"	5.7	83.9	
6.3 mm	1/4"	4.9	79.0	
4.75 mm	#4	1.5	77.5	
2.00 mm	#10	5.5	72.0	
0.850 mm	#20	8.0	64.0	
0.600 mm	#30	3.9	60.1	
0.425 mm	#40	4.7	55.4	
0.150 mm	#100	19.1	36.3	
0.075 mm	#200	16.1	20.2	
Pan		20.2		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Advance Testing

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Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Aetion
Item:	NSG-GCM-11-14-12-2	**Project Number:**	120458
Source:	Sevenson Envrionmental	**Lab Number:**	12-0993C
Location:	Stockpile	**Item Number:**	No Specifications Available
Date Sampled:	11/14/2012	**Sampled By:**	Client
Date Tested:	11/20/2012-11/21/2012	**Tested By:**	Maxwell Nicols

PARTICLE SIZE ANALYSIS BY SIEVE AND HYDROMETER METHOD

Test Method: ASTM D422

Sieve Size	Particle Diameter, mm	Percent Passing	Specification
3/8"	9.50	82.4	
#4	4.75	77.5	
#10	2.00	72.0	
#40	0.425	55.4	
#200	0.075	20.2	
Hydrometer Analysis Results	0.050	16.3	
	0.020	11.7	
	0.010	8.4	
	0.005	6.2	
	0.002	4.1	
	0.001		

SOIL SPECIFIC GRAVITY: 2.67 (As reported separately, or estimated.)

DISPERSION METHOD: Mechanical, 1 min.

SAND & GRAVEL PARTICLES: Hard subrounded particles

Comments:

COMPOSITION SUMMARY (USDA SIZE DESIGNATIONS)		
Gravel	(3 inches to #10)	28.0%
Fraction Passing #10:		
Sand	(#10 to 0.05 mm)	77.4%
Silt	(0.05 mm to 0.002 mm)	16.9%
Clay	(Less than 0.002 mm)	5.7%
Total		100.0%
USDA Soil Textural Class	Loamy Sand	

REPORT REVIEWED BY: Emily J. Rodriguez

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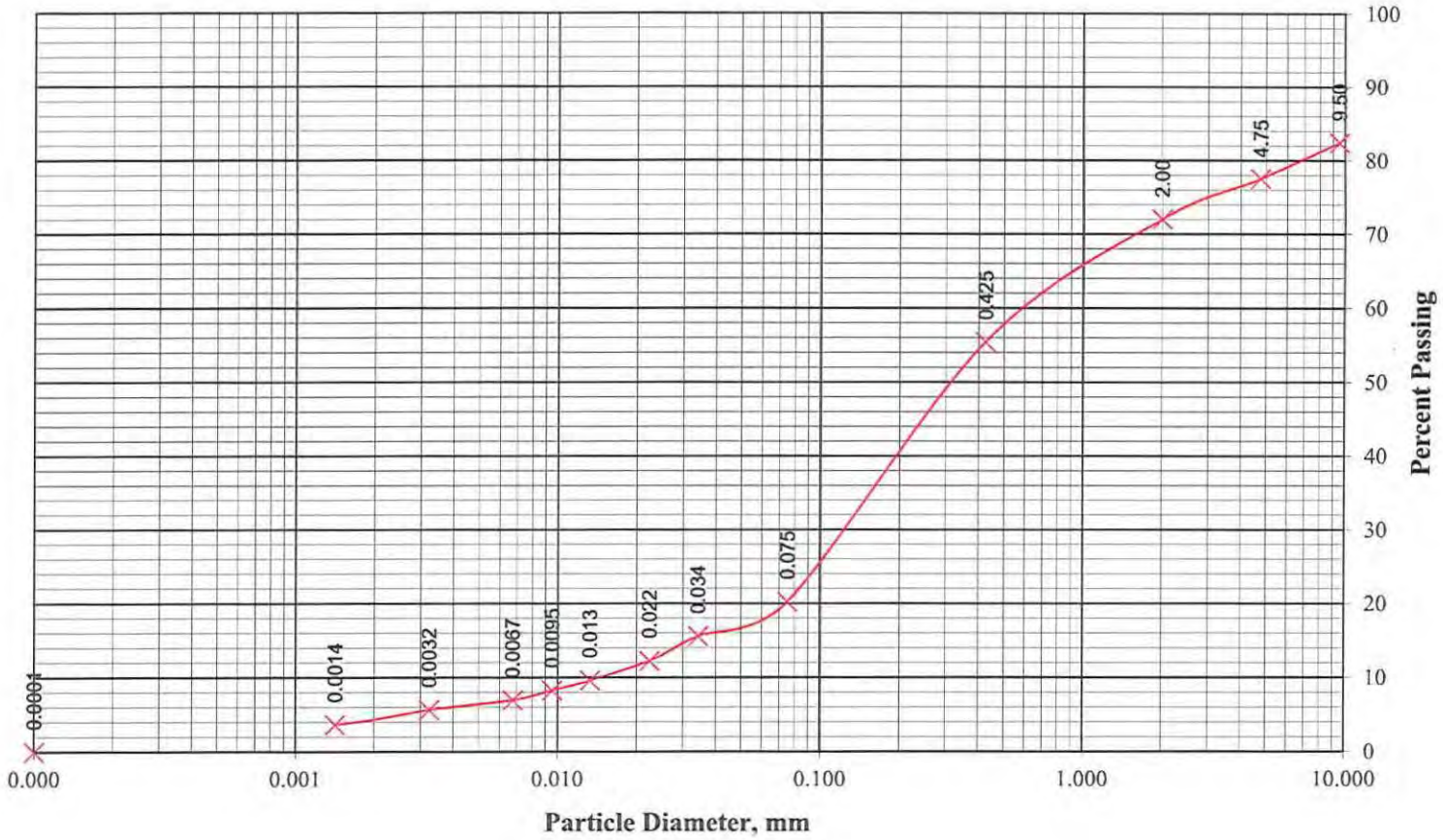
Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Item:	NSG-GCM-11-14-12-2	**Project Number:**	120458
Source:	Sevenson Envrionmental	**Lab Number:**	12-0993C
Location:	Stockpile	**Item Number:**	No Specifications Available
Date Sampled:	11/14/2012	**Sampled By:**	Client
Date Tested:	11/20/2012-11/21/2012	**Tested By:**	Maxwell Nicols



Advance Testing
3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services	**Project**	Silver Lake Removal Action
Material:	NSG-GCM-11-14-12-2	**Project Number:**	120458
Source:	Sevenson Envrionmental	**Lab Number:**	12-0993C
Location:	Stockpile	**Item Number:**	No Specifications Available
Date Sampled:	11/14/2012	**Sampled By:**	Client
Date Tested:	11/26/2012	**Tested By:**	Emily Rodriguez

Report for Unified Soil Classification

Test Method: ASTM D2487

USCS Group Symbol: **SM**

USCS Group Name: **Silty Sand with Gravel**

Specifications:

Comments:

Report Reviewed By: Emily J. Rodriguez

PDF

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on reverse side prior to initiating this form)*	DATE 12/12/12	Submittal No. 0020

SECTION I – REQUEST FOR APROVAL OF THE FOLLOWING ITEMS

TO: Construction Manager ATTN: Mark Gravelding, P.E. ARCADIS 6723 Towpath Road Syracuse, NY 13214 Email: mark.gravelding@arcadis-us.comm	FROM: Sevenson Environmental Services, Inc. 2749 Lockport Road Niagara Falls, New York 14305	General Electric Company Purchase Order Number:	CHECK ONE: X THIS IS A NEW TRANSMITTAL THIS IS A RESUBMITTAL OF TRANSMITTAL
SPECIFICATION SEC. NO: (Cover only one section with each transmittal) 313219	PROJECT TITLE AND LOCATION: **Silver Lake Removal Action Area** Pittsfield, MA 01201		CHECK ONE: THIS TRANSMITTAL IS FOR FIO X APPROVAL

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.)	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. *(See instruction No. 8)*	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT		FOR CONTRACTOR USE CODE	VARIATION (See Instruction No. 6)	FOR CE USE CODE
				SPEC. PARA NO.	DRAWING SHEET NO.			
a.	*b.*	*c.*	*d.*	*e.*	*f.*	*g.*	*h.*	*i.*
8	Granular Cap Material/Nichols Sand and Gravel Hinsdale Pit Identification of proposed source. Sample ID's (NSG-GCM-12-3-12-8)			312323 (Part 1.04)	26			
9	Granular Cap Material article/sieve analysis (ASTM D 422), hydrometer analysis results for ~~(2)~~ ~~samples~~ (1) sample per 500CY			312323 (Part 1.04)	26			

(1)

REMARKS	I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated. **Name (TITLE)** Michael W. Muth - Project Manager NAME AND SIGNATURE OF CONTRACTOR

SECTION II – APPROVAL ACTION

ENCLOSURES RETURNED *(List by Item No.)*	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

ENG FORM 4025-R, MAR 95 *(ER 415-1-10)* **EDITION OF SEP 93 IS OBSOLETE** (PROPONENT: CEMP-CE)
SHEET __1_ OF _1_

Noted for Submittal #0020:
This material has slightly more gravel than recommended by the specification, and therefore slightly less sand and/or silt/clay; however, the percentage of gravel is still less than 25% and the percentage of silt/clay is still more than 16%. This material is considered acceptable for its intended use.

Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NSG-GCM-12-3-12-8	**Project Number:**	120458
Source:	Sevenson Environmental Services Inc.	**Lab Number:**	12-1032B
Date Sampled:	12/3/2012	**Sampled By:**	Client
Date Tested:	12/11/2012	**Tested By:**	John Brinsfield

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-1032B	NSG-GCM-12-3-12-8	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	3.4	96.6	
12.5 mm	1/2"	3.1	93.5	
6.3 mm	1/4"	5.3	88.2	
4.75 mm	#4	1.9	86.3	
2.00 mm	#10	5.6	80.7	
0.850 mm	#20	7.6	73.1	
0.600 mm	#30	4.7	68.4	
0.425 mm	#40	5.6	62.8	
0.150 mm	#100	23.5	39.3	
0.075 mm	#200	19.0	20.3	
Pan		20.3		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Advance Testing

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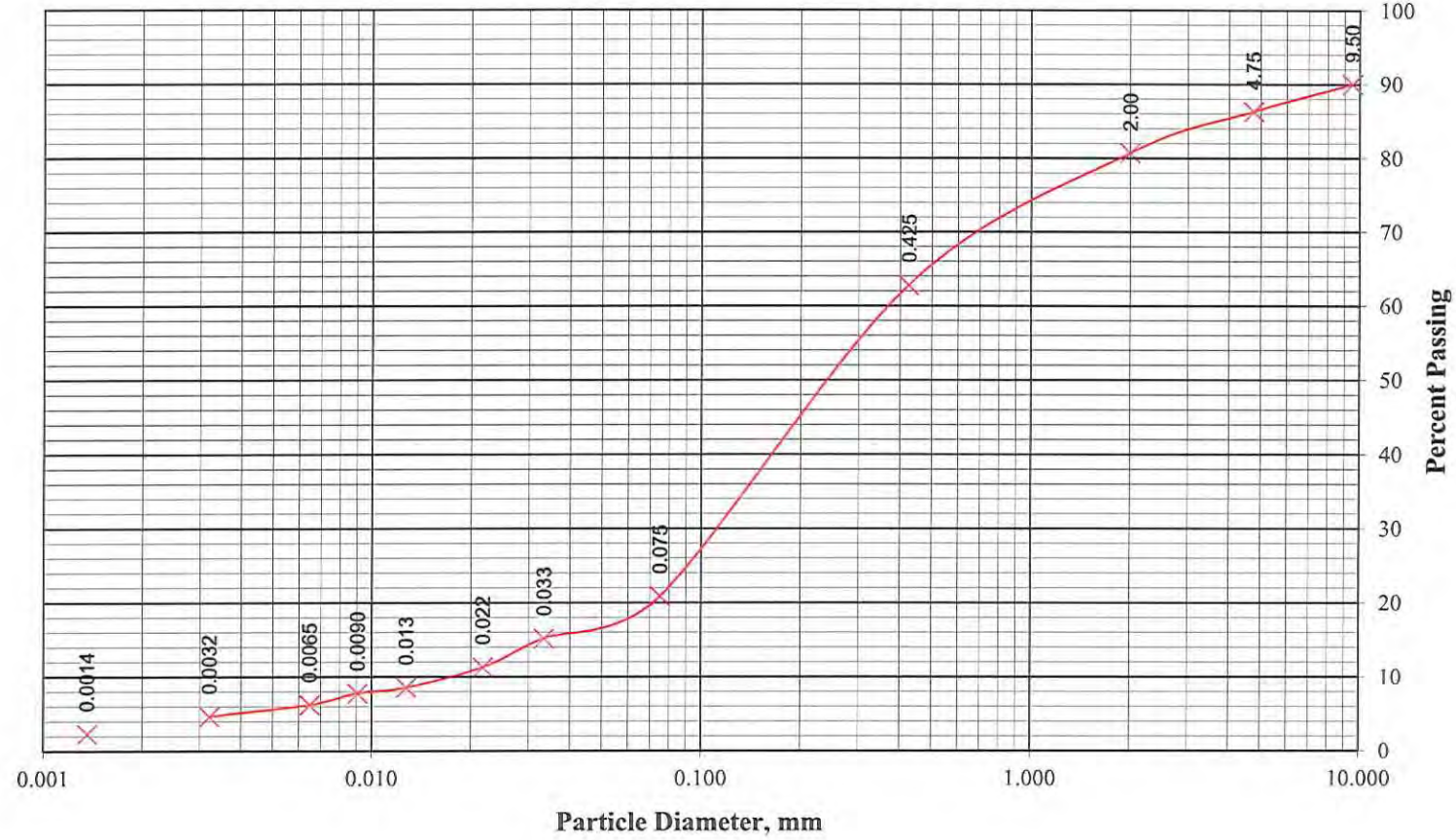
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Item:	NSG-GCM-12-3-12-8	**Project Number:**	120458
Source:	Sevenson Environmental Services Inc.	**Lab Number:**	12-1032B
Location:	Stockpile	**Item Number:**	ASTM D 422
Date Sampled:	12/3/2012	**Sampled By:**	Client
Date Tested:	12/12/2012-12/11/2012	**Tested By:**	John Brinsfield



Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Item:	NSG-GCM-12-3-12-8	**Project Number:**	120458
Source:	Sevenson Environmental Services Ir	**Lab Number:**	12-1032B
Location:	Stockpile	**Item Number:**	ASTM D 422
Date Sampled:	12/3/2012	**Sampled By:**	Client
Date Tested:	12/12/2012-12/11/2012	**Tested By:**	John Brinsfield

PARTICLE SIZE ANALYSIS BY SIEVE AND HYDROMETER METHOD

Test Method: ASTM D422

Sieve Size	Particle Diameter, mm	Percent Passing	Specification
3/8"	9.50	90.0	
#4	4.75	86.3	
#10	2.00	80.7	
#40	0.425	62.8	
#200	0.075	20.9	
Hydrometer Analysis Results	0.050	16.3	
	0.020	10.6	
	0.010	8.0	
	0.005	5.8	
	0.002	3.5	
	0.001		

SOIL SPECIFIC GRAVITY: 2.67 (As reported separately, or estimated.)
DISPERSION METHOD: Mechanical, 1 min.
SAND & GRAVEL PARTICLES: Hard subrounded particles

Comments:

COMPOSITION SUMMARY (USDA SIZE DESIGNATIONS)		
Gravel	(3 inches to #10)	19.3%
	Fraction Passing #10:	
Sand	(#10 to 0.05 mm)	79.8%
Silt	(0.05 mm to 0.002 mm)	15.9%
Clay	(Less than 0.002 mm)	4.3%
Total		100.0%
USDA Soil Textural Class		

REPORT REVIEWED BY: Emily J. Rodriguez

PDF

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on reverse side prior to initiating this form)*	**DATE 12/20/12**	**Submittal No. 0021**

SECTION I – REQUEST FOR APROVAL OF THE FOLLOWING ITEMS

TO:	FROM:	General Electric Company Purchase Order Number:	CHECK ONE:
Construction Manager ATTN: Mark Gravelding, P.E. ARCADIS 6723 Towpath Road Syracuse, NY 13214 Email: mark.gravelding@arcadis-us.comm	Sevenson **Environmental** Services, Inc. 2749 Lockport Road Niagara Falls, New York 14305		**X** THIS IS A NEW TRANSMITTAL THIS IS A RESUBMITTAL OF TRANSMITTAL

SPECIFICATION SEC. NO: (Cover only one section with each transmittal) 313219	PROJECT TITLE AND LOCATION: **Silver Lake Removal Action Area** Pittsfield, MA 01201	CHECK ONE: THIS TRANSMITTAL IS FOR FIO X APPROVAL

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.)	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. *(See instruction No. 8)*	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT SPEC. PARA NO.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO.	FOR CONTRACTOR USE CODE	VARIATION (See Instruction No. 6)	FOR CE USE CODE
a.	*b.*	*c.*	*d.*	*e.*	*f.*	*g.*	*h.*	*i.*
8	Granular Cap Material/Nichols Sand and Gravel Hinsdale Pit Identification of proposed source. Sample ID's (NSG-GCM-12-12-12-9 and NSG-GCM-12-12-12-10)			**312323 (Part 1.04)**	26			
9	Granular Cap Material article/sieve analysis (ASTM D 422), hydrometer analysis results for (2) samples			**312323 (Part 1.04)**	26			
	(1) sample per 500CY							

REMARKS	I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated. Name (TITLE) Michael W. Muth - Project Manager NAME AND SIGNATURE OF CONTRACTOR

SECTION II – APPROVAL ACTION

ENCLOSURES RETURNED *(List by Item No.)*	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

ENG FORM 4025-R, MAR 95 *(ER 415-1-10)* **EDITION OF SEP 93 IS OBSOLETE** SHEET __1_ OF _1_ (PROPONENT: CEMP-CE)

Noted for Submittal #0021:
This material has slightly more gravel than recommended by the specification and therefore slightly less sand and/or silt/clay; however, the percentage of gravel is still less than 25% and the percentage of silt/clay is still more than 16%. This material is considered acceptable for its intended use.

Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NSG-GCM_12-12-12-9	**Project Number:**	120458
Source:	Sevenson Environmental Services Inc.	**Lab Number:**	12-1055A
Date Sampled:	12/12/2012	**Sampled By:**	Client
Date Tested:	12/17/2012	**Tested By:**	Jared Vassell

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-1055A	NSG-GCM_12-12-12-9	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	2.2	97.8	
19.0 mm	3/4"	2.8	95.0	
12.5 mm	1/2"	4.6	90.4	
6.3 mm	1/4"	4.2	86.2	
4.75 mm	#4	1.6	84.6	
2.00 mm	#10	6.3	78.3	
0.850 mm	#20	7.9	70.4	
0.600 mm	#30	4.0	66.4	
0.425 mm	#40	4.6	61.8	
0.150 mm	#100	19.0	42.8	
0.075 mm	#200	16.4	26.4	
Pan		26.4		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Advance Testing

3348 Route 208, Campbell Hall, NY 10916
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25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Item:	NSG-GCM_12-12-12-9	**Project Number:**	120458
Source:	Sevenson Environmental Services Inc.	**Lab Number:**	12-1055A
Location:	Stockpile	**Item Number:**	No Specification Available
Date Sampled:	12/12/2012	**Sampled By:**	Client
Date Tested:	12/19/2012-12/19/2012	**Tested By:**	John Brinsfield

PARTICLE SIZE ANALYSIS BY SIEVE AND HYDROMETER METHOD

Test Method: ASTM D422

Sieve Size	Particle Diameter, mm	Percent Passing	Specification
3/8"	9.50	88.5	
#4	4.75	84.6	
#10	2.00	78.3	
#40	0.425	61.8	
#200	0.075	26.4	
Hydrometer Analysis Results	0.050	18.9	
	0.020	8.5	
	0.010	6.4	
	0.005	4.0	
	0.002	2.2	
	0.001		

SOIL SPECIFIC GRAVITY: 2.67 (As reported separately, or estimated.)

DISPERSION METHOD: Mechanical, 1 min.

SAND & GRAVEL PARTICLES: Hard subrounded particles

Comments:

COMPOSITION SUMMARY (USDA SIZE DESIGNATIONS)		
Gravel	(3 inches to #10)	21.7%
	Fraction Passing #10:	
Sand	(#10 to 0.05 mm)	75.9%
Silt	(0.05 mm to 0.002 mm)	21.3%
Clay	(Less than 0.002 mm)	2.8%
Total		100.0%
USDA Soil Textural Class	Loamy Sand	

REPORT REVIEWED BY: Emily J. Rodriguez

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Advance Testing

3348 Route 208, Campbell Hall, NY 10916
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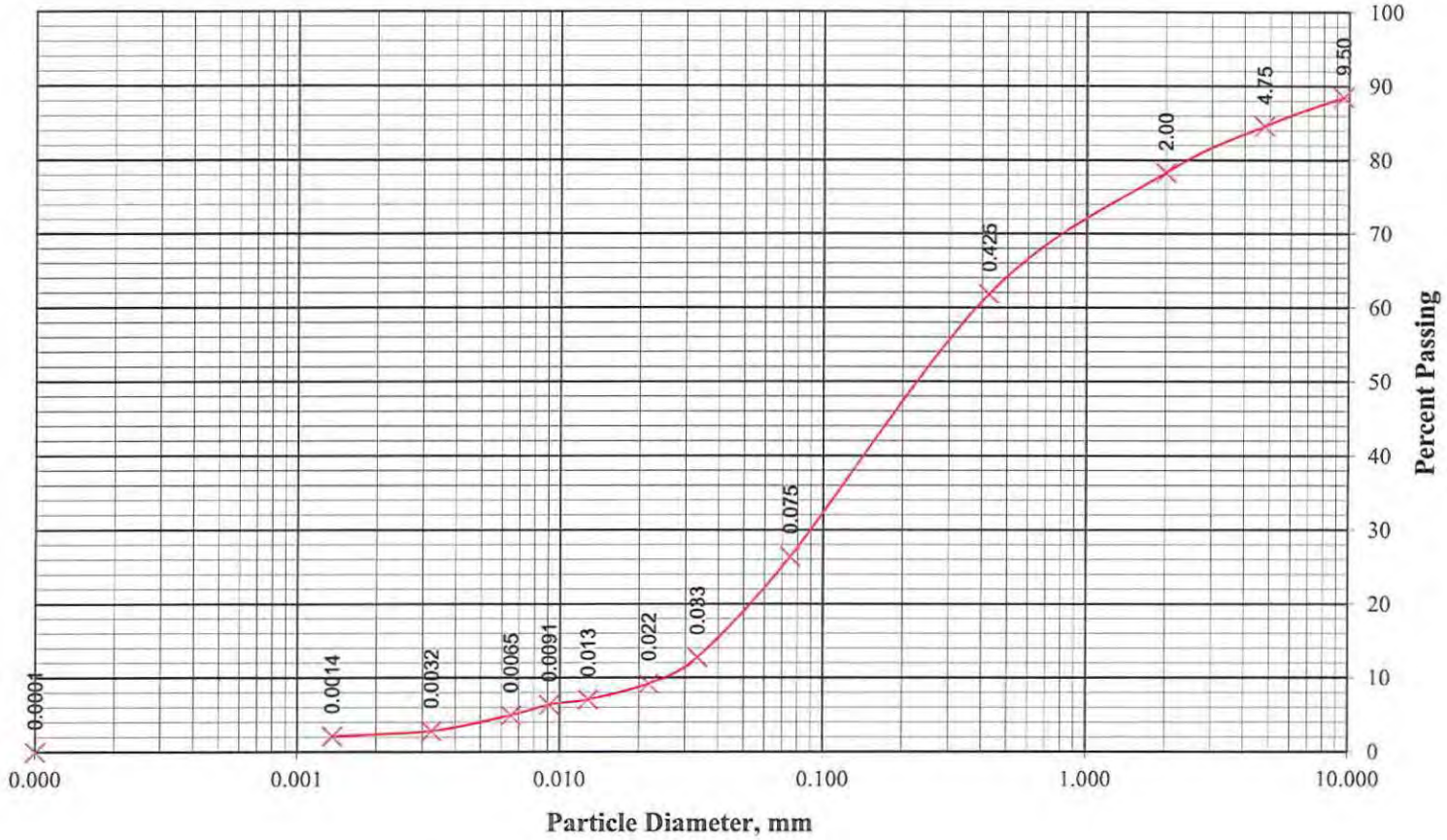
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Item:	NSG-GCM 12-12-12-9	**Project Number:**	120458
Source:	Sevenson Environmental Services Inc.	**Lab Number:**	12-1055A
Location:	Stockpile	**Item Number:**	NO Specifications Available
Date Sampled:	12/12/2012	**Sampled By:**	Client
Date Tested:	12/19/2012-12/19/2012	**Tested By:**	John Brinsfield



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3348 Route 208, Campbell Hall, NY 10916
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42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NSG-GCM_12-12-12-10	**Project Number:**	120458
Source:	Sevenson Environmental Services Inc.	**Lab Number:**	12-1055B
Date Sampled:	12/12/2012	**Sampled By:**	Client
Date Tested:	12/17/2012	**Tested By:**	Jared Vassell

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-1055B	NSG-GCM_12-12-12-10	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	2.0	98.0	
25.0 mm	1"	5.3	92.7	
19.0 mm	3/4"	3.9	88.8	
12.5 mm	1/2"	3.8	85.0	
6.3 mm	1/4"	5.0	80.0	
4.75 mm	#4	2.6	77.4	
2.00 mm	#10	7.2	70.2	
0.850 mm	#20	7.8	62.4	
0.600 mm	#30	3.7	58.7	
0.425 mm	#40	4.0	54.7	
0.150 mm	#100	17.5	37.2	
0.075 mm	#200	15.4	21.8	
Pan		21.8		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NSG-GCM_12-12-12-10	**Project Number:**	120458
Source:	Sevenson Environmental Services Inc.	**Lab Number:**	12-1055B
Date Sampled:	12/12/2012	**Sampled By:**	Client
Date Tested:	12/17/2012	**Tested By:**	Jared Vassell

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-1055B	NSG-GCM_12-12-12-10	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	2.0	98.0	
25.0 mm	1"	5.3	92.7	
19.0 mm	3/4"	3.9	88.8	
12.5 mm	1/2"	3.8	85.0	
6.3 mm	1/4"	5.0	80.0	
4.75 mm	#4	2.6	77.4	
2.00 mm	#10	7.2	70.2	
0.850 mm	#20	7.8	62.4	
0.600 mm	#30	3.7	58.7	
0.425 mm	#40	4.0	54.7	
0.150 mm	#100	17.5	37.2	
0.075 mm	#200	15.4	21.8	
Pan		21.8		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Advance Testing

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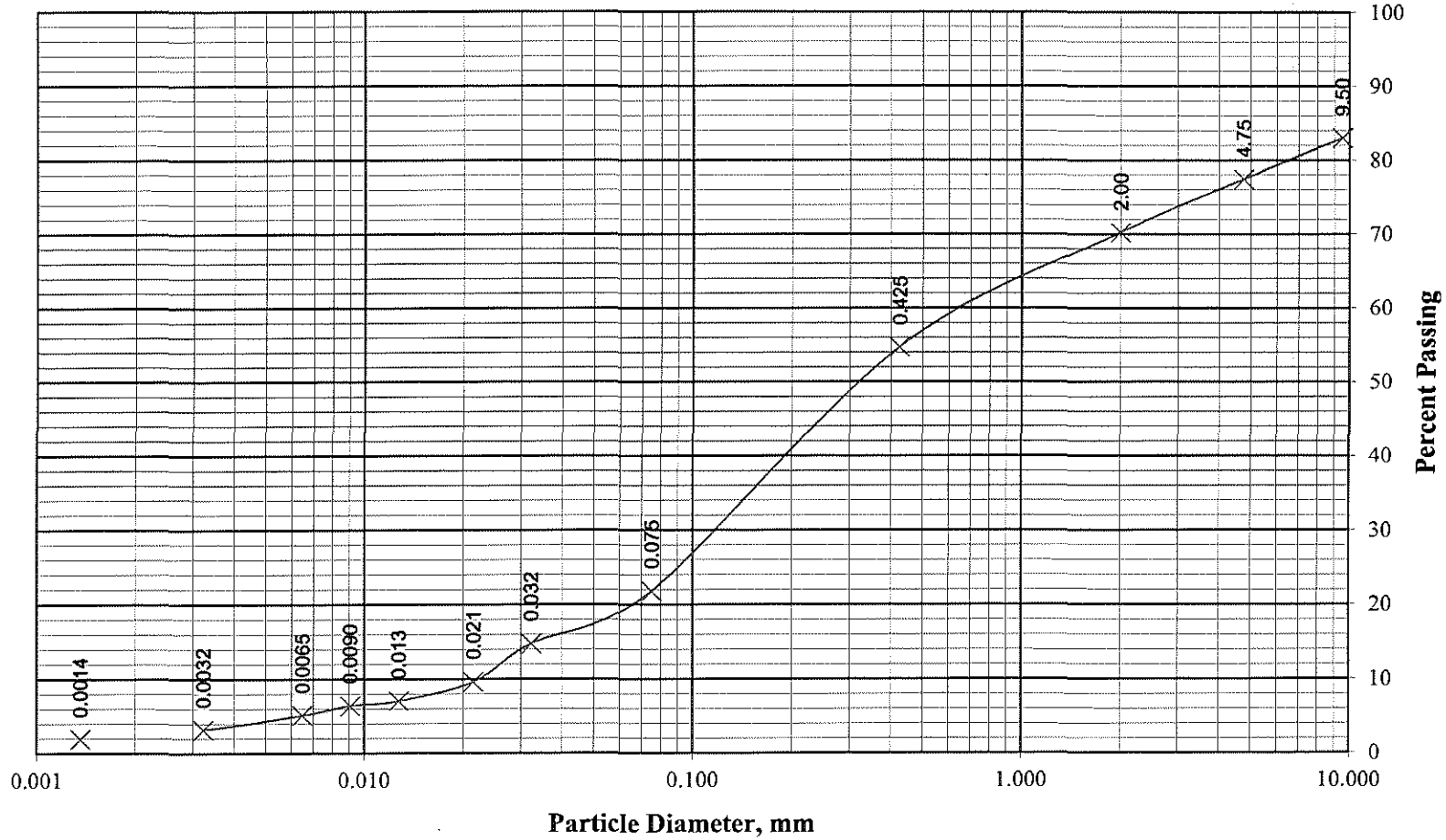
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Item:	NSG-GCM_12-12-12-10	**Project Number:**	120458
Source:	Sevenson Environmental Services Inc.	**Lab Number:**	12-1055B
Location:	Stockpile	**Item Number:**	No Specifications Available
Date Sampled:	12/12/2012	**Sampled By:**	Client
Date Tested:	12/19/2012-12/19/2012	**Tested By:**	John Brinsfield



TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on reverse side prior to initiating this form)*	DATE 01/7/13	Submittal No. 0022

SECTION I – REQUEST FOR APROVAL OF THE FOLLOWING ITEMS

TO:	FROM:	General Electric Company Purchase Order Number:	CHECK ONE:
Construction Manager ATTN: Mark Gravelding, P.E. ARCADIS 6723 Towpath Road Syracuse, NY 13214 Email: mark.gravelding@arcadis-us.comm	Sevenson Environmental Services, Inc. 2749 Lockport Road Niagara Falls, New York 14305		X THIS IS A NEW TRANSMITTAL THIS IS A RESUBMITTAL OF TRANSMITTAL

SPECIFICATION SEC. NO: (Cover only one section with each transmittal) 313219	PROJECT TITLE AND LOCATION: **Silver Lake Removal Action Area** Pittsfield, MA 01201	CHECK ONE: THIS TRANSMITTAL IS FOR FIO X APPROVAL

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.)	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. *(See instruction No. 8)*	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT SPEC. PARA NO.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO.	FOR CONTRACTOR USE CODE	VARIATION (See Instruction No. 6)	FOR CE USE CODE
a.	*b.*	*c.*	*d.*	*e.*	*f.*	*g.*	*h.*	*i.*
8	Granular Cap Material/Nichols Sand and Gravel Hinsdale Pit Identification of proposed source. Sample ID's (NSG-GCM-12-14-12-11 and NSG-GCM-12-14-12-12)			312323 (Part 1.04)	26			
9	Granular Cap Material article/sieve analysis (ASTM D 422), hydrometer analysis results for (2) samples			312323 (Part 1.04)	26			
	(1) sample per 500CY							

REMARKS	I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated. **Name (TITLE)** Michael W. Muth - Project Manager NAME AND SIGNATURE OF CONTRACTOR

SECTION II – APPROVAL ACTION

ENCLOSURES RETURNED *(List by Item No.)*	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

ENG FORM 4025-R, MAR 95 *(ER 415-1-10)* **EDITION OF SEP 93 IS OBSOLETE** SHEET __1_ OF _1_ (PROPONENT: CEMP-CE)

Noted for Submittal #0022:
This material has slightly more gravel than recommended by the specification and therefore slightly less sand and/or silt/clay; however, the percentage of gravel is still less than 25% and the percentage of silt/clay is still more than 16%. This material is considered acceptable for its intended use.

☐ REVIEWED ☐ REJECTED
☒ REVIEWED & NOTED ☐ For information only
☐ REVISE & RESUBMIT ☐ Received, no action taken

Reviewed solely for general conformance with contract documents
ARCADIS of New York, Inc.

Signature 1/8/13 Date

Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NSG-GCM-12-14-12-11	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	12-1067A
Date Sampled:	12/14/2012	**Sampled By:**	Client
Date Tested:	12/18/2012	**Tested By:**	Jared Vassell

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-1067A	NSG-GCM-12-14-12-11	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	1.8	98.2	
19.0 mm	3/4"	2.3	95.9	
12.5 mm	1/2"	3.0	92.9	
6.3 mm	1/4"	4.4	88.5	
4.75 mm	#4	1.6	86.9	
2.00 mm	#10	6.5	80.4	
0.850 mm	#20	8.5	71.9	
0.600 mm	#30	4.6	67.3	
0.425 mm	#40	5.6	61.7	
0.150 mm	#100	21.5	40.2	
0.075 mm	#200	17.0	23.2	
Pan		23.2		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Advance Testing
3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Item:	NSG-GCM-12-14-12-11	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	12-1067A
Location:	Stockpile	**Item Number:**	No Specifications Available
Date Sampled:	12/14/2012	**Sampled By:**	Client
Date Tested:	12/21/2012-12/21/2012	**Tested By:**	John Brinsfield

PARTICLE SIZE ANALYSIS BY SIEVE AND HYDROMETER METHOD

Test Method: ASTM D422

Sieve Size	Particle Diameter, mm	Percent Passing	Specification
3/8"	9.50	90.5	
#4	4.75	86.9	
#10	2.00	80.4	
#40	0.425	61.7	
#200	0.075	23.2	
Hydrometer Analysis Results	0.050	17.7	
	0.020	10.4	
	0.010	6.8	
	0.005	4.3	
	0.002	2.5	
	0.001		

SOIL SPECIFIC GRAVITY: 2.67 (As reported separately, or estimated.)
DISPERSION METHOD: Mechanical, 1 min.
SAND & GRAVEL PARTICLES: Hard subrounded particles

Comments:

COMPOSITION SUMMARY (USDA SIZE DESIGNATIONS)		
Gravel	(3 inches to #10)	19.6%
	Fraction Passing #10:	
Sand	(#10 to 0.05 mm)	78.0%
Silt	(0.05 mm to 0.002 mm)	18.9%
Clay	(Less than 0.002 mm)	3.1%
Total		100.0%
USDA Soil Textural Class	Loamy Sand	

REPORT REVIEWED BY: Emily J. Rodriguez

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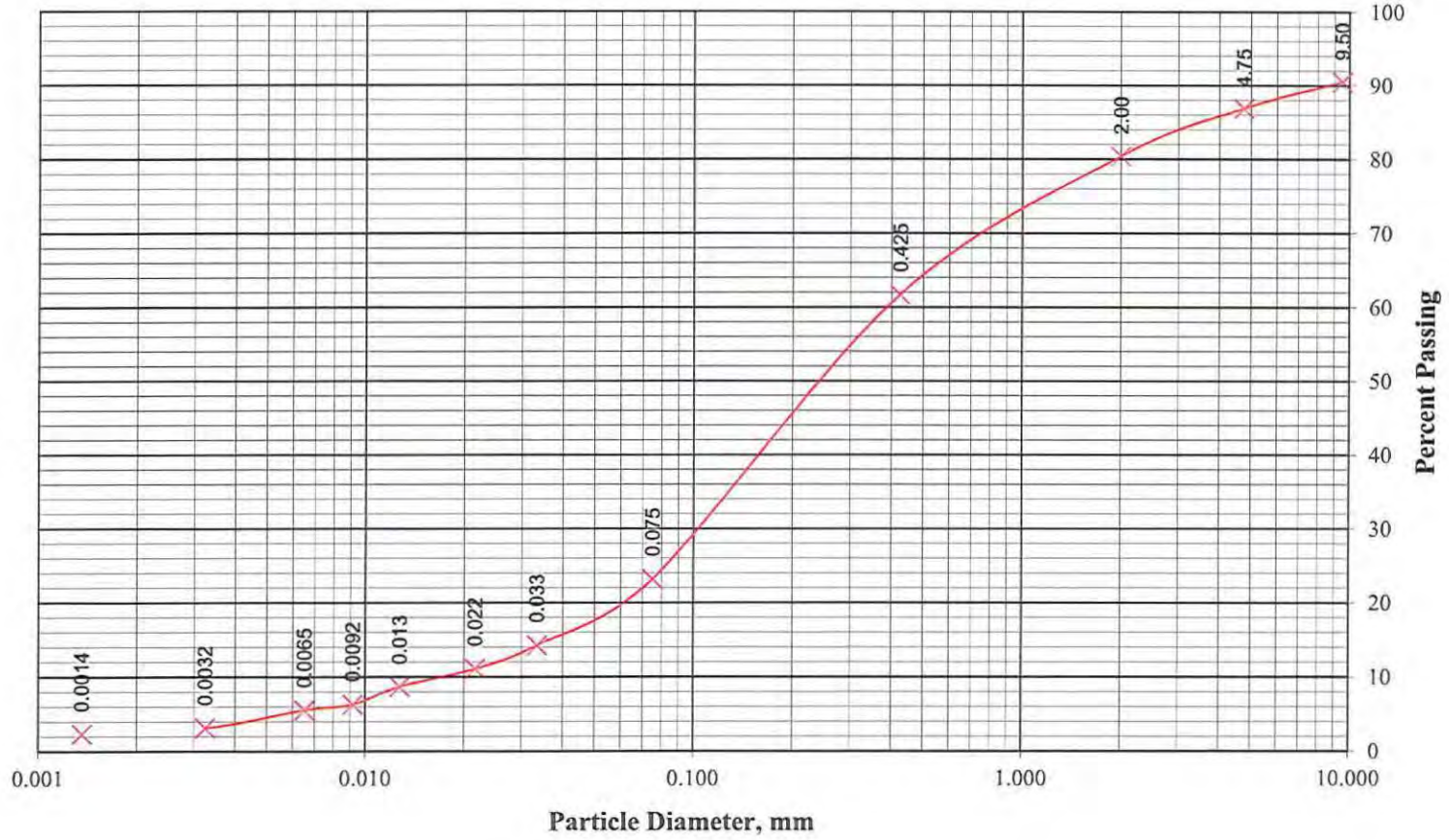
Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Item:	NSG-GCM-12-14-12-11	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	12-1067A
Location:	Stockpile	**Item Number:**	No Specifications Available
Date Sampled:	12/14/2012	**Sampled By:**	Client
Date Tested:	12/21/2012-12/21/2012	**Tested By:**	John Brinsfield



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25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NSG-GCM-12-14-12-12	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	12-1067B
Date Sampled:	12/14/2012	**Sampled By:**	Client
Date Tested:	12/18/2012	**Tested By:**	Jared Vassell

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
12-1067B	NSG-GCM-12-14-12-12	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	4.6	95.4	
19.0 mm	3/4"	1.1	94.3	
12.5 mm	1/2"	3.7	90.6	
6.3 mm	1/4"	4.2	86.4	
4.75 mm	#4	0.5	85.9	
2.00 mm	#10	3.3	82.6	
0.850 mm	#20	6.2	76.4	
0.600 mm	#30	3.8	72.6	
0.425 mm	#40	4.9	67.7	
0.150 mm	#100	19.8	47.9	
0.075 mm	#200	17.5	30.4	
Pan		30.4		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Item:	NSG-GCM-12-14-12-12	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	12-1067B
Location:	Stockpile	**Item Number:**	No Specifications Available
Date Sampled:	12/14/2012	**Sampled By:**	Client
Date Tested:	12/21/2012-12/21/2012	**Tested By:**	John Brinsfield

PARTICLE SIZE ANALYSIS BY SIEVE AND HYDROMETER METHOD

Test Method: ASTM D422

Sieve Size	Particle Diameter, mm	Percent Passing	Specification
3/8"	9.50	88.7	
#4	4.75	85.9	
#10	2.00	82.6	
#40	0.425	67.7	
#200	0.075	30.4	
Hydrometer Analysis Results	0.050	22.0	
	0.020	7.3	
	0.010	6.0	
	0.005	4.1	
	0.002	2.6	
	0.001		

SOIL SPECIFIC GRAVITY: 2.67 (As reported separately, or estimated.)
DISPERSION METHOD: Mechanical, 1 min.
SAND & GRAVEL PARTICLES: Hard subrounded particles

Comments:

COMPOSITION SUMMARY (USDA SIZE DESIGNATIONS)		
Gravel	(3 inches to #10)	17.4%
	Fraction Passing #10:	
Sand	(#10 to 0.05 mm)	73.4%
Silt	(0.05 mm to 0.002 mm)	23.5%
Clay	(Less than 0.002 mm)	3.1%
Total		100.0%
USDA Soil Textural Class	Loamy Sand	

REPORT REVIEWED BY: Emily J. Rodriguez

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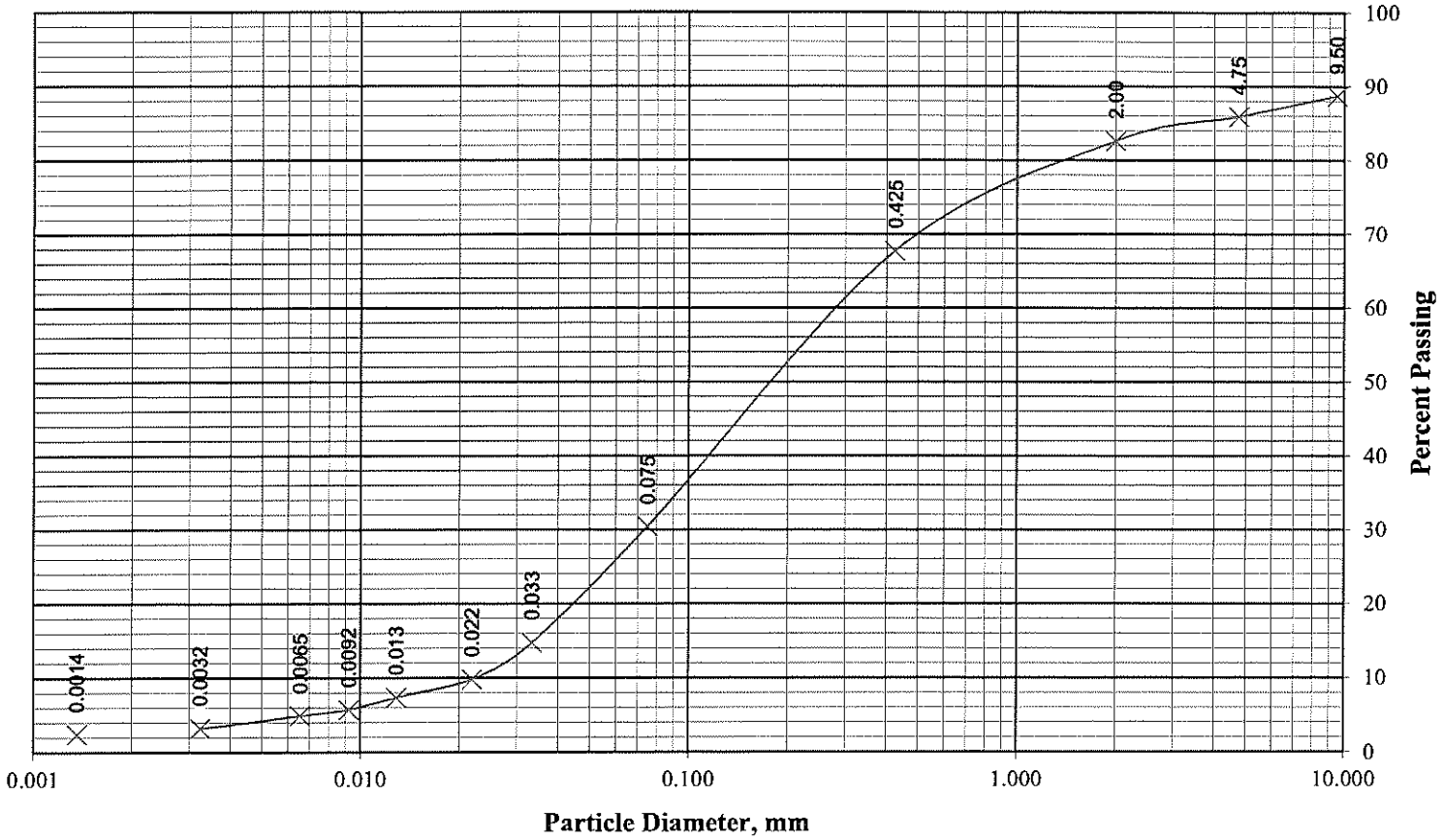
Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Item:	NSG-GCM-12-14-12-12	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	12-1067B
Location:	Stockpile	**Item Number:**	No Specifications Available
Date Sampled:	12/14/2012	**Sampled By:**	Client
Date Tested:	12/21/2012-12/21/2012	**Tested By:**	John Brinsfield



TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on reverse side prior to initiating this form)*	DATE 04/05/12	Submittal No. 0023

SECTION I – REQUEST FOR APROVAL OF THE FOLLOWING ITEMS

TO:	FROM:	General Electric Company Purchase Order Number:	CHECK ONE:
Construction Manager ATTN: Mark Gravelding, P.E. ARCADIS 6723 Towpath Road Syracuse, NY 13214 Email: mark.gravelding@arcadis-us.comm	Sevenson Environmental Services, Inc. 2749 Lockport Road Niagara Falls, New York 14305		**X** THIS IS A NEW TRANSMITTAL THIS IS A RESUBMITTAL OF TRANSMITTAL

SPECIFICATION SEC. NO: (Cover only one section with each transmittal) 312323	PROJECT TITLE AND LOCATION: **Silver Lake Removal Action Area** Pittsfield, MA 01201	CHECK ONE: THIS TRANSMITTAL IS FOR FIO X APPROVAL

ITEM NO.	**DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.)**	**MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. *(See instruction No. 8)***	**NO. OF COPIES**	**CONTRACT REFERENCE DOCUMENT SPEC. PARA NO.**	**CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO.**	**FOR CONTRACTOR USE CODE**	**VARIATION (See Instruction No. 6)**	**FOR CE USE CODE**
a.	***b.***	***c.***	***d.***	***e.***	***f.***	***g.***	***h.***	***i.***
8	Armor stone/riprap material sample results (D50 -10'') Sampled at Lucia pit on Farnum Rd in Cheshire, MA 01225.			**312323 (Part 1.04)**	26			
9	Gradation testing for armor stone/riprap (D50-10''). Particle size distribution using ASTM D55 19-94			**312323 (Part 1.04)**	26			
	Includes field notes and material photographs							

REMARKS	I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated. **Name (TITLE)** Michael W. Muth - Project Manager NAME AND SIGNATURE OF CONTRACTOR

SECTION II – APPROVAL ACTION

ENCLOSURES RETURNED *(List by Item No.)*	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

ENG FORM 4025-R, MAR 95 *(ER 415-1-10)* **EDITION OF SEP 93 IS OBSOLETE** SHEET __1_ OF _1_ (PROPONENT: CEMP-CE)

Submittal 0023 -
D50 10-inch stone

Date: 4/5/2013 Technician: Joe Mahoney
Item: D50 = 10" Dom Massaro
Plant: Lucia

Sieve Size	# Retained	% Retained	% Passing		SPEC
15"	0	0.00	100.00		100
14"	7	11.11	88.89		
13"	5	7.94	80.95		
12"	3	4.76	76.19		
11"	12	19.05	57.14		
10"	5	7.94	49.21		50
9"	9	14.29	34.92		
8"	9	14.29	20.63		
7"	6	9.52	11.11		
6"	7	11.11	0.00		
5"	0	0.00	0.00		0
Total	63	100.00			

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on reverse side prior to initiating this form)*	**DATE** 04/29/13	**Submittal No.** 0024

SECTION I – REQUEST FOR APROVAL OF THE FOLLOWING ITEMS

TO:	FROM:	General Electric Company Purchase Order Number:	CHECK ONE:
Construction Manager ATTN: Mark Gravelding, P.E. ARCADIS 6723 Towpath Road Syracuse, NY 13214 Email: mark.gravelding@arcadis-us.comm	Sevenson Environmental Services, Inc. 2749 Lockport Road Niagara Falls, New York 14305		X THIS IS A NEW TRANSMITTAL THIS IS A RESUBMITTAL OF TRANSMITTAL
SPECIFICATION SEC. NO: (Cover only one section with each transmittal) 313219	PROJECT TITLE AND LOCATION: **Silver Lake Removal Action Area** Pittsfield, MA 01201		CHECK ONE: THIS TRANSMITTAL IS FOR FIO X APPROVAL

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.)	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. *(See instruction No. 8)*	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT: SPEC. PARA NO.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO.	FOR CONTRACTOR USE CODE	VARIATION (See Instruction No. 6)	FOR CE USE CODE
a.	*b.*	*c.*	*d.*	*e.*	*f.*	*g.*	*h.*	*i.*
8	Granular Cap Material / Nichols Sand and Gravel Hinsdale Pit Identification of proposed source. Sample ID's (NSG-4-8-13-GCM-13 and NSG-4-8-13-GCM-14)			312323 (Part 1.04)	26			
9	Granular Cap Material article/sieve analysis (ASTM D 422), hydrometer analysis results for (2) samples			312323 (Part 1.04)	26			
	(1) sample per 500CY							

REMARKS	I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated. Name (TITLE) Michael W. Muth - Project Manager NAME AND SIGNATURE OF CONTRACTOR

SECTION II – APPROVAL ACTION

ENCLOSURES RETURNED *(List by Item No.)*	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

ENG FORM 4025-R, MAR 95 *(ER 415-1-10)* **EDITION OF SEP 93 IS OBSOLETE** SHEET __1_ OF _1_ (PROPONENT: CEMP-CE)

Noted for Submittal #0024:
This material has slightly more gravel than recommended by the specification and therefore slightly less sand and/or silt/clay; however, review of the USCS Size Designations, indicates the percentage of gravel is still less than 25% and the percentage of silt/clay is still more than 16%. This material is considered acceptable for its intended use.

Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NSG-4-8-13-GCM-13	**Project Number:**	120458
Source:	Sevenson Envrionmental	**Lab Number:**	13-0190A
Date Sampled:	4/8/2013	**Sampled By:**	Client
Date Tested:	4/10/2013	**Tested By:**	John Brinsfield

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
13-0190A	NSG-4-8-13-GCM-13	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	2.0	98.0	
19.0 mm	3/4"	1.3	96.7	
12.5 mm	1/2"	3.3	93.4	
6.3 mm	1/4"	7.1	86.3	
4.75 mm	#4	2.4	83.9	
2.00 mm	#10	8.1	75.8	
0.850 mm	#20	9.6	66.2	
0.600 mm	#30	4.2	62.0	
0.425 mm	#40	4.2	57.8	
0.150 mm	#100	20.8	37.0	
0.075 mm	#200	16.1	20.9	
Pan		20.9		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
12960 Commerce Lake Drive, A14, Fort Myers, FL 33913
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Item:	NSG-4-8-13-GCM-13	**Project Number:**	120458
Source:	Sevenson Envrionmental	**Lab Number:**	13-0190A
Location:	Stockpile	**Item Number:**	No Specifications Available
Date Sampled:	4/8/2013	**Sampled By:**	Client
Date Tested:	4/23/2013-04/20/2013	**Tested By:**	John Brinsfield

PARTICLE SIZE ANALYSIS BY SIEVE AND HYDROMETER METHOD

Test Method: AASHTO T88

Sieve Size	Particle Diameter, mm	Percent Passing	Specification
3/8"	9.50	90.1	
#4	4.75	83.9	
#10	2.00	75.8	
#40	0.425	57.8	
#200	0.075	20.9	
Hydrometer Analysis Results	0.050	14.7	
	0.020	7.2	
	0.010	5.1	
	0.005	2.3	
	0.002	1.8	
	0.001		

SOIL SPECIFIC GRAVITY: 2.67 (As reported separately, or estimated.)

DISPERSION METHOD: Mechanical, 1 min.

SAND & GRAVEL PARTICLES: Hard subrounded particles

Comments:

COMPOSITION SUMMARY (USDA SIZE DESIGNATIONS)		
Gravel	(3 inches to #10)	24.2%
	Fraction Passing #10:	
Sand	(#10 to 0.05 mm)	80.6%
Silt	(0.05 mm to 0.002 mm)	17.0%
Clay	(Less than 0.002 mm)	2.4%
Total		100.0%
USDA Soil Textural Class	Loamy Sand	

Emily J. Rodriguez

REPORT REVIEWED BY: _____

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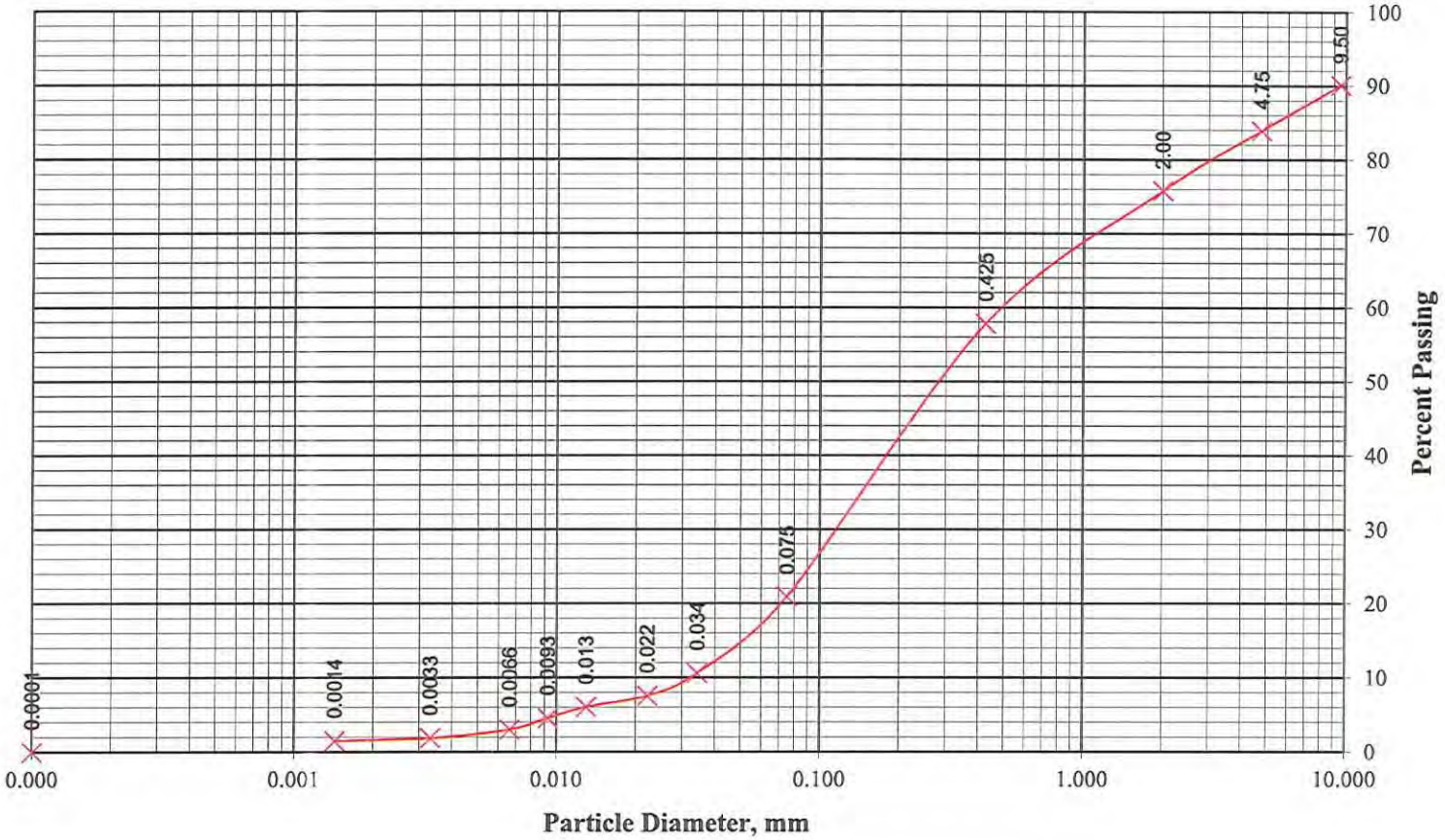
Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
12960 Commerce Lake Drive, A14, Fort Myers, FL 33913
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Item:	NSG-4-8-13-GCM-13	**Project Number:**	120458
Source:	Sevenson Envrionmental	**Lab Number:**	13-0190A
Location:	Stockpile	**Item Number:**	No Specifications Available
Date Sampled:	4/8/2013	**Sampled By:**	Client
Date Tested:	4/23/2013-04/20/2013	**Tested By:**	John Brinsfield



Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NSG-4-8-13-GCM - 14	**Project Number:**	120458
Source:	Sevenson Envrionmental	**Lab Number:**	13-0190B
Date Sampled:	4/8/2013	**Sampled By:**	Client
Date Tested:	4/10/2013	**Tested By:**	John Brinsfield

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
13-0190B	NSG-4-8-13-GCM	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.6	99.4	
19.0 mm	3/4"	1.7	97.7	
12.5 mm	1/2"	4.6	93.1	
6.3 mm	1/4"	6.8	86.3	
4.75 mm	#4	1.5	84.8	
2.00 mm	#10	8.7	76.1	
0.850 mm	#20	11.0	65.1	
0.600 mm	#30	4.5	60.6	
0.425 mm	#40	5.1	55.5	
0.150 mm	#100	21.5	34.0	
0.075 mm	#200	15.7	18.3	
Pan		18.3		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Phone: 845-496-1600 Fax: 845-496-1398
12960 Commerce Lake Drive, A14, Fort Myers, FL 33913
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Item:	NSG-4-8-13-GCM 14	**Project Number:**	120458
Source:	Sevenson Envrionmental	**Lab Number:**	13-0190B
Location:	Stockpile	**Item Number:**	No Specifications Available
Date Sampled:	4/8/2013	**Sampled By:**	Client
Date Tested:	4/23/2013-04/20/2013	**Tested By:**	John Brinsfield

PARTICLE SIZE ANALYSIS BY SIEVE AND HYDROMETER METHOD

Test Method: AASHTO T88

Sieve Size	Particle Diameter, mm	Percent Passing	Specification
3/8"	9.50	90.4	
#4	4.75	84.8	
#10	2.00	76.1	
#40	0.425	55.5	
#200	0.075	18.3	
Hydrometer Analysis Results	0.050	12.6	
	0.020	6.5	
	0.010	4.3	
	0.005	3.6	
	0.002	2.2	
	0.001		

SOIL SPECIFIC GRAVITY: 2.67 (As reported separately, or estimated.)

DISPERSION METHOD: Mechanical, 1 min.

SAND & GRAVEL PARTICLES: Hard subrounded particles

Comments:

COMPOSITION SUMMARY (USDA SIZE DESIGNATIONS)		
Gravel	(3 inches to #10)	23.9%
	Fraction Passing #10:	
Sand	(#10 to 0.05 mm)	83.4%
Silt	(0.05 mm to 0.002 mm)	13.7%
Clay	(Less than 0.002 mm)	2.9%
Total		100.0%
USDA Soil Textural Class		

REPORT REVIEWED BY: Emily J. Rodriguez

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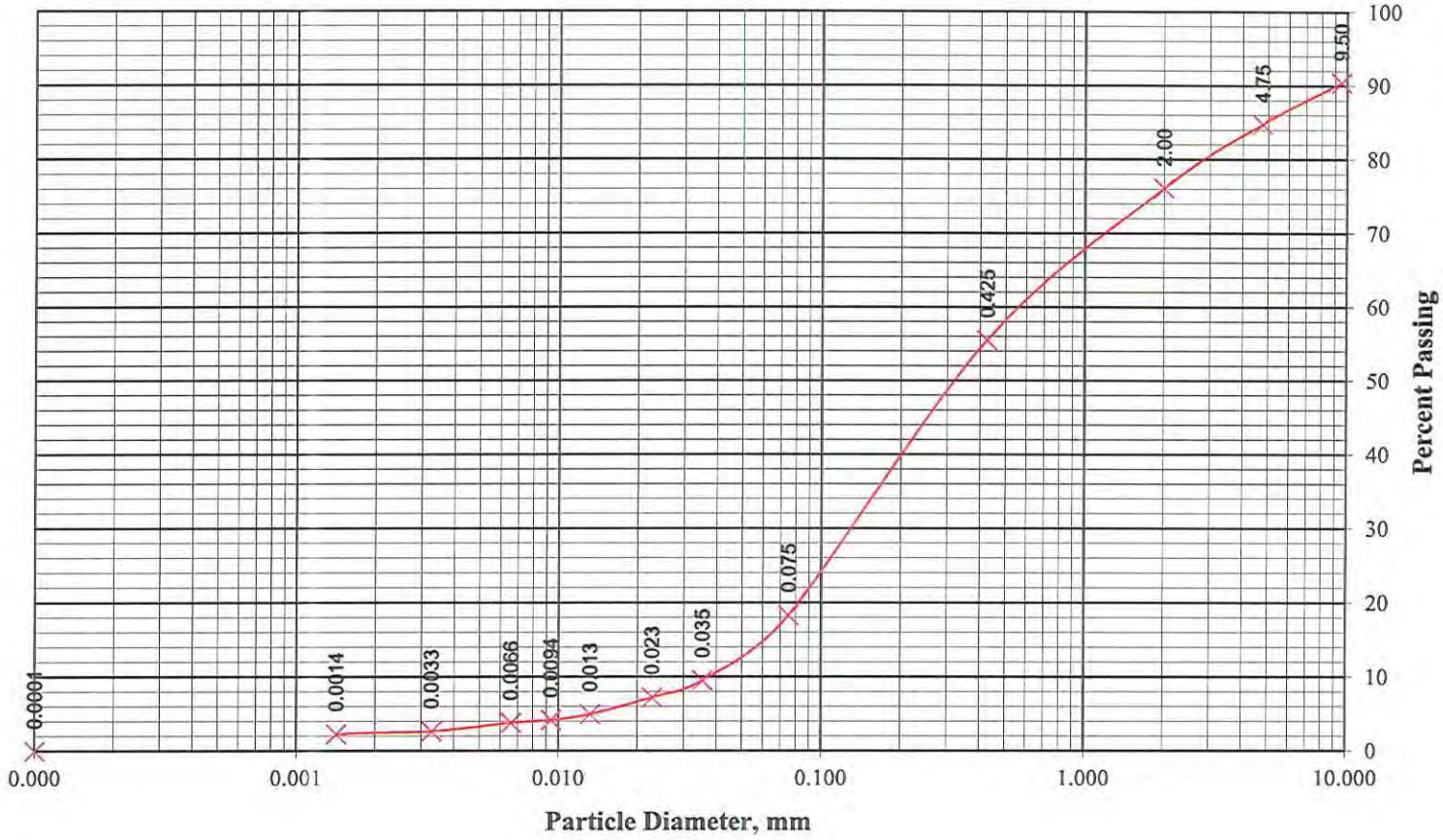
3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
12960 Commerce Lake Drive, A14, Fort Myers, FL 33913
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Item:	NSG-4-8-13-GCM 14	**Project Number:**	120458
Source:	Sevenson Envrionmental	**Lab Number:**	13-0190B
Location:	Stockpile	**Item Number:**	No Specifications Available
Date Sampled:	4/8/2013	**Sampled By:**	Client
Date Tested:	4/23/2013-04/20/2013	**Tested By:**	John Brinsfield



TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on reverse side prior to initiating this form)*	DATE 5/13/12	Submittal No. 0027

SECTION I – REQUEST FOR APROVAL OF THE FOLLOWING ITEMS

TO:	FROM:	General Electric Company Purchase Order Number:	CHECK ONE:
Construction Manager ATTN: Mark Gravelding, P.E. ARCADIS 6723 Towpath Road Syracuse, NY 13214 Email: mark.gravelding@arcadis-us.comm	Sevenson **Environmental** Services, Inc. 2749 Lockport Road Niagara Falls, New York 14305		**X** THIS IS A NEW TRANSMITTAL THIS IS A RESUBMITTAL OF TRANSMITTAL

SPECIFICATION SEC. NO: (Cover only one section with each transmittal) 313219	PROJECT TITLE AND LOCATION: **Silver Lake Removal Action Area** Pittsfield, MA 01201	CHECK ONE: THIS TRANSMITTAL IS FOR FIO X APPROVAL

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.)	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. *(See Instruction No. 8)*	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT SPEC. PARA NO.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO.	FOR CONTRACTOR USE CODE	VARIATION (See Instruction No. 6)	FOR CE USE CODE
a.	*b.*	*c.*	*d.*	*e.*	*f.*	*g.*	*h.*	*i.*
8	Compost from Century Acquisitions – Colonie Town Landfill – 1319 New Loudon Rd Cohoes, NY 12047			**312323 (Part 2.01)**	26			
9	Compost. Particle/sieve size and Hydrometer analysis (ASTM D422) results of (1) sample			**312323 (Part 2.01)**	26			

REMARKS	I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated. **Name (TITLE)** Michael W. Muth - Project Manager NAME AND SIGNATURE OF CONTRACTOR

SECTION II – APPROVAL ACTION

ENCLOSURES RETURNED *(List by Item No.)*	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

ENG FORM 4025-R, MAR 95 *(ER 415-1-10)* **EDITION OF SEP 93 IS OBSOLETE** SHEET __1_ OF _1_ (PROPONENT: CEMP-CE)

Noted for Submittal #0027 (compost grain size results):
The grain size results have been reviewed under the assumption that this material will be blended with dead sand material from Petricca Hinsdale Pit to create the capping material. Using USCS Size Designations, the calculated grain size of the blended material has slightly more sand and gravel than recommended by the specification and therefore slightly less silt/clay; however, this material is considered acceptable for its intended use.

Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	CA-COMP-4-17-13-1	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	13-0263
Date Sampled:	4/17/2013	**Sampled By:**	Client
Date Tested:	5/1/2013	**Tested By:**	Patrick Kiernan

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
13-0263	CA-COMP-4-17-13-1	In-Place	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.0	100.0	
12.5 mm	1/2"	0.0	100.0	
6.3 mm	1/4"	3.4	96.6	
4.75 mm	#4	5.2	91.4	
2.00 mm	#10	24.0	67.4	
0.850 mm	#20	20.8	46.6	
0.600 mm	#30	7.9	38.7	
0.425 mm	#40	7.3	31.4	
0.150 mm	#100	18.9	12.5	
0.075 mm	#200	8.1	4.4	
Pan		4.4		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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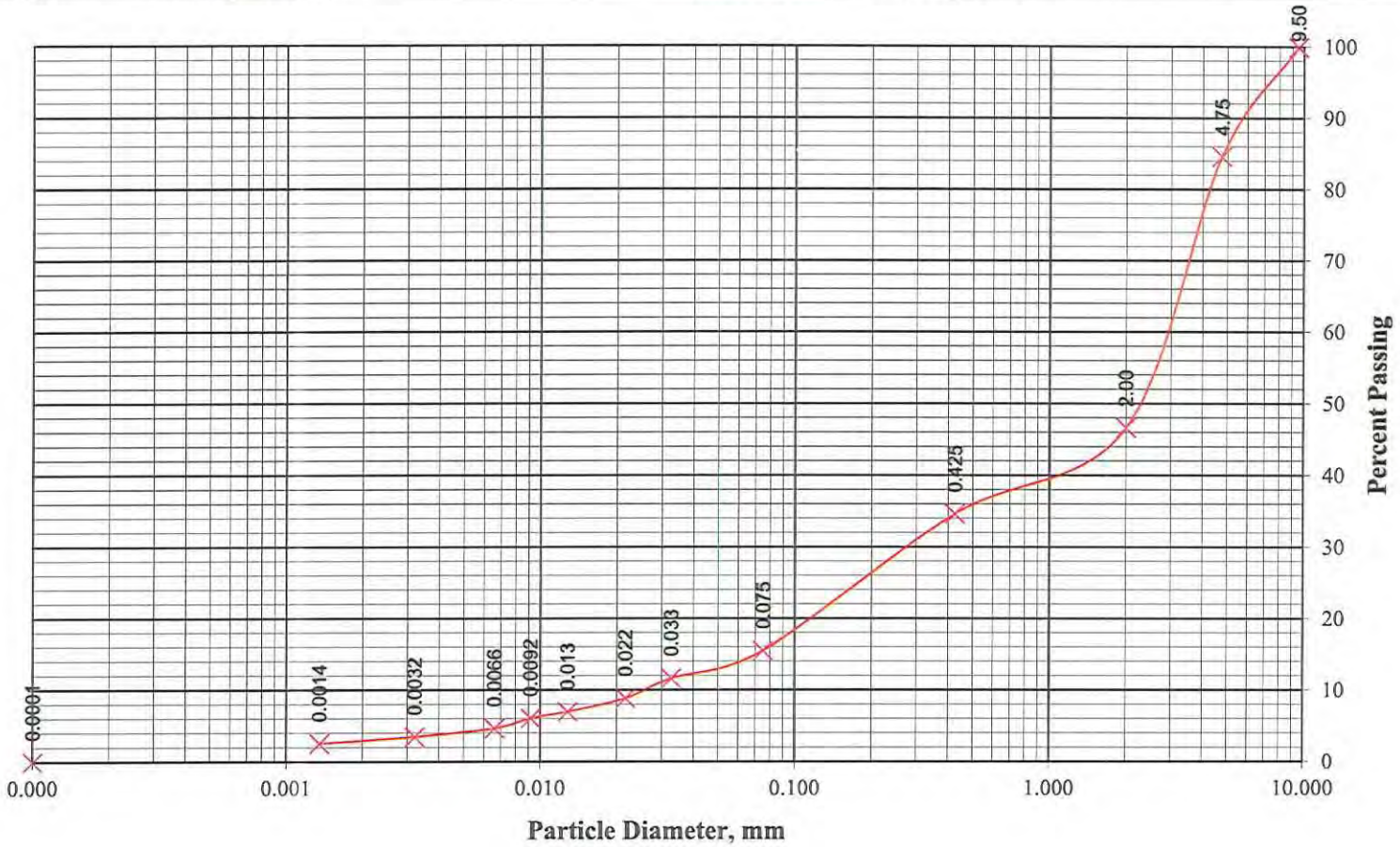
Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
12960 Commerce Lake Drive, A14, Fort Myers, FL 33913
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Item:	CA-COMP-4-17-13-1	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	13-0263
Location:	In-Place	**Item Number:**	ASTM D422
Date Sampled:	4/17/2013	**Sampled By:**	Client
Date Tested:	5/10/2013-05/03/2013	**Tested By:**	John Brinsfield



Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
12960 Commerce Lake Drive, A14, Fort Myers, FL 33913
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Item:	CA-COMP-4-17-13-1	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	13-0263
Location:	In-Place	**Item Number:**	ASTM D422
Date Sampled:	4/17/2013	**Sampled By:**	Client
Date Tested:	5/10/2013-05/03/2013	**Tested By:**	John Brinsfield

PARTICLE SIZE ANALYSIS BY SIEVE AND HYDROMETER METHOD

Test Method: ASTM D422

Sieve Size	Particle Diameter, mm	Percent Passing	Specification
3/8"	9.50	99.9	
#4	4.75	84.6	
#10	2.00	46.6	
#40	0.425	34.6	
#200	0.075	15.5	
Hydrometer Analysis Results	0.050	13.1	
	0.020	8.4	
	0.010	6.2	
	0.005	4.1	
	0.002	3.0	
	0.001		

SOIL SPECIFIC GRAVITY: 2.67 (As reported separately, or estimated.)

DISPERSION METHOD: Mechanical, 1 min.

SAND & GRAVEL PARTICLES: Hard subrounded particles

Comments:

COMPOSITION SUMMARY (USDA SIZE DESIGNATIONS)		
Gravel	(3 inches to #10)	53.4%
	Fraction Passing #10:	
Sand	(#10 to 0.05 mm)	33.5%
Silt	(0.05 mm to 0.002 mm)	10.1%
Clay	(Less than 0.002 mm)	3.0%
Total		100.0%
USDA Soil Textural Class	Silt Loam	

REPORT REVIEWED BY: Emily J. Rodriguez

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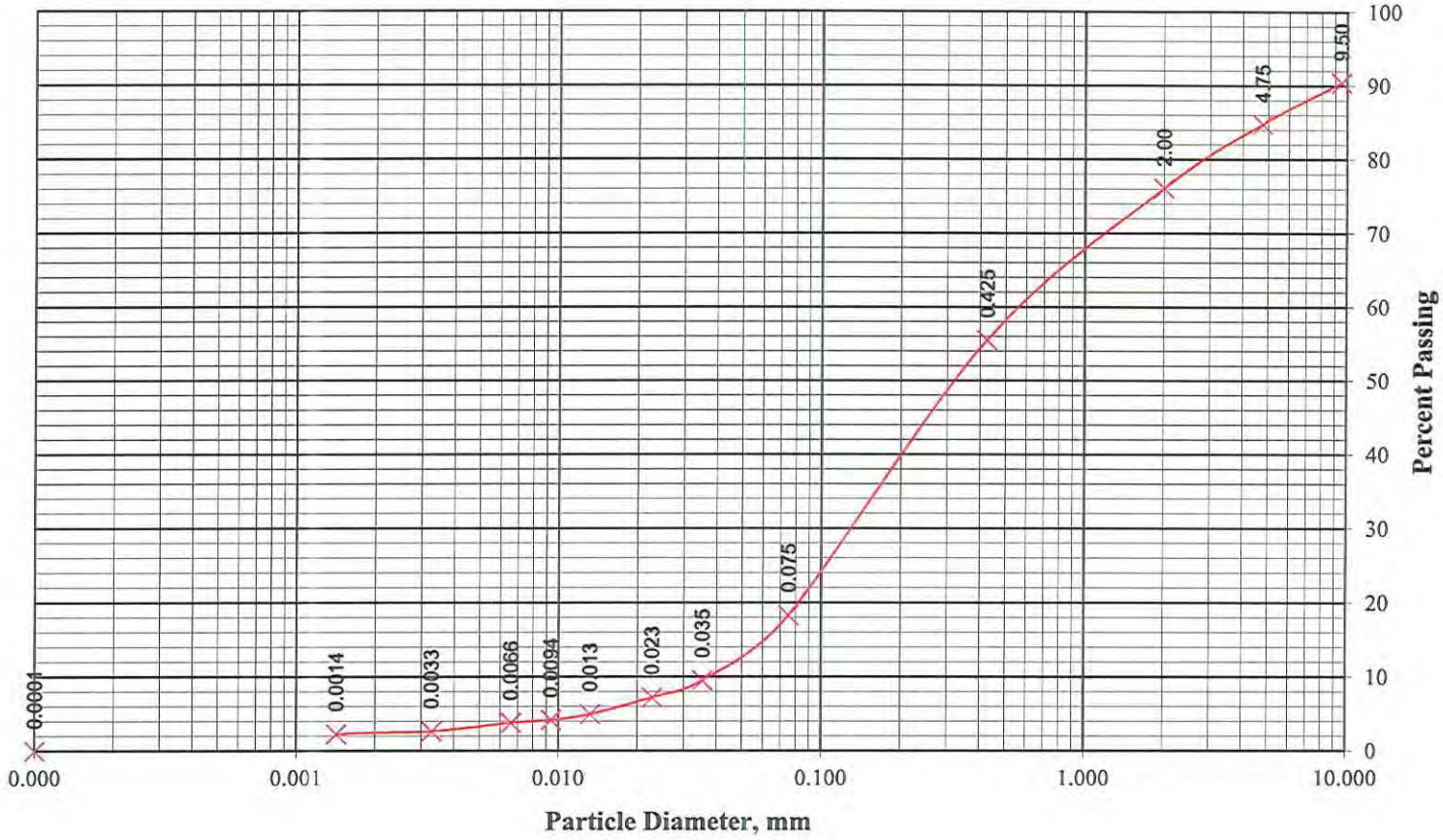
Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
12960 Commerce Lake Drive, A14, Fort Myers, FL 33913
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Item:	NSG-4-8-13-GCM 14	**Project Number:**	120458
Source:	Sevenson Envrionmental	**Lab Number:**	13-0190B
Location:	Stockpile	**Item Number:**	No Specifications Available
Date Sampled:	4/8/2013	**Sampled By:**	Client
Date Tested:	4/23/2013-04/20/2013	**Tested By:**	John Brinsfield



TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on reverse side prior to initiating this form)*	DATE 5/13/12	Submittal No. 0028

SECTION I – REQUEST FOR APROVAL OF THE FOLLOWING ITEMS

TO:	FROM:	General Electric Company Purchase Order Number:	CHECK ONE:
Construction Manager ATTN: Mark Gravelding, P.E. ARCADIS 6723 Towpath Road Syracuse, NY 13214 Email: mark.gravelding@arcadis-us.comm	Sevenson **Environmental** Services, Inc. 2749 Lockport Road Niagara Falls, New York 14305		X THIS IS A NEW TRANSMITTAL THIS IS A RESUBMITTAL OF TRANSMITTAL

SPECIFICATION SEC. NO: (Cover only one section with each transmittal) 313219	PROJECT TITLE AND LOCATION: **Silver Lake Removal Action Area** Pittsfield, MA 01201	CHECK ONE: THIS TRANSMITTAL IS FOR FIO X APPROVAL

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.)	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. *(See Instruction No. 8)*	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT SPEC. PARA NO.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO.	FOR CONTRACTOR USE CODE	VARIATION (See Instruction No. 6)	FOR CE USE CODE
a.	*b.*	*c.*	*d.*	*e.*	*f.*	*g.*	*h.*	*i.*
8	Dead sand from Petricca Hinsdale, MA			**312323 (Part 2.01)**	26			
9	Dead Sand. Particle/sieve size and Hydrometer analysis (ASTM D422) results of (2) samples			**312323 (Part 2.01)**	26			

REMARKS	I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated. **Name (TITLE)** Michael W. Muth - Project Manager NAME AND SIGNATURE OF CONTRACTOR

SECTION II – APPROVAL ACTION

ENCLOSURES RETURNED *(List by Item No.)*	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

ENG FORM 4025-R, MAR 95 *(ER 415-1-10)* **EDITION OF SEP 93 IS OBSOLETE** SHEET __1_ OF _1_ (PROPONENT: CEMP-CE)

Noted for Submittal #0028 (dead sand grain size results):
The grain size results have been reviewed under the assumption that this material will be blended with compost material from Century Acquisitions to create the capping material. Using USCS Size Designations, the calculated grain size of the blended material has slightly more sand and gravel than recommended by the specification and therefore slightly less silt/clay; however, this material is considered acceptable for its intended use.

Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	PHP-SAND-05-02-13-1	**Project Number:**	120458
Source:	Sevenson Envrionmental	**Lab Number:**	13-0291A
Date Sampled:	5/2/2013	**Sampled By:**	Client
Date Tested:	5/9/2013	**Tested By:**	John Brinsfield

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
13-0291A	PHP-SAND-05-02-13-1	Unknown	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.0	100.0	
12.5 mm	1/2"	0.0	100.0	
6.3 mm	1/4"	2.8	97.2	
4.75 mm	#4	2.0	95.2	
2.00 mm	#10	11.2	84.0	
0.850 mm	#20	22.5	61.5	
0.600 mm	#30	13.1	48.4	
0.425 mm	#40	15.1	33.3	
0.150 mm	#100	28.4	4.9	
0.075 mm	#200	2.9	2.0	
Pan		2.0		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
12960 Commerce Lake Drive, A14, Fort Myers, FL 33913
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Item:	PHP-SAND-05-02-13-1	**Project Number:**	120458
Source:	Sevenson Envrionmental	**Lab Number:**	13-0291A
Location:	Unknown	**Item Number:**	No Specifications Available
Date Sampled:	5/2/2013	**Sampled By:**	Client
Date Tested:	5/13/2013-05/11/2013	**Tested By:**	John Brinsfield

PARTICLE SIZE ANALYSIS BY SIEVE AND HYDROMETER METHOD

Test Method: AASHTO T88

Sieve Size	Particle Diameter, mm	Percent Passing	Specification
3/8"	9.50	100.0	
#4	4.75	95.2	
#10	2.00	84.0	
#40	0.425	33.3	
#200	0.075	2.0	
Hydrometer Analysis Results	0.050	1.9	
	0.020	1.7	
	0.010	1.6	
	0.005	1.3	
	0.002	1.3	
	0.001		

SOIL SPECIFIC GRAVITY: 2.67 (As reported separately, or estimated.)

DISPERSION METHOD: Mechanical, 1 min.

SAND & GRAVEL PARTICLES: Hard subrounded particles

Comments:

COMPOSITION SUMMARY (USDA SIZE DESIGNATIONS)		
Gravel	(3 inches to #10)	16.0%
Fraction Passing #10:		
Sand	(#10 to 0.05 mm)	82.1%
Silt	(0.05 mm to 0.002 mm)	0.6%
Clay	(Less than 0.002 mm)	1.3%
Total		100.0%
USDA Soil Textural Class	Loamy Sand	

REPORT REVIEWED BY: Emily J. Rodriguez

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3348 Route 208, Campbell Hall, NY 10916
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42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	PHP-SAND-05-02-13-2	**Project Number:**	120458
Source:	Sevenson Envrionmental	**Lab Number:**	13-0291B
Date Sampled:	5/2/2013	**Sampled By:**	Client
Date Tested:	5/9/2013	**Tested By:**	John Brinsfield

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
13-0291B	PHP-SAND-05-02-13-2	Unknown	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.0	100.0	
12.5 mm	1/2"	0.0	100.0	
6.3 mm	1/4"	2.9	97.1	
4.75 mm	#4	2.5	94.6	
2.00 mm	#10	11.2	83.4	
0.850 mm	#20	21.5	61.9	
0.600 mm	#30	10.6	51.3	
0.425 mm	#40	11.9	39.4	
0.150 mm	#100	31.8	7.6	
0.075 mm	#200	4.8	2.8	
Pan		2.8		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
12960 Commerce Lake Drive, A14, Fort Myers, FL 33913
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Item:	PHP-SAND-05-02-13-2	**Project Number:**	120458
Source:	Sevenson Envrionmental	**Lab Number:**	13-0291B
Location:	Unknown	**Item Number:**	No Specifications Available
Date Sampled:	5/2/2013	**Sampled By:**	Client
Date Tested:	5/13/2013-05/11/2013	**Tested By:**	John Brinsfield

PARTICLE SIZE ANALYSIS BY SIEVE AND HYDROMETER METHOD

Test Method: AASHTO T88

Sieve Size	Particle Diameter, mm	Percent Passing	Specification
3/8"	9.50	100.0	
#4	4.75	94.6	
#10	2.00	83.4	
#40	0.425	39.4	
#200	0.075	3.8	
Hydrometer Analysis Results	0.050	2.9	
	0.020	2.1	
	0.010	2.1	
	0.005	1.2	
	0.002	1.2	
	0.001		

SOIL SPECIFIC GRAVITY: 2.67 (As reported separately, or estimated.)

DISPERSION METHOD: Mechanical, 1 min.

SAND & GRAVEL PARTICLES: Hard subrounded particles

Comments:

COMPOSITION SUMMARY (USDA SIZE DESIGNATIONS)		
Gravel	(3 inches to #10)	16.6%
Fraction Passing #10:		
Sand	(#10 to 0.05 mm)	80.5%
Silt	(0.05 mm to 0.002 mm)	1.7%
Clay	(Less than 0.002 mm)	1.2%
Total		100.0%
USDA Soil Textural Class	Loamy Sand	

REPORT REVIEWED BY: Emily J. Rodriguez

PDF

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on reverse side prior to initiating this form)*	DATE 05/17/13	Submittal No. 0029

SECTION I – REQUEST FOR APROVAL OF THE FOLLOWING ITEMS

TO:	FROM:	General Electric Company Purchase Order Number:	CHECK ONE:
Construction Manager ATTN: Mark Gravelding, P.E. ARCADIS 6723 Towpath Road Syracuse, NY 13214 Email: mark.gravelding@arcadis-us.comm	Sevenson Environmental Services, Inc. 2749 Lockport Road Niagara Falls, New York 14305		X THIS IS A NEW TRANSMITTAL THIS IS A RESUBMITTAL OF TRANSMITTAL

SPECIFICATION SEC. NO: (Cover only one section with each transmittal) 313219	PROJECT TITLE AND LOCATION: **Silver Lake Removal Action Area** Pittsfield, MA 01201	CHECK ONE: THIS TRANSMITTAL IS FOR FIO X APPROVAL

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.)	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. *(See Instruction No. 8)*	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT		FOR CONTRACTOR USE CODE	VARIATION (See Instruction No. 6)	FOR CE USE CODE
				SPEC. PARA NO.	DRAWING SHEET NO.			
a.	*b.*	*c.*	*d.*	*e.*	*f.*	*g.*	*h.*	*i.*
8	Granular Cap Material / Nichols Sand and Gravel Hinsdale Pit			**312323 (Part 1.04)**	26			
9	Granular Cap Material article/sieve analysis (ASTM D 422) results for (3) samples each representing 500CY		1	**312323 (Part 1.04)**	26			
	Sample ID # : NSG-CM-05-08-13-1 NSG-CM-05-08-13-2 NSG-CM-05-08-13-3			**312323 (Part 1.04)**	26			
11	60/40 Blend of Granular Cap Material 60%-Topsoil 40%-Sand Screened to 1-inch minus			**312323 (Part 1.04)**	26			

REMARKS	I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated. Name (TITLE) Michael W. Muth - Project Manager NAME AND SIGNATURE OF CONTRACTOR

SECTION II – APPROVAL ACTION

ENCLOSURES RETURNED *(List by Item No.)*	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

ENG FORM 4025-R, MAR 95 *(ER 415-1-10)* **EDITION OF SEP 93 IS OBSOLETE** SHEET __1_ OF _1_ (PROPONENT: CEMP-CE)

Noted for Submittal no. 0029 (blended sand/topsoil grain size results: Using USCS Size Designations, the grain size of the blended material meets the specification of a silty sand with an approximate grain size distribution of 5% gravel, 75% sand, and 20% silt/clay and the material is considered acceptable for its intended use.

☐ REVIEWED
☒ REVIEWED & NOTED
☐ REVISE & RESUBMIT
☐ REJECTED
☐ For information only
☐ Received, no action taken

Reviewed solely for general conformance with contract documents
ARCADIS of New York, Inc.

Signature

5/22/13
Date

Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NSG-CM-05-08-13-1	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Numher:**	13-0305A
Date Sampled:	5/8/2013	**Sampled By:**	Client
Date Tested:	5/14/2013	**Tested By:**	Patrick Kiernan

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
13-0305A	NSG-CM-05-08-13-1	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.0	100.0	
12.5 mm	1/2"	0.0	100.0	
6.3 mm	1/4"	3.9	96.1	
4.75 mm	#4	1.8	94.3	
2.00 mm	#10	5.0	89.3	
0.850 mm	#20	7.3	82.0	
0.600 mm	#30	4.6	77.4	
0.425 mm	#40	6.8	70.6	
0.150 mm	#100	38.5	32.1	
0.075 mm	#200	15.7	16.4	
Pan		16.4		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Item:	NSG-CM-05-08-13-2	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	13-0305B
Date Sampled:	5/8/2013	**Sampled By:**	Client
Date Tested:	5/14/2013	**Tested By:**	Patrick Kiernan

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
13-0305B	NSG-CM-05-08-13-2	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.0	100.0	
12.5 mm	1/2"	0.0	100.0	
6.3 mm	1/4"	2.3	97.7	
4.75 mm	#4	1.1	96.6	
2.00 mm	#10	4.5	92.1	
0.850 mm	#20	8.4	83.7	
0.600 mm	#30	4.9	78.8	
0.425 mm	#40	6.9	71.9	
0.150 mm	#100	38.1	33.8	
0.075 mm	#200	16.8	17.0	
Pan		17.0		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NSG-CM-05-08-13-3	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	13-0305C
Date Sampled:	5/8/2013	**Sampled By:**	Client
Date Tested:	5/14/2013	**Tested By:**	Patrick Kiernan

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
13-0305C	NSG-CM-05-08-13-3	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.0	100.0	
12.5 mm	1/2"	0.2	99.8	
6.3 mm	1/4"	2.7	97.1	
4.75 mm	#4	1.7	95.4	
2.00 mm	#10	5.8	89.6	
0.850 mm	#20	8.3	81.3	
0.600 mm	#30	4.7	76.6	
0.425 mm	#40	6.4	70.2	
0.150 mm	#100	36.5	33.7	
0.075 mm	#200	16.8	16.9	
Pan		16.9		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on reverse side prior to initiating this form)*	DATE 05/23/13	Submittal No. 0030

SECTION I – REQUEST FOR APROVAL OF THE FOLLOWING ITEMS

TO: Construction Manager ATTN: Mark Gravelding, P.E. ARCADIS 6723 Towpath Road Syracuse, NY 13214 Email: mark.gravelding@arcadis-us.comm	FROM: Sevenson **Environmental** Services, Inc. 2749 Lockport Road Niagara Falls, New York 14305	General Electric Company Purchase Order Number:	CHECK ONE: **X** THIS IS A NEW TRANSMITTAL THIS IS A RESUBMITTAL OF TRANSMITTAL
SPECIFICATION SEC. NO: (Cover only one section with each transmittal) 313219	PROJECT TITLE AND LOCATION: **Silver Lake Removal Action Area** Pittsfield, MA 01201		CHECK ONE: THIS TRANSMITTAL IS FOR FIO X APPROVAL

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.)	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. *(See instruction No. 8)*	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT		FOR CONTRACTOR USE CODE	VARIATION (See Instruction No. 6)	FOR CE USE CODE
				SPEC. PARA NO.	DRAWING SHEET NO.			
a.	*b.*	*c.*	*d.*	*e.*	*f.*	*g.*	*h.*	*i.*
8	Granular Cap Material / Nichols Sand and Gravel Hinsdale Pit			**312323 (Part 1.04)**	26			
9	Granular Cap Material particle/sieve analysis (ASTM D 422) results for (6) samples each representing 500CY		1	**312323 (Part 1.04)**	26			
	Sample ID # : NSG-CM-05-13-13-1 NSG-CM-05-13-13-2 NSG-CM-05-13-13-3 NSG-CM-05-17-13-1 NSG-CM-05-17-13-2 NSG-CM-05-17-13-3			**312323 (Part 1.04)**	26			
11	60/40 Blend of Granular Cap Material 60%-Topsoil 40%-Sand Must be screened to 1/2-inch minus			**312323 (Part 1.04)**	26			

REMARKS	I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated. **Name (TITLE)** Michael W. Muth - Project Manager NAME AND SIGNATURE OF CONTRACTOR

SECTION II – APPROVAL ACTION

ENCLOSURES RETURNED *(List by Item No.)*	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

ENG FORM 4025-R, MAR 95 *(ER 415-1-10)* **EDITION OF SEP 93 IS OBSOLETE** SHEET __1_ OF _1_ (PROPONENT: CEMP-CE)

Noted for Submittal no. 0030 (blended sand/topsoil grain size results): Using USCS Size Designations, the grain size of the blended material meets the specification of a silty sand with an approximate grain size distribution of 5% gravel, 75% sand, and 20% silt/clay and the material is considered acceptable for its intended use.

Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NSG-CM-05-13-13-1	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	13-0333A
Date Sampled:	5/13/2013	**Sampled By:**	Client
Date Tested:	5/17/2013	**Tested By:**	Patrick Kiernan

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
13-0333A	NSG-CM-05-13-13-1	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.0	100.0	
12.5 mm	1/2"	0.0	100.0	
6.3 mm	1/4"	4.6	95.4	
4.75 mm	#4	1.8	93.6	
2.00 mm	#10	6.8	86.8	
0.850 mm	#20	9.0	77.8	
0.600 mm	#30	5.1	72.7	
0.425 mm	#40	6.8	65.9	
0.150 mm	#100	33.5	32.4	
0.075 mm	#200	14.7	17.7	
Pan		17.7		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NSG-CM-05-13-13-2	**Project Numher:**	120458
Source:	Sevenson Environmental	**Lab Number:**	13-0333B
Date Sampled:	5/13/2013	**Sampled By:**	Client
Date Tested:	5/17/2013	**Tested By:**	Patrick Kiernan

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
13-0333B	NSG-CM-05-13-13-2	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.0	100.0	
12.5 mm	1/2"	0.2	99.8	
6.3 mm	1/4"	2.9	96.9	
4.75 mm	#4	0.5	96.4	
2.00 mm	#10	4.4	92.0	
0.850 mm	#20	9.4	82.6	
0.600 mm	#30	4.9	77.7	
0.425 mm	#40	6.5	71.2	
0.150 mm	#100	34.3	36.9	
0.075 mm	#200	17.2	19.7	
Pan		19.7		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NSG-CM-05-13-13-3	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	13-0333C
Date Sampled:	5/13/2013	**Sampled By:**	Client
Date Tested:	5/17/2013	**Tested By:**	Patrick Kiernan

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
13-0333C	NSG-CM-05-13-13-3	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.0	100.0	
12.5 mm	1/2"	0.0	100.0	
6.3 mm	1/4"	1.7	98.3	
4.75 mm	#4	1.5	96.8	
2.00 mm	#10	5.1	91.7	
0.850 mm	#20	10.0	81.7	
0.600 mm	#30	5.8	75.9	
0.425 mm	#40	6.9	69.0	
0.150 mm	#100	34.2	34.8	
0.075 mm	#200	16.4	18.4	
Pan		18.4		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NSG-CM -05-17-13-1	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	13-0342A
Date Sampled:	5/17/2013	**Sampled By:**	Client
Date Tested:	5/21/2013	**Tested By:**	John Brinsfield

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
13-0342A	NSG-CM- -05-17-13-1	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.0	100.0	
12.5 mm	1/2"	0.0	100.0	
6.3 mm	1/4"	1.7	98.3	
4.75 mm	#4	1.9	96.4	
2.00 mm	#10	4.0	92.4	
0.850 mm	#20	7.8	84.6	
0.600 mm	#30	4.6	80.0	
0.425 mm	#40	6.5	73.5	
0.150 mm	#100	37.5	36.0	
0.075 mm	#200	17.2	18.8	
Pan		18.8		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NSG-CM- 05-17-13-2	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	f13-0342B
Date Sampled:	5/17/2013	**Sampled By:**	Client
Date Tested:	5/21/2013	**Tested By:**	John Brinsfield

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
f13-0342B	NSG-CM- 05-17-13-2	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.0	100.0	
12.5 mm	1/2"	0.0	100.0	
6.3 mm	1/4"	4.0	96.0	
4.75 mm	#4	1.9	94.1	
2.00 mm	#10	6.5	87.6	
0.850 mm	#20	10.5	77.1	
0.600 mm	#30	5.4	71.7	
0.425 mm	#40	6.4	65.3	
0.150 mm	#100	29.9	35.4	
0.075 mm	#200	15.4	20.0	
Pan		20.0		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NSG-CM- 05-17-13-3	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	13-0342C
Date Sampled:	5/17/2013	**Sampled By:**	Client
Date Tested:	5/21/2013	**Tested By:**	John Brinsfield

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
13-0342C	NSG-CM- 05-17-13-3	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.0	100.0	
12.5 mm	1/2"	0.4	99.6	
6.3 mm	1/4"	5.2	94.4	
4.75 mm	#4	2.8	91.6	
2.00 mm	#10	8.3	83.3	
0.850 mm	#20	10.0	73.3	
0.600 mm	#30	4.2	69.1	
0.425 mm	#40	5.6	63.5	
0.150 mm	#100	30.4	33.1	
0.075 mm	#200	15.8	17.3	
Pan		17.3		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

PDF

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on reverse side prior to initiating this form)*	DATE 5/28/12	Submittal No. 0031

SECTION I – REQUEST FOR APROVAL OF THE FOLLOWING ITEMS

TO: Construction Manager ATTN: Mark Gravelding, P.E. ARCADIS 6723 Towpath Road Syracuse, NY 13214 Email: mark.gravelding@arcadis-us.comm	FROM: Sevenson Environmental Services, Inc. 2749 Lockport Road Niagara Falls, New York 14305	General Electric Company Purchase Order Number:	CHECK ONE: X THIS IS A NEW TRANSMITTAL THIS IS A RESUBMITTAL OF TRANSMITTAL
SPECIFICATION SEC. NO: (Cover only one section with each transmittal) 313219	PROJECT TITLE AND LOCATION: **Silver Lake Removal Action Area** Pittsfield, MA 01201		CHECK ONE: THIS TRANSMITTAL IS FOR FIO X APPROVAL

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.)	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. *(See Instruction No. 8)*	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT		FOR CONTRACTOR USE CODE	VARIATION (See Instruction No. 6)	FOR CE USE CODE
				SPEC. PARA NO.	DRAWING SHEET NO.			
a.	*b.*	*c.*	*d.*	*e.*	*f.*	*g.*	*h.*	*i.*
8	Dead sand from Petricca Hinsdale, MA			**312323 (Part 2.01)**	26			
9	Dead Sand. Particle/sieve size analysis (ASTM D422) results of (6) pile samples Each Sample represents 500 CY			**312323 (Part 2.01)**	26			
ID#'s	PHP-SAND-05-20-13-1 PHP-SAND-05-20-13-2 PHP-SAND-05-20-13-3 PHP-Sand-052213-1 PHP-Sand-052213-2 PHP-Sand-052213-3							

REMARKS	I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated. Name (TITLE) Michael W. Muth - Project Manager NAME AND SIGNATURE OF CONTRACTOR

SECTION II – APPROVAL ACTION

ENCLOSURES RETURNED *(List by Item No.)*	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

ENG FORM 4025-R, MAR 95 *(ER 415-1-10)* **EDITION OF SEP 93 IS OBSOLETE** SHEET __1_ OF _1_ (PROPONENT: CEMP-CE)

Noted for Submittal #0031 (dead sand grain size results):
The grain size results have been reviewed (using USCS Size Designations) under the assumption that this material will be blended with compost material from Century Acquisitions to create the capping material.

☐ REVIEWED
☒ REVIEWED & NOTED
☐ REVISE & RESUBMIT
☐ REJECTED
☐ For information only
☐ Received, no action taken

Reviewed solely for general conformance with contract documents
ARCADIS of New York, Inc.
Signature
5/29/13
Date

Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	PHP-SAND-05-20-13-1	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	13-0343C
Date Sampled:	5/17/2013	**Sampled By:**	Client
Date Tested:	5/24/2013	**Tested By:**	John Brinsfield

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
13-0343C	PHP-SAND-05-20-13-1	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.0	100.0	
12.5 mm	1/2"	0.0	100.0	
6.3 mm	1/4"	5.5	94.5	
4.75 mm	#4	1.8	92.7	
2.00 mm	#10	8.9	83.8	
0.850 mm	#20	9.1	74.7	
0.600 mm	#30	5.4	69.3	
0.425 mm	#40	6.9	62.4	
0.150 mm	#100	37.9	24.5	
0.075 mm	#200	18.1	6.4	
Pan		6.4		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Advance Testing

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Phone: 845-496-1600 Fax: 845-496-1398
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42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	PHP-SAND-05-20-13-2	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	13-0343D
Date Sampled:	5/17/2013	**Sampled By:**	Client
Date Tested:	5/24/2013	**Tested By:**	John Brinsfield

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
13-0343D	PHP-SAND-05-20-13-2	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.0	100.0	
12.5 mm	1/2"	0.0	100.0	
6.3 mm	1/4"	7.9	92.1	
4.75 mm	#4	3.3	88.8	
2.00 mm	#10	10.1	78.7	
0.850 mm	#20	11.0	67.7	
0.600 mm	#30	5.4	62.3	
0.425 mm	#40	6.7	55.6	
0.150 mm	#100	33.7	21.9	
0.075 mm	#200	15.2	6.7	
Pan		6.7		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Advance Testing

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1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	PHP-SAND-05-20-13-3	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Numher:**	13-0343E
Date Sampled:	5/17/2013	**Sampled By:**	Client
Date Tested:	5/24/2013	**Tested By:**	John Brinsfield

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
13-0343E	PHP-SAND-05-20-13-3	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.0	100.0	
12.5 mm	1/2"	0.0	100.0	
6.3 mm	1/4"	5.9	94.1	
4.75 mm	#4	2.6	91.5	
2.00 mm	#10	8.7	82.8	
0.850 mm	#20	13.7	69.1	
0.600 mm	#30	5.6	63.5	
0.425 mm	#40	6.7	56.8	
0.150 mm	#100	34.4	22.4	
0.075 mm	#200	15.1	7.3	
Pan		7.3		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Advance Testing

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1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	PHP-Sand-052213-1	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	13-0360G
Date Sampled:	5/22/2013	**Sampled By:**	Client
Date Tested:	5/24/2013	**Tested By:**	John Brinsfield

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
13-0360G	PHP-Sand-052213-1	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.0	100.0	
12.5 mm	1/2"	0.0	100.0	
6.3 mm	1/4"	5.8	94.2	
4.75 mm	#4	3.0	91.2	
2.00 mm	#10	9.1	82.1	
0.850 mm	#20	14.6	67.5	
0.600 mm	#30	6.2	61.3	
0.425 mm	#40	7.6	53.7	
0.150 mm	#100	32.0	21.7	
0.075 mm	#200	14.3	7.4	
Pan		7.4		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Advance Testing

3348 Route 208, Campbell Hall, NY 10916
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42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	PHP-Sand-052213-2	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	13-0360H
Date Sampled:	5/22/2013	**Sampled By:**	Client
Date Tested:	5/24/2013	**Tested By:**	John Brinsfield

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
13-0360H	PHP-Sand-052213-2	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.0	100.0	
12.5 mm	1/2"	0.6	99.4	
6.3 mm	1/4"	4.9	94.5	
4.75 mm	#4	3.6	90.9	
2.00 mm	#10	14.2	76.7	
0.850 mm	#20	21.5	55.2	
0.600 mm	#30	9.3	45.9	
0.425 mm	#40	9.2	36.7	
0.150 mm	#100	23.0	13.7	
0.075 mm	#200	7.1	6.6	
Pan		6.6		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Advance Testing

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42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	PHP-Sand-052213-3	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	13-0360I
Date Sampled:	5/22/2013	**Sampled By:**	Client
Date Tested:	5/24/2013	**Tested By:**	John Brinsfield

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
13-0360I	PHP-Sand-052213-3	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.0	100.0	
12.5 mm	1/2"	0.0	100.0	
6.3 mm	1/4"	2.1	97.9	
4.75 mm	#4	2.8	95.1	
2.00 mm	#10	5.8	89.3	
0.850 mm	#20	11.0	78.3	
0.600 mm	#30	6.8	71.5	
0.425 mm	#40	9.9	61.6	
0.150 mm	#100	36.8	24.8	
0.075 mm	#200	15.1	9.7	
Pan		9.7		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on reverse side prior to initiating this form)*	DATE 5/30/12	Submittal No. 0033

SECTION I – REQUEST FOR APROVAL OF THE FOLLOWING ITEMS

TO:	FROM:	General Electric Company Purchase Order Number:	CHECK ONE:
Construction Manager ATTN: Mark Gravelding, P.E. ARCADIS 6723 Towpath Road Syracuse, NY 13214 Email: mark.gravelding@arcadis-us.comm	Sevenson Environmental Services, Inc. 2749 Lockport Road Niagara Falls, New York 14305		X THIS IS A NEW TRANSMITTAL THIS IS A RESUBMITTAL OF TRANSMITTAL

SPECIFICATION SEC. NO: (Cover only one section with each transmittal) 313219	PROJECT TITLE AND LOCATION: **Silver Lake Removal Action Area** Pittsfield, MA 01201	CHECK ONE: THIS TRANSMITTAL IS FOR FIO X APPROVAL

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.)	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. *(See instruction No. 8)*	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT		FOR CONTRACTOR USE CODE	VARIATION (See Instruction No. 6)	FOR CE USE CODE
				SPEC. PARA NO.	DRAWING SHEET NO.			
a.	b.	c.	d.	e.	f.	g.	h.	i.
8	Dead sand from Petricca Hinsdale, MA			312323 (Part 2.01)	26			
9	Dead Sand. Particle/sieve size analysis (ASTM D422) results of (4) pile samples Each Sample represents 500 CY			312323 (Part 2.01)	26			
ID#'s	PHP-SAND-052813-9 PHP-SAND-052813-10 PHP-SAND-052813-11 PHP-SAND-052813-12							

REMARKS	I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated. **Name (TITLE)** Michael W. Muth - Project Manager NAME AND SIGNATURE OF CONTRACTOR

SECTION II – APPROVAL ACTION

ENCLOSURES RETURNED *(List by Item No.)*	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

ENG FORM 4025-R, MAR 95 *(ER 415-1-10)* **EDITION OF SEP 93 IS OBSOLETE** SHEET __1_ OF _1_ (PROPONENT: CEMP-CE)

Noted for Submittal #0033 (dead sand grain size results):
The grain size results have been reviewed (using USCS Size Designations) under the assumption that this material will be blended with compost material from Century Acquisitions to create the capping material.

Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	PHP-SAND-052813-9	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	13-0373A
Date Sampled:	5/28/2013	**Sampled By:**	Client
Date Tested:	5/30/2013	**Tested By:**	Sean Williams

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
13-0373A	PHP-SAND-052813-9	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.0	100.0	
12.5 mm	1/2"	0.0	100.0	
6.3 mm	1/4"	5.0	95.0	
4.75 mm	#4	2.9	92.1	
2.00 mm	#10	9.9	82.2	
0.850 mm	#20	16.3	65.9	
0.600 mm	#30	7.1	58.8	
0.425 mm	#40	8.5	50.3	
0.150 mm	#100	30.5	19.8	
0.075 mm	#200	12.5	7.3	
Pan		7.3		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	PHP-SAND-052813-10	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	13-0373B
Date Sampled:	5/28/2013	**Sampled By:**	Client
Date Tested:	5/30/2013	**Tested By:**	Sean Williams

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
13-0373B	PHP-SAND-052813-10	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.0	100.0	
12.5 mm	1/2"	0.0	100.0	
6.3 mm	1/4"	6.0	94.0	
4.75 mm	#4	4.7	89.3	
2.00 mm	#10	13.6	75.7	
0.850 mm	#20	19.3	56.4	
0.600 mm	#30	9.0	47.4	
0.425 mm	#40	8.9	38.5	
0.150 mm	#100	24.8	13.7	
0.075 mm	#200	7.6	6.1	
Pan		6.1		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	PHP-SAND-052813-11	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	13-0373C
Date Sampled:	5/28/2013	**Sampled By:**	Client
Date Tested:	5/30/2013	**Tested By:**	Sean Williams

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
13-0373C	PHP-SAND-052813-11	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.0	100.0	
12.5 mm	1/2"	0.0	100.0	
6.3 mm	1/4"	8.0	92.0	
4.75 mm	#4	4.8	87.2	
2.00 mm	#10	17.1	70.1	
0.850 mm	#20	24.2	45.9	
0.600 mm	#30	10.3	35.6	
0.425 mm	#40	8.7	26.9	
0.150 mm	#100	18.5	8.4	
0.075 mm	#200	4.7	3.7	
Pan		3.7		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	PHP-SAND-052813-12	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	13-0373D
Date Sampled:	5/28/2013	**Sampled By:**	Client
Date Tested:	5/30/2013	**Tested By:**	Sean Williams

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
13-0373D	PHP-SAND-052813-12	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.0	100.0	
12.5 mm	1/2"	0.0	100.0	
6.3 mm	1/4"	6.2	93.8	
4.75 mm	#4	3.6	90.2	
2.00 mm	#10	13.9	76.3	
0.850 mm	#20	24.6	51.7	
0.600 mm	#30	10.6	41.1	
0.425 mm	#40	10.7	30.4	
0.150 mm	#100	21.4	9.0	
0.075 mm	#200	5.2	3.8	
Pan		3.8		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on reverse side prior to initiating this form)*	DATE 5/31/12	Submittal No. 0034

SECTION I – REQUEST FOR APROVAL OF THE FOLLOWING ITEMS

TO: Construction Manager ATTN: Mark Gravelding, P.E. ARCADIS 6723 Towpath Road Syracuse, NY 13214 Email: mark.gravelding@arcadis-us.comm	FROM: Sevenson **Environmental** Services, Inc. 2749 Lockport Road Niagara Falls, New York 14305	General Electric Company Purchase Order Number:	CHECK ONE: **X** THIS IS A NEW TRANSMITTAL THIS IS A RESUBMITTAL OF TRANSMITTAL
SPECIFICATION SEC. NO: (Cover only one section with each transmittal) 313219	PROJECT TITLE AND LOCATION: **Silver Lake Removal Action Area** Pittsfield, MA 01201		CHECK ONE: THIS TRANSMITTAL IS FOR FIO X APPROVAL

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.)	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. *(See instruction No. 8)*	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT		FOR CONTRACTOR USE CODE	VARIATION (See Instruction No. 6)	FOR CE USE CODE
				SPEC. PARA NO.	DRAWING SHEET NO.			
a.	*b.*	*c.*	*d.*	*e.*	*f.*	*g.*	*h.*	*i.*
8	Dead sand from Petricca Hinsdale, MA			**312323 (Part 2.01)**	26			
9	Dead Sand. Particle/sieve size analysis (ASTM D422) results of (4) pile samples Each Sample represents 500 CY			**312323 (Part 2.01)**	26			
ID#'s	PHP-SAND-053013-13 PHP-SAND-053013-14							
8	Blended Cap Material (Sand/Topsoil Blend) Nichols Sand & Gravel			**312323 (Part 2.01)**	26			
9	Sand/Topsoil Blend particle size sieve analysis (ASTM D422) results for (1) sample representing (1) 500 CY pile			**312323 (Part 2.01)**	26			
ID#	NSG-CM-053013-13							

REMARKS	I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated. Name (TITLE) Michael W. Muth - Project Manager NAME AND SIGNATURE OF CONTRACTOR

SECTION II – APPROVAL ACTION

ENCLOSURES RETURNED *(List by Item No.)*	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

ENG FORM 4025-R, MAR 95 *(ER 415-1-10)* **EDITION OF SEP 93 IS OBSOLETE** SHEET __1_ OF _1_ (PROPONENT: CEMP-CE)

Noted for Submittal #0034 (dead sand grain size results and blended sand/ topsoil grain size results):
- The grain size results for the dead sand have been reviewed (using USCS Size Designations) under the assumption that this material will be blended with compost material from Century Acquisitions to create the capping material.
- The grain size results for the blended sand/topsoil material indicate the material is considered acceptable for its intended use.

Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	PHP-Sand-053013-13	**Project Nnmber:**	120458
Source:	Sevenson Environmental	**Lab Number:**	13-0383E
Date Sampled:	5/30/2013	**Sampled By:**	Client
Date Tested:	5/31/2013	**Tested By:**	John Brinsfield

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
13-0383E	PHP-Sand-053013-13	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.0	100.0	
12.5 mm	1/2"	0.0	100.0	
6.3 mm	1/4"	6.3	93.7	
4.75 mm	#4	3.0	90.7	
2.00 mm	#10	15.5	75.2	
0.850 mm	#20	26.0	49.2	
0.600 mm	#30	10.2	39.0	
0.425 mm	#40	9.3	29.7	
0.150 mm	#100	22.5	7.2	
0.075 mm	#200	4.6	2.6	
Pan		2.6		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	PHP-Sand-053013-14	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	13-0383F
Date Sampled:	5/30/2013	**Sampled By:**	Client
Date Tested:	5/31/2013	**Tested By:**	John Brinsfield

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
13-0383F	PHP-Sand-053013-14	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.0	100.0	
12.5 mm	1/2"	0.0	100.0	
6.3 mm	1/4"	5.8	94.2	
4.75 mm	#4	5.4	88.8	
2.00 mm	#10	16.8	72.0	
0.850 mm	#20	20.7	51.3	
0.600 mm	#30	8.9	42.4	
0.425 mm	#40	9.2	33.2	
0.150 mm	#100	23.9	9.3	
0.075 mm	#200	6.0	3.3	
Pan		3.3		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Advance Testing

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Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	Sevenson Environmental Services Inc.	**Project:**	Silver Lake Removal Action
Item:	NSG-CM-053013-13	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	13-0383G
Date Sampled:	5/30/2013	**Sampled By:**	Client
Date Tested:	5/31/2013	**Tested By:**	John Brinsfield

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
13-0383G	NSG-CM-053013-13	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.0	100.0	
12.5 mm	1/2"	0.0	100.0	
6.3 mm	1/4"	2.5	97.5	
4.75 mm	#4	1.5	96.0	
2.00 mm	#10	5.1	90.9	
0.850 mm	#20	7.7	83.2	
0.600 mm	#30	4.7	78.5	
0.425 mm	#40	6.6	71.9	
0.150 mm	#100	36.9	35.0	
0.075 mm	#200	17.2	17.8	
Pan		17.8		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on reverse side prior to initiating this form)*	DATE 06/03/13	Submittal No. 0035

SECTION I – REQUEST FOR APROVAL OF THE FOLLOWING ITEMS

TO:	FROM:	General Electric Company Purchase Order Number:	CHECK ONE:
Construction Manager ATTN: Mark Gravelding, P.E. ARCADIS 6723 Towpath Road Syracuse, NY 13214 Email: mark.gravelding@arcadis-us.comm	Sevenson **Environmental** Services, Inc. 2749 Lockport Road Niagara Falls, New York 14305		**X** THIS IS A NEW TRANSMITTAL THIS IS A RESUBMITTAL OF TRANSMITTAL

SPECIFICATION SEC. NO: (Cover only one section with each transmittal) 313219	PROJECT TITLE AND LOCATION: **Silver Lake Removal Action Area** Pittsfield, MA 01201	CHECK ONE: THIS TRANSMITTAL IS FOR FIO X APPROVAL

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.)	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. *(See instruction No. 8)*	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT		FOR CONTRACTOR USE CODE	VARIATION (See Instruction No. 6)	FOR CE USE CODE
				SPEC. PARA NO.	DRAWING SHEET NO.			
a.	*b.*	*c.*	*d.*	*e.*	*f.*	*g.*	*h.*	*i.*
8	Granular Cap Material / Nichols Sand and Gravel Hinsdale Pit			**312323 (Part 1.04)**	26			
9	Granular Cap Material particle/sieve analysis (ASTM D 422) results for (3) samples each representing 500CY		1	**312323 (Part 1.04)**	26			
	Sample ID # : NSG-CM-05-17-13-4 (Pile 10) NSG-CM-05-17-13-5 (Pile 11) NSG-CM-05-22-13-12 (Pile 12)			**312323 (Part 1.04)**	26			
	60/40 Blend of Granular Cap Material 50%-Topsoil 50%-Sand Must be screened to 1/2-inch minus							

REMARKS	I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated. **Name (TITLE)** Michael W. Muth - Project Manager NAME AND SIGNATURE OF CONTRACTOR

SECTION II – APPROVAL ACTION

ENCLOSURES RETURNED *(List by Item No.)*	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

ENG FORM 4025-R, MAR 95 *(ER 415-1-10)* **EDITION OF SEP 93 IS OBSOLETE** SHEET __1_ OF _1_ (PROPONENT: CEMP-CE)

Noted for Submittal #0035 (blended sand/topsoil grain size results):
The grain size results for the blended sand/topsoil material indicate the material is considered acceptable for its intended use.

Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathom Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NSG-CM-05-17-13-4	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	13-0343A
Date Sampled:	5/17/2013	**Sampled By:**	Client
Date Tested:	5/24/2013	**Tested By:**	John Brinsfield

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
13-0343A	NSG-CM-05-17-13-4	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.0	100.0	
12.5 mm	1/2"	0.3	99.7	
6.3 mm	1/4"	3.8	95.9	
4.75 mm	#4	1.5	94.4	
2.00 mm	#10	5.4	89.0	
0.850 mm	#20	10.3	78.7	
0.600 mm	#30	4.9	73.8	
0.425 mm	#40	6.5	67.3	
0.150 mm	#100	33.1	34.2	
0.075 mm	#200	16.2	18.0	
Pan		18.0		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NSG-CM-05-17-13-5	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	13-0343B
Date Sampled:	5/17/2013	**Sampled By:**	Client
Date Tested:	5/24/2013	**Tested By:**	John Brinsfield

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
13-0343B	NSG-CM-05-17-13-5	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.0	100.0	
12.5 mm	1/2"	0.2	99.8	
6.3 mm	1/4"	4.9	94.9	
4.75 mm	#4	1.1	93.8	
2.00 mm	#10	5.0	88.8	
0.850 mm	#20	7.5	81.3	
0.600 mm	#30	4.5	76.8	
0.425 mm	#40	6.3	70.5	
0.150 mm	#100	32.9	37.6	
0.075 mm	#200	17.6	20.0	
Pan		20.0		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NSG-CM-052213-12	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	13-0360A
Date Sampled:	5/22/2013	**Sampled By:**	Client
Date Tested:	5/24/2013	**Tested By:**	John Brinsfield

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
13-0360A	NSG-CM-052213-12	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.0	100.0	
12.5 mm	1/2"	0.0	100.0	
6.3 mm	1/4"	2.5	97.5	
4.75 mm	#4	2.3	95.2	
2.00 mm	#10	8.4	86.8	
0.850 mm	#20	9.5	77.3	
0.600 mm	#30	4.5	72.8	
0.425 mm	#40	5.8	67.0	
0.150 mm	#100	30.6	36.4	
0.075 mm	#200	16.2	20.2	
Pan		20.2		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on reverse side prior to initiating this form)*	DATE 06/07/13	Submittal No. 0037

SECTION I – REQUEST FOR APROVAL OF THE FOLLOWING ITEMS

TO:	FROM:	General Electric Company Purchase Order Number:	CHECK ONE:
Construction Manager ATTN: Mark Gravelding, P.E. ARCADIS 6723 Towpath Road Syracuse, NY 13214 Email: mark.gravelding@arcadis-us.comm	Sevenson Environmental Services, Inc. 2749 Lockport Road Niagara Falls, New York 14305		X THIS IS A NEW TRANSMITTAL THIS IS A RESUBMITTAL OF TRANSMITTAL
SPECIFICATION SEC. NO: (Cover only one section with each transmittal) 313219	PROJECT TITLE AND LOCATION: **Silver Lake Removal Action Area** Pittsfield, MA 01201		CHECK ONE: THIS TRANSMITTAL IS FOR FIO X APPROVAL

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.)	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. *(See instruction No. 8)*	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT		FOR CONTRACTOR USE CODE	VARIATION (See Instruction No. 6)	FOR CE USE CODE
				SPEC. PARA NO.	DRAWING SHEET NO.			
a.	*b.*	*c.*	*d.*	*e.*	*f.*	*g.*	*h.*	*i.*
8	Granular Cap Material / Nichols Sand and Gravel Hinsdale Pit			**312323 (Part 1.04)**	26			
9	Granular Cap Material particle/sieve analysis (ASTM D 422) results for (5) samples each representing 500CY		1	**312323 (Part 1.04)**	26			
	Sample ID # : NSG-CM-060313-14 (Pile 14) NSG-CM-060313-15 (Pile 15) NSG-CM-060413-16 (Pile 16) NSG-CM-060413-17 (Pile 17) NSG-CM-060413-18 (Pile 18)			**312323 (Part 1.04)**	26			
	Blend of Granular Cap Material 50%-Topsoil 50%-Sand Must be screened to 1/2-inch minus							

REMARKS	I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated. Name (TITLE) Michael W. Muth - Project Manager NAME AND SIGNATURE OF CONTRACTOR

SECTION II – APPROVAL ACTION

ENCLOSURES RETURNED *(List by Item No.)*	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

ENG FORM 4025-R, MAR 95 *(ER 415-1-10)* **EDITION OF SEP 93 IS OBSOLETE** SHEET __1_ OF _1_ (PROPONENT: CEMP-CE)

Noted for Submittal #0037 (blended sand/topsoil grain size results):
The grain size results for the blended sand/topsoil material indicate the material is considered acceptable for its intended use.

☐ REVIEWED
☒ REVIEWED & NOTED
☐ REVISE & RESUBMIT
☐ REJECTED
☐ For information only
☐ Received, no action taken

Reviewed solely for general conformance with contract documents
ARCADIS of New York, Inc.

Signature

6/7/13
Date

Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NSG-CM-060313-14	**Project Number:**	120458
Source:	Sevenson Environmental Services	**Lab Number:**	13-0398B
Date Sampled:	6/3/2013	**Sampled By:**	Client
Date Tested:	6/6/2013	**Tested By:**	Sean Williams

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
13-0398B	NSG-CM-060313-14	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.0	100.0	
12.5 mm	1/2"	0.9	99.1	
6.3 mm	1/4"	3.3	95.8	
4.75 mm	#4	1.5	94.3	
2.00 mm	#10	7.1	87.2	
0.850 mm	#20	8.5	78.7	
0.600 mm	#30	4.1	74.6	
0.425 mm	#40	5.6	69.0	
0.150 mm	#100	27.7	41.3	
0.075 mm	#200	15.7	25.6	
Pan		25.6		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NSG-CM-060313-15	**Project Number:**	120458
Source:	Sevenson Environmental Services	**Lab Number:**	13-0398C
Date Sampled:	6/3/2013	**Sampled By:**	Client
Date Tested:	6/6/2013	**Tested By:**	Sean Williams

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
13-0398C	NSG-CM-060313-15	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.0	100.0	
12.5 mm	1/2"	0.5	99.5	
6.3 mm	1/4"	8.7	90.8	
4.75 mm	#4	5.8	85.0	
2.00 mm	#10	9.6	75.4	
0.850 mm	#20	6.5	68.9	
0.600 mm	#30	3.6	65.3	
0.425 mm	#40	5.1	60.2	
0.150 mm	#100	27.5	32.7	
0.075 mm	#200	15.1	17.6	
Pan		17.6		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Advance Testing

3348 Route 208, Campbell Hall, NY 10916
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25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NSG-CM-060413-16	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	13-0401A
Date Sampled:	6/4/2013	**Sampled By:**	Client
Date Tested:	6/6/2013	**Tested By:**	Sean Williams

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
13-0401A	NSG-CM-060413-16	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.0	100.0	
12.5 mm	1/2"	1.6	98.4	
6.3 mm	1/4"	3.4	95.0	
4.75 mm	#4	2.3	92.7	
2.00 mm	#10	6.5	86.2	
0.850 mm	#20	9.0	77.2	
0.600 mm	#30	4.9	72.3	
0.425 mm	#40	6.7	65.6	
0.150 mm	#100	32.0	33.6	
0.075 mm	#200	15.6	18.0	
Pan		18.0		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NSG-CM-060413-17	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	13-0401B
Date Sampled:	6/4/2013	**Sampled By:**	Client
Date Tested:	6/6/2013	**Tested By:**	Sean Williams

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
13-0401B	NSG-CM-060413-17	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.0	100.0	
12.5 mm	1/2"	0.3	99.7	
6.3 mm	1/4"	4.1	95.6	
4.75 mm	#4	2.3	93.3	
2.00 mm	#10	6.2	87.1	
0.850 mm	#20	7.4	79.7	
0.600 mm	#30	4.6	75.1	
0.425 mm	#40	6.6	68.5	
0.150 mm	#100	33.6	34.9	
0.075 mm	#200	16.8	18.1	
Pan		18.1		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NSG-CM-060413-18	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	13-0401C
Date Sampled:	6/4/2013	**Sampled By:**	Client
Date Tested:	6/6/2013	**Tested By:**	Sean Williams

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
13-0401C	NSG-CM-060413-18	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.4	99.6	
12.5 mm	1/2"	0.5	99.1	
6.3 mm	1/4"	3.6	95.5	
4.75 mm	#4	1.0	94.5	
2.00 mm	#10	5.7	88.8	
0.850 mm	#20	8.3	80.5	
0.600 mm	#30	4.8	75.7	
0.425 mm	#40	7.1	68.6	
0.150 mm	#100	34.0	34.6	
0.075 mm	#200	16.1	18.5	
Pan		18.5		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on reverse side prior to initiating this form)*	DATE 06/11/13	Submittal No. 0038

SECTION I – REQUEST FOR APROVAL OF THE FOLLOWING ITEMS

TO:	FROM:		
Construction Manager ATTN: Mark Gravelding, P.E. ARCADIS 6723 Towpath Road Syracuse, NY 13214 Email: mark.gravelding@arcadis-us.comm	Sevenson Environmental Services, Inc. 2749 Lockport Road Niagara Falls, New York 14305	General Electric Company Purchase Order Number:	CHECK ONE: X THIS IS A NEW TRANSMITTAL THIS IS A RESUBMITTAL OF TRANSMITTAL
SPECIFICATION SEC. NO: (Cover only one section with each transmittal) 313219	PROJECT TITLE AND LOCATION: **Silver Lake Removal Action Area** Pittsfield, MA 01201		CHECK ONE: THIS TRANSMITTAL IS FOR FIO X APPROVAL

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.)	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. *(See Instruction No. 8)*	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT		FOR CONTRACTOR USE CODE	VARIATION (See Instruction No. 6)	FOR CE USE CODE
				SPEC. PARA NO.	DRAWING SHEET NO.			
a.	*b.*	*c.*	*d.*	*e.*	*f.*	*g.*	*h.*	*i.*
8	Granular Cap Material / Nichols Sand and Gravel Hinsdale Pit			**312323 (Part 1.04)**	26			
9	Granular Cap Material particle/sieve analysis (ASTM D 422) results for (5) samples each representing 500CY		1	**312323 (Part 1.04)**	26			
	Sample ID # : NSG-CM-060613-19 (Pile 19) NSG-CM-060613-20 (Pile 20) NSG-CM-060613-21 (Pile 21)			**312323 (Part 1.04)**	26			
	Blend of Granular Cap Material 50%-Topsoil 50%-Sand Must be screened to 1/2-inch minus							

REMARKS	I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated. **Name (TITLE)** Michael W. Muth - Project Manager NAME AND SIGNATURE OF CONTRACTOR

SECTION II – APPROVAL ACTION

ENCLOSURES RETURNED *(List by Item No.)*	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

ENG FORM 4025-R, MAR 95 *(ER 415-1-10)* **EDITION OF SEP 93 IS OBSOLETE** SHEET __1_ OF _1_ (PROPONENT: CEMP-CE)

Noted for Submittal #0038 (blended sand/topsoil grain size results):
The grain size results for the blended sand/topsoil material indicate the material is considered acceptable for its intended use.

Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NSG-CM-060613-19	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	13-0412A
Date Sampled:	6/6/2013	**Sampled By:**	Client
Date Tested:	6/10/2013	**Tested By:**	Sean Williams

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
13-0412A	NSG-CM-060613-19	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.0	100.0	
12.5 mm	1/2"	0.3	99.7	
6.3 mm	1/4"	5.4	94.3	
4.75 mm	#4	2.4	91.9	
2.00 mm	#10	7.3	84.6	
0.850 mm	#20	8.6	76.0	
0.600 mm	#30	5.0	71.0	
0.425 mm	#40	6.7	64.3	
0.150 mm	#100	31.1	33.2	
0.075 mm	#200	15.2	18.0	
Pan		18.0		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NSG-CM-060613-20	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	13-0412B
Date Sampled:	6/6/2013	**Sampled By:**	Client
Date Tested:	6/10/2013	**Tested By:**	Sean Williams

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
13-0412B	NSG-CM-060613-20	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.0	100.0	
12.5 mm	1/2"	0.5	99.5	
6.3 mm	1/4"	4.6	94.9	
4.75 mm	#4	2.5	92.4	
2.00 mm	#10	6.3	86.1	
0.850 mm	#20	9.1	77.0	
0.600 mm	#30	5.5	71.5	
0.425 mm	#40	7.4	64.1	
0.150 mm	#100	31.7	32.4	
0.075 mm	#200	14.9	17.5	
Pan		17.5		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NSG-CM-060613-21	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	13-0412C
Date Sampled:	6/6/2013	**Sampled By:**	Client
Date Tested:	6/10/2013	**Tested By:**	Sean Williams

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
13-0412C	NSG-CM-060613-21	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.0	100.0	
12.5 mm	1/2"	0.1	99.9	
6.3 mm	1/4"	1.6	98.3	
4.75 mm	#4	1.5	96.8	
2.00 mm	#10	4.9	91.9	
0.850 mm	#20	6.9	85.0	
0.600 mm	#30	4.6	80.4	
0.425 mm	#40	6.9	73.5	
0.150 mm	#100	36.2	37.3	
0.075 mm	#200	18.4	18.9	
Pan		18.9		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on reverse side prior to initiating this form)*	DATE 06/18/13	Submittal No. 0039

SECTION I – REQUEST FOR APROVAL OF THE FOLLOWING ITEMS

TO:	FROM:	General Electric Company Purchase Order Number:	CHECK ONE:
Construction Manager ATTN: Mark Gravelding, P.E. ARCADIS 6723 Towpath Road Syracuse, NY 13214 Email: mark.gravelding@arcadis-us.comm	Sevenson Environmental Services, Inc. 2749 Lockport Road Niagara Falls, New York 14305		**X** THIS IS A NEW TRANSMITTAL THIS IS A RESUBMITTAL OF TRANSMITTAL

SPECIFICATION SEC. NO: (Cover only one section with each transmittal) 313219	PROJECT TITLE AND LOCATION: **Silver Lake Removal Action Area** Pittsfield, MA 01201	CHECK ONE: THIS TRANSMITTAL IS FOR FIO X APPROVAL

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.)	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. *(See Instruction No. 8)*	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT		FOR CONTRACTOR USE CODE	VARIATION (See Instruction No. 6)	FOR CE USE CODE
				SPEC. PARA NO.	DRAWING SHEET NO.			
a.	*b.*	*c.*	*d.*	*e.*	*f.*	*g.*	*h.*	*i.*
8	Granular Cap Material / Nichols Sand and Gravel Hinsdale Pit			312323 (Part 1.04)	26			
9	Granular Cap Material particle/sieve analysis (ASTM D 422) results for (5) samples each representing 500CY		1	312323 (Part 1.04)	26			
	Sample ID # : NSG-CM-061213-19 (Pile 22) NSG-CM-061213-20 (Pile 23)			312323 (Part 1.04)	26			
	Blend of Granular Cap Material 50%-Topsoil 50%-Sand Must be screened to 1/2-inch minus							

REMARKS	I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated. Name (TITLE) Michael W. Muth - Project Manager NAME AND SIGNATURE OF CONTRACTOR

SECTION II – APPROVAL ACTION

ENCLOSURES RETURNED *(List by Item No.)*	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

ENG FORM 4025-R, MAR 95 *(ER 415-1-10)* **EDITION OF SEP 93 IS OBSOLETE** SHEET _1_ OF _1_ (PROPONENT: CEMP-CE)

Noted for Submittal #0039 (blended sand/topsoil grain size results):
The grain size results for the blended sand/topsoil material indicate the material is considered acceptable for its intended use.

☐ REVIEWED
☒ REVIEWED & NOTED
☐ REVISE & RESUBMIT
☐ REJECTED
☐ For information only
☐ Received, no action taken

Reviewed solely for general conformance with contract documents

ARCADIS of New York, Inc.

Signature

6/19/13
Date

Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NSG-CM-061213-22	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	13-0441A
Date Sampled:	6/12/2013	**Sampled By:**	Client
Date Tested:	6/18/2013	**Tested By:**	Sean Williams

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
13-0441A	NSG-CM-061213-22	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.0	100.0	
12.5 mm	1/2"	0.0	100.0	
6.3 mm	1/4"	1.6	98.4	
4.75 mm	#4	2.0	96.4	
2.00 mm	#10	5.4	91.0	
0.850 mm	#20	8.5	82.5	
0.600 mm	#30	4.5	78.0	
0.425 mm	#40	6.5	71.5	
0.150 mm	#100	35.4	36.1	
0.075 mm	#200	18.2	17.9	
Pan		17.9		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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Advance Testing

3348 Route 208, Campbell Hall, NY 10916
Phone: 845-496-1600 Fax: 845-496-1398
25 Hathorn Road, Enfield, NH 03748
42 Day Farm Road, West Stockbridge, MA 01266
1813 State Route 7, Harpursville, NY 13787

Client:	**Sevenson Environmental Services Inc.**	**Project:**	Silver Lake Removal Action
Item:	NSG-CM-061213-23	**Project Number:**	120458
Source:	Sevenson Environmental	**Lab Number:**	13-0441B
Date Sampled:	6/12/2013	**Sampled By:**	Client
Date Tested:	6/17/2013	**Tested By:**	Sean WIlliams

GRADATION (SIEVE ANALYSIS) OF SOIL OR AGGREGATE

Test Method(s): ASTM D422, C136, C117; AASHTO T88, T27, T11

Lab Number	Sample Type	Sampling Location	Specification
13-0441B	NSG-CM-061213-23	Stockpile	

Sieve Size		%	%	Spec. %
mm	Inches	Retained	Passing	Pass
100.0 mm	4"	0.0	100.0	
75.0 mm	3"	0.0	100.0	
63.0 mm	2 1/2"	0.0	100.0	
50.0 mm	2"	0.0	100.0	
37.5 mm	1 1/2"	0.0	100.0	
25.0 mm	1"	0.0	100.0	
19.0 mm	3/4"	0.0	100.0	
12.5 mm	1/2"	0.7	99.3	
6.3 mm	1/4"	3.5	95.8	
4.75 mm	#4	2.8	93.0	
2.00 mm	#10	5.9	87.1	
0.850 mm	#20	8.5	78.6	
0.600 mm	#30	3.9	74.7	
0.425 mm	#40	5.7	69.0	
0.150 mm	#100	33.1	35.9	
0.075 mm	#200	17.1	18.8	
Pan		18.8		

Comments:

Minus #200 by wash-sieve method.

Report Reviewed By: Emily J. Rodriguez

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