

710707

Seneca Meadows, Inc.  
1786 Salzman Rd.  
Waterloo, NY 13165  
Ph: (315) 539-5624 Fax: (315) 539-3097

Ticket: 1460941  
Date: 11/08/2006  
Time: 11:35:58 - 11:36:11

Customer: 15BEL / BEL ENVIRONMENTAL

Carrier: 0667 / RIDCELLI ENTERPRIS

Profile: 2006069B-15BEL / 15BEL-2006069

Origin: 9 / BROOME

Truck: RIC157

Comment:

Gross: 160680LBS

Tare: 41940LBS

Net: 118740LBS

Wastes & Services

Quantity

BCS01 / B/R-CONTAM SOIL

59.3700 Tons

Weighmaster: LYDIA 450104

Driver: Alton

## **Appendix P**

Hazardous Waste Manifest and  
Volume Ticket for Wastewater  
Treated by Clean Harbors



## REMIT TO:

Clean Harbors Env. Services  
PO Box 3442  
Boston, MA 02241-3442

## OFFICE:

Clean Harbors Env Services Inc  
42 Longwater Drive  
Norwell, MA 02061 - 9149  
(800) 444-4244

If you have any questions regarding this invoice, please  
contact your customer service representative at the  
telephone number listed above

## SOLD TO:

Blasland Bouck & Lee  
6723 Towpath Road  
Syracuse, NY 13214 - 0000

## JOB SITE/GENERATOR:

New York State Electric & Gas  
279-291 Court Street  
Binghamton, NY 13902

Job Description: CH11028BLACB.COAL TAR WATER - Hazardous VIA CHES TO BA

\*\* Payable in USD funds \*\*

Job Date	Invoice No	Customer	Sales Order	Purchase Order	Terms
03 Oct 2006	D20626972	BLA180	021277561		NET 15 DAYS

## SUMMARY BY LINE TYPE

DISPOSAL  
EQUIPMENT  
FEES  
TRANSPORTATION  
SUBTOTAL  
TAX  
INVOICE TOTAL

Manifest Info	Item ID	Description	Manifest Qty	Manifest Billing UOM	Billing Qty	Billing UOM	Unit Price	Amount
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03 Oct 2006

000394056FLE 1	DISPSL / A24	COAL TAR WATER - Hazardous CH11028BLACB	4,600	G	4,615,000	GAL		
	TANKWASH	Tank Wash			1,000	EA		
000394056FLE	TRAN	TRANSPORTATION			1,000	EA		
	FEE	Recovery Fee			2,358,000	EA		

3134

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved OMB No. 2050-0

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number <b>000394056 FLE</b>			
5. Generator's Name and Mailing Address			Generator's Site Address (if different than mailing address)					
Generator's Phone:			U.S. EPA ID Number					
6. Transporter 1 Company Name			U.S. EPA ID Number					
7. Transporter 2 Company Name			U.S. EPA ID Number					
8. Designated Facility Name and Site Address			U.S. EPA ID Number					
Facility's Phone:								
GENERATOR	9a. HAZ	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No. Type		11. Total Quantity	12. Unit Vol No.	13. Waste Code	
	1		001 TT 04/6004					
	2							
	3							
	4							
14. Special Handling Instructions and Additional Information								
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a), (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.								
Generator's/Offor's Printed/Typed Name: <b>DAVID M. BUDOSH</b> Signature: <i>[Signature]</i> Month: <b>10</b> Day: <b>03</b> Year: <b>04</b>								
TRANSPORTER	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: Date leaving U.S.:							
	17. Transporter Acknowledgment of Receipt of Materials Transporter 1 Printed/Typed Name: <i>[Signature]</i> Signature: <i>[Signature]</i> Month: <b>10</b> Day: <b>03</b> Year: <b>04</b> Transporter 2 Printed/Typed Name: Signature: Month: Day: Year:							
DESIGNATED FACILITY	18. Discrepancy 18a. Discrepancy Indication Select <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection							
	Manifest Reference Number:							
	18b. Alternate Facility (or Generator): U.S. EPA ID Number:							
	Facility's Phone:							
	18c. Signature of Alternate Facility (or Generator): Month: Day: Year:							
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)								
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in item 18a Printed/Typed Name: <i>[Signature]</i> Signature: <i>[Signature]</i> Month: <b>10</b> Day: <b>03</b> Year: <b>04</b>								



Page # 1 of 11

Run #: 046	Sales Order #: D21277581	Tractor #: 1333	Trailer #: 3134			
Job Date: 10-3-6	Customer / Generator Name: NYSE & Gas					
Expected Arrival Time: 800	Address: Binghamton NY		Gallons/Pounds/Tons: 4600			
Start Odometer: 71629	Manifest #: 000394056					
End Odometer:	Container Drop:	#	#			
Employee ID#: 3449	Container Pick Up:	#	#			
Driver Name: R Van Campen			Total Number of Liners Used:			
Please Use Military Hrs for Start/End Times						
Activity Code	Start Time	End Time	Reason Code	Hours (H)	Minutes (M)	Comments:
15	600	630			.50	
17	630	830		2.0		2.0
79	830	1030	22	2.0		2.0
82	1030	1730	49 19 54	1.0 1.0 4.0	.50 .50	7.0
83	1730	2030	39 41 33	 1.0 1.0	.50 .50	3.0
60	2030	2230		2.0		2.0
42	2230	2300			.50	.50
					(17.0)	
Customer's signature verifies arrival and departure times and authorizes any surcharge charges to be billed by Circuit Hardware when applicable as outlined in your quote or contract.						
Customer's Signature: [Signature]						Date: 10-3-6
Driver's Signature: [Signature]						Date: 10-3-6

Page # 1 of 11

1-800-444-4244

[illegible]

Customer's signature verifies arrival and departure times and authorizes any demurrage charges to be billed by Clean Harbors when applicable as outlined in your quote or contract.

Customer's Signature: \_\_\_\_\_

Date:

TOTAL P.07

**REMIT TO:**

Clean Harbors Env. Services  
PO Box 3442  
Boston, MA 02241-3442

**OFFICE:**

Clean Harbors Env Services Inc  
42 Longwater Drive  
Norwell, MA 02061 - 9149  
(800) 444-4244

**SOLD TO:**

Blasland Bouck & Lee  
6723 Towpath Road  
Syracuse, NY 13214 - 0000

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contact your customer service representative at the  
telephone number listed above

**JOB SITE/GENERATOR:**

New York State Electric & Gas  
279-291 Court Street  
Binghamton, NY 13902

Job Description: CH11028BLACB, COAL TAR WATER - Hazardous VIA CHES TO BA

\*\* Payable in USD funds \*\*

Job Date	Invoice No	Customer	Sales Order	Purchase Order	Terms
02 Nov 2006	D20649091	BLA180	D21301578		NET 15 DAYS

**SUMMARY BY LINE TYPE**

DISPOSAL  
EQUIPMENT  
FEES  
TRANSPORTATION  
SUBTOTAL  
TAX  
INVOICE TOTAL

Manifest	Item ID	Description	Manifest	Manifest	Billing	Billing	Unit	Amount
Info			Qty	UOM	Qty	UOM	Price	

02 Nov 2006

000390579FLE 1	DISPSL / A24	COAL TAR WATER - Hazardous CH11028BLACB	4,895	G	5,150.000	GAL		
	TANKWASH	Tank Wash			1.000	EA		
000390579FLE	TRAN	TRANSPORTATION			1.000	EA		
	FEE	Recovery Fee			2,465.000	EA		

**REMIT TO:**

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PO Box 3442  
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**JOB SITE/GENERATOR:**

New York State Electric & Gas  
279-291 Court Street  
Binghamton, NY 13902

Job Description: CH11028BLACB, COAL TAR WATER - Hazardous VIA CHES TO BA

\*\* Payable in USD funds \*\*

Job Date	Invoice No	Customer	Sales Order	Purchase Order	Terms
13 Nov 2006	D20661107	BLA180	D21306334		NET 15 DAYS

**SUMMARY BY LINE TYPE**

DISPOSAL  
EQUIPMENT  
FEES  
SURCHARGE  
TRANSPORTATION  
SUBTOTAL  
TAX  
INVOICE TOTAL

Manifest Info	Item ID	Description	Manifest Qty	Manifest UOM	Billing Qty	Billing UOM	Unit Price	Amount
---------------	---------	-------------	--------------	--------------	-------------	-------------	------------	--------

13 Nov 2006

	SRCHRG / B36B	Solids or solids upon treatment surcharge Solid - 5			3,542.000	GAL		
000390580FLE 1	DISPSL / B36B	COAL TAR WATER - Hazardous CH11028BLACB	3,150	G	1.000	MIN		
	TANKWASH	Tank Wash			1.000	EA		
000390580FLE	TRAN	TRANSPORTATION			4.000	EA		
	FEE	Recovery Fee			2,397.520	EA		

## **Appendix Q**

Waste Profile and Approval Letter  
from Casie Protank

# CASIE/PROTANK

## ENVIRONMENTAL SERVICES

☐ New  
☐ Amendment  
☐ Recertification

NAME OF  
WASTE STREAM

MATERIAL  
CFI NO.

### A. GENERATOR INFORMATION

Generator Name New York State Electric & Gas Corporation  
 Facility Address 293 Court Street

City/County Binghamton

State New York Zip Code 13901

USEPA ID# NY0000073189

Technical Contact Dave Budosh (BBLES) (on-site)

Telephone (315) 317-0308 EXT.       

Fax (315) 449-4111 (Jason Golubski, phr. (315) 671-9437)

Billing Name BBLES

Billing Address 6723 Towpath Road

City Syracuse State NY Zip Code 13214

Attention Margie Saunders

### B. WASTE INFORMATION

Common Name for Waste Non-Haz. debris from former MGP

Detailed Description of Process Generating Waste (Describe each step in process)  
Excavation of former MGP structures from the  
subsurface

List raw materials used:       

List products produced:       

Is waste Dioxin bearing? ☐ Yes ☒ No Infectious? ☐ Yes ☒ No

Radioactive? ☐ Yes ☒ No Explosive? ☐ Yes ☒ No

Anticipated Volume: 1 Roll-off Frequency: 1 occurrence

Current Volume on site: 1 Roll-off

Have toxicity characteristic or other analysis been performed on this waste?

☐ No ☒ Yes (if yes, please attach copy of results)

### C. DOT

Shipping Name Non-Hazardous Non-Regulated Debris

Hazard Class       

UN/NA No.       

Packing Group       

RO       

Method of Shipment:

☐ Vac Truck ☐ Dump Trailer ☐ Drum (type/size)       

☐ Tank Truck ☐ Roll Off ☐ Other       

### D. RCRA

Non Hazardous/Exempt? ☒ Yes ☐ No

State Waste Codes: N/A EPA Waste Codes: N/A

1) Is this a US EPA hazardous waste? ☐ Yes ☒ No

2) Is waste an EPA Listed hazardous waste? ☐ Yes ☒ No

3) Does waste contain solvents? ☐ Yes ☒ No

If yes, specify:       

4) Is waste a listed solvent as defined by 40 CFR 261.31 (F001, F002, F003, F004, F005)? ☐ Yes ☒ No

5) Does waste contain greater than 1,000 ppm Total HOCs, Halogenated Organic Compounds? ☐ Yes ☒ No

6) Does waste contain PCBs greater than 50 ppm or PCBs derived from a source greater than 50 ppm? ☐ Yes ☒ No

### E. ANNUAL REPORT CODES

SIC Code:       

Source Code: A

Form Code: B

Origin Code:       

System Type: M

### F. OTHER COMPONENTS

	No	Yes	Total ppm
PCBs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>      </u>
Cyanides	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>      </u>
Sulfides	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>      </u>
Pesticides	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>      </u>
Phenolics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>      </u>
Dioxins	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>      </u>
Halogens	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>      </u> %

### G. PHYSICAL CHARACTERISTICS AT 70°F Approximately 7 to 10 tons

Weight Density        lbs./gal. (US, liq)        lbs./cu. foot

Dry Weight ☐ <1.0% ☐ 1-5% ☐ 5-20% ☐ 20-100%

pH ☐ N/A ☐ 0-2 ☐ 2.1-4 ☐ 4.1-10 ☐ 10.1-12.4 ☐ ≥12.5 Exact       

Flash Point ☐ <100°F ☐ 101-140°F ☐ 141-200°F

(liquid only)

Boiling Point ☐ <95°F ☐ >95°F ☐ N/A

BTU/Lb.        % Recoverable Oil       

### H. METALS ☐ None ☐ TCLP (MGL) ☐ TOTAL (PPM)

SEE ATTACHED	Reg. Limit	Below	Above	Range
D004 Arsenic	5 mg/L	<input type="checkbox"/>	<input type="checkbox"/>	<u>      </u>
D005 Barium	100 mg/L	<input type="checkbox"/>	<input type="checkbox"/>	<u>      </u>
D006 Cadmium	1 mg/L	<input type="checkbox"/>	<input type="checkbox"/>	<u>      </u>
D007 Chromium	5 mg/L	<input type="checkbox"/>	<input type="checkbox"/>	<u>      </u>
Copper		<input type="checkbox"/>	<input type="checkbox"/>	<u>      </u>
D008 Lead	5 mg/L	<input type="checkbox"/>	<input type="checkbox"/>	<u>      </u>
D009 Mercury	0.2 mg/L	<input type="checkbox"/>	<input type="checkbox"/>	<u>      </u>
Nickel	134 mg/L	<input type="checkbox"/>	<input type="checkbox"/>	<u>      </u>
D010 Selenium	1 mg/L	<input type="checkbox"/>	<input type="checkbox"/>	<u>      </u>
D011 Silver	5 mg/L	<input type="checkbox"/>	<input type="checkbox"/>	<u>      </u>
Zinc		<input type="checkbox"/>	<input type="checkbox"/>	<u>      </u>

Others: SEE ATTACHED ANALYTICAL

### J. TOXICITY CHARACTERISTIC ORGANICS SEE ATTACHED ANALYTICAL

☐ Total ☒ TCLP

	(in parts per million)	Actual		(in parts per million)	Actual
D012 Endrin	<input type="checkbox"/> <0.02	<u>      </u>	D028 1,2 Dichloroethane	<input type="checkbox"/> <0.5	<u>      </u>
D013 Lindane	<input type="checkbox"/> <0.4	<u>      </u>	D029 1,1 Dichloroethylene	<input type="checkbox"/> <0.7	<u>      </u>
D014 Methoxychlor	<input type="checkbox"/> <10.0	<u>      </u>	D030 2,4 Dinitrotoluene	<input type="checkbox"/> <0.13	<u>      </u>
D015 Toxaphene	<input type="checkbox"/> <0.5	<u>      </u>	D031 Heptachlor	<input type="checkbox"/> <0.008	<u>      </u>
D016 2,4 D	<input type="checkbox"/> <10.0	<u>      </u>	D032 Hexachlorobenzene	<input type="checkbox"/> <0.13	<u>      </u>
D017 Silvex (2, 4, 5-TP)	<input type="checkbox"/> <1.0	<u>      </u>	D033 Hexachlorobutadiene	<input type="checkbox"/> <0.5	<u>      </u>
D018 Benzene	<input type="checkbox"/> <0.5	<u>      </u>	D034 Hexachloroethane	<input type="checkbox"/> <3.0	<u>      </u>
D019 Carbon Tetrachloride	<input type="checkbox"/> <0.5	<u>      </u>	D035 Methyl Ethyl Ketone	<input type="checkbox"/> <200	<u>      </u>
D020 Chlordane	<input type="checkbox"/> <0.03	<u>      </u>	D036 Nitrobenzene	<input type="checkbox"/> <2.0	<u>      </u>
D021 Chlorobenzene	<input type="checkbox"/> <100	<u>      </u>	D037 Pentachlorophenol	<input type="checkbox"/> <100	<u>      </u>
D022 Chloroform	<input type="checkbox"/> <8.0	<u>      </u>	D038 Pyridine	<input type="checkbox"/> <5.0	<u>      </u>
D023 O-Cresol	<input type="checkbox"/> <200	<u>      </u>	D039 Tetrachloroethylene	<input type="checkbox"/> <0.7	<u>      </u>
D024 M-Cresol	<input type="checkbox"/> <200	<u>      </u>	D040 Trichloroethane	<input type="checkbox"/> <0.5	<u>      </u>
D025 P-Cresol	<input type="checkbox"/> <200	<u>      </u>	D041 2,4,5 Trichlorophenol	<input type="checkbox"/> <400	<u>      </u>
D026 Cresols	<input type="checkbox"/> <200	<u>      </u>	D042 2,4,6 Trichlorophenol	<input type="checkbox"/> <2.0	<u>      </u>
D027 1,4 Dichlorobenzene	<input type="checkbox"/> <7.5	<u>      </u>	D043 Vinyl Chloride	<input type="checkbox"/> <0.2	<u>      </u>

### L. PHYSICAL/CHEMICAL CONSTITUENTS

(1) Cast Iron Tank 4'x4'x10'       %  
 (1) Ductile Iron/Steel Tank 6'x6'x5'       %  
 Cast Iron Pipe 30' (many small pieces)       %  
             %  
 Actual soil/coal tar <1%       %  
 (Attach AB MSDS, Sample Analysis and Additional Info)       100%

**K. HAZARDOUS CHARACTERISTICS SEE ATTACHED ANALYTICAL**

☐ Corrosive  
☐ Toxic  
☐ Oxidizer  
☐ T.C. Toxic

☐ Acutely Toxic  
☐ Peroxide  
☐ Ignitable  
☐ Poison

☐ Pyrophoric  
☐ Reactive  
☐ Water Reactive

TSCA Regulated Waste?  
 US EPA Hazardous Waste?  
 State Hazardous Waste?  
 CERCLA Hazardous Waste?  
 US EPA Hazardous Waste Numbers \_\_\_\_\_

☐ Yes ☒ No  
☐ Yes ☒ No  
☐ Yes ☒ No  
☐ Yes ☒ No

The information in this report is based on ☐ General Knowledge ☒ Analysis (attached)

**GENERATOR CERTIFICATION**

I hereby certify that the above and attached description is complete and accurate and that no deliberate or willful omissions of compositions or properties exists, and that all known or suspected hazards have been disclosed.

Generator's Authorized Signatory:

Trocy Blaylock

TITLE LEAD ANALYST

DATE 10/27/06

**WASTE CHARACTERIZATION REPORT****General Instructions**

- 1) This Waste Characterization Report has been designed to provide Casie/Protank with information necessary to transport, treat, store, or dispose of your waste in a safe, legal, and environmentally sound matter.
- 2) The information on this form is required prior to the acceptance of any waste by Casie/Protank. Answers must be provided for all questions / sections on this form, and be printed in ink or typed.
- 3) If a particular question is not applicable to your waste stream, indicate by writing "NA" in the appropriate space. If your waste does not contain a specific constituent, indicate by writing "NONE" in the appropriate space.
- 4) If you do not know the answer to a specific question indicate "UNKNOWN" in the appropriate section. This response will require you to provide additional information or have analysis performed.
- 5) Pay special attention to the Process Description section of this form. Provide a *detailed step by step* description of the actual process which generates the waste, starting with the raw materials used through to the final product produced.
- 6) Ranges are acceptable in the Chemical Composition section of the form. All organic and inorganic components in the waste must be listed and the sum of the averages must equal 100 percent.
- 7) Material Safety Data Sheets (MSDS) must be submitted for virgin chemical products, offspec chemical products, spent solvents, and spill cleanup material.
- 8) An authorized employee of the generator must sign and date the certification on the completed Waste Characterization Report.
- 9) A representative sample must be collected in accordance with 40 CFR 261 Appendix I and submitted along with the complete WCR.
- 10) If you need help in completing this form, please contact your Casie/Protank Sales Representative.
- 11) Make a copy of this form for your records and send original and all attachments to the address shown above.
- 12) Once approved this waste stream will require recertification once per year at the approval anniversary date.
- 13) You must notify your Casie/Protank Sales Representative in the event of a material or process change.

**CASIE/PROTANK**

P.O. Box 92  
 Franklinville, NJ 08322  
 856-696-4401  
 FAX 856-696-7065

NJDEP 0614D1HP08  
 EPA ID NJD045995693  
 NJDEP LAB 06739  
 NJ HAZ TRANS S6747



# QUICK RESPONSE FAX OF LABORATORY RESULTS

10-11-06

Today's Date

PROJECT ID: 293 Court St., Binghamton, NY

TO:

COPY TO:

Joseph Molina

Jason Golubski

Blasland, Bouck & Lee, Inc.

5853854198

FROM:

LIFE SCIENCE LABORATORIES, INC.

LSL PROJECT ID:

0617579

NUMBER OF PAGES TRANSMITTED:

5

(INCLUDING COVER PAGE)

COMMENTS:

Thank you for the opportunity to be of service to you. We appreciate your business. If you need further assistance, please don't hesitate to contact us.

## Need help with ...

Questions About Your Results

Price Quotations

Requests for Sample Kits or Scheduling Pickup of Samples

Status of Samples Currently Being Analyzed

## Please Ask For ...

The Quality Department

The Client Services Department

The Field Services Department

The Technical Services Department

This facsimile contains CONFIDENTIAL INFORMATION which may also be legally privileged and is intended only for the use of the addressee(s) named above. If you are not the intended recipient of this facsimile, or the employee or agent responsible for delivering it to the intended recipient, you are hereby notified that any dissemination or copying of this facsimile is prohibited. If you have received this facsimile in error, please notify us by telephone and return the original to us via the U. S. Postal Service. Thank You.

If you did not receive all of the pages please contact us immediately at (315) 445-1105.

LIFE SCIENCE LABORATORIES, INC.

5854 Butternut Drive, E. Syracuse, NY 13057





Joseph Molina  
Blasland, Bouck & Lee, Inc.  
295 Woodcliff Drive  
Third Floor, Suite 301  
Fairport, NY 14450

Phone: (585) 385-0090  
FAX: (585) 385-4198  
Authorization: PO #130.74.001

# Laboratory Analysis Report

## For

### Blasland, Bouck & Lee, Inc.

Client Project ID:  
**293 Court St., Binghamton, NY**  
LSL Project ID: **0617579**  
Receive Date/Time: 10/05/06 16:12  
Project Received by: RD

Life Science Laboratories, Inc. warrants, to the best of its knowledge and belief, the accuracy of the analytical test results contained in this report, but makes no other warranty, expressed or implied, especially no warranties of merchantability or fitness for a particular purpose. By the Client's acceptance and/or use of this report, the Client agrees that LSL is hereby released from any and all liabilities, claims, damages or causes of action affecting or which may affect the Client as regards to the results contained in this report. The Client further agrees that the only remedy available to the Client in the event of proven non-conformity with the above warranty shall be for LSL to re-perform the analytical test(s) at no charge to the Client. The data contained in this report are for the exclusive use of the Client to whom it is addressed, and the release of these data to any other party, or the use of the name, trademark or service mark of Life Science Laboratories, Inc. especially for the use of advertising to the general public, is strictly prohibited without express prior written consent of Life Science Laboratories, Inc. This report may only be reproduced in its entirety. No partial duplication is allowed. The Chain of Custody document submitted with these samples is considered by LSL to be an appendix of this report and may contain specific information that pertains to the samples included in this report. The analytical result(s) in this report are only representative of the sample(s) submitted for analysis. LSL makes no claim of a sample's representativeness, or integrity, if sampling was not performed by LSL personnel.

## Life Science Laboratories, Inc.

(1) LSL Central Lab, East Syracuse, NY	(315) 445-1105	NYS DOH ELAP #10248 PA DEP #68-2556
(2) LSL North Lab, Waddington, NY	(315) 388-4476	NYS DOH ELAP #10900
(3) LSL Finger Lakes Lab, Wayland, NY	(585) 728-3320	NYS DOH ELAP #11667
(4) LSL Southern Tier Lab, Cuba, NY	(585) 968-2640	NYS DOH ELAP #10760
(5) LSL MidLakes Lab, Canandaigua, NY	(585) 396-0270	NYS DOH ELAP #11369
(6) LSL Brittonfield Lab, East Syracuse, NY	(315) 437-0200	NYS DOH ELAP #10155

This report was reviewed by:

gEdmunds, QA  
Life Science Laboratories, Inc.

Date:

10/11/06

# -- LABORATORY ANALYSIS REPORT --

Blasland, Bouck & Lee, Inc. Fairport, NY

Sample ID: SP6-100506 - Composite LSL Sample ID: 0617579-001  
Location: 293 Court St., Binghamton  
Sampled: 10/05/06 10:00 Sampled By: Client  
Sample Matrix: SHW as Recd

Analytical Method	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
Analyte					
(1) Corrosivity as pH					
Corrosivity as pH	10	Std Units		10/10/06 11:04	MK
(5) EPA 1010 Ignitability					
Ignitability	>60	Degrees C.		10/9/06	ASL
(1) EPA 1311 TCLP Extraction					
TCLP Non-Volatile Extraction				10/9/06	MFJ
(1) EPA 1311 TCLP Z.H. Extraction					
TCLP Zero Headspace Extraction				10/9/06	MFJ
(1) EPA 6010 TCLP Metals					
Arsenic	<1	mg/l	10/10/06	10/11/06	DP
Barium	<5	mg/l	10/10/06	10/11/06	DP
Cadmium	<0.5	mg/l	10/10/06	10/11/06	DP
Chromium	<1	mg/l	10/10/06	10/11/06	DP
Lead	<1	mg/l	10/10/06	10/11/06	DP
Selenium	<0.5	mg/l	10/10/06	10/11/06	DP
Silver	<1	mg/l	10/10/06	10/11/06	DP
(1) EPA 7471 TCLP Mercury					
Mercury	<0.002	mg/l		10/11/06	DP
(1) EPA 8082 PCB's					
Aroclor-1016	<0.02	mg/kg	10/10/06	10/11/06	BW
Aroclor-1221	<0.02	mg/kg	10/10/06	10/11/06	BW
Aroclor-1232	<0.02	mg/kg	10/10/06	10/11/06	BW
Aroclor-1242	<0.02	mg/kg	10/10/06	10/11/06	BW
Aroclor-1248	<0.02	mg/kg	10/10/06	10/11/06	BW
Aroclor-1254	<0.02	mg/kg	10/10/06	10/11/06	BW
Aroclor-1260	<0.02	mg/kg	10/10/06	10/11/06	BW
Surrogate (DCB)	101	%R	10/10/06	10/11/06	BW
(1) EPA 8260 TCLP Volatiles					
Benzene	<0.05	mg/l		10/10/06	CA
Carbon tetrachloride	<0.05	mg/l		10/10/06	CA
Chlorobenzene	<0.05	mg/l		10/10/06	CA
Chloroform	<0.05	mg/l		10/10/06	CA
1,4-Dichlorobenzene	<0.05	mg/l		10/10/06	CA
1,2-Dichloroethane	<0.05	mg/l		10/10/06	CA
1,1-Dichloroethene	<0.05	mg/l		10/10/06	CA
2-Butanone (MEK)	<0.1	mg/l		10/10/06	CA
Tetrachloroethene	<0.05	mg/l		10/10/06	CA
Trichloroethene	<0.05	mg/l		10/10/06	CA
Vinyl chloride	<0.02	mg/l		10/10/06	CA
Surrogate (1,2-DCA-d4)	88	%R		10/10/06	CA
Surrogate (Tol-d8)	98	%R		10/10/06	CA
Surrogate (4-BFB)	97	%R		10/10/06	CA
(1) EPA 8270 TCLP Semi-Volatiles					
Cresol, Total	<0.01	mg/l	10/10/06	10/10/06	CRT

# -- LABORATORY ANALYSIS REPORT --

Blasland, Bouck & Lee, Inc. Fairport, NY

Sample ID: SP6-100506 - Composite LSL Sample ID: 0617579-001  
Location: 293 Court St., Binghamton  
Sampled: 10/05/06 10:00 Sampled By: Client  
Sample Matrix: SHW as Recd

Analytical Method	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
Analyte					
(1) EPA 8270 TCLP Semi-Volatiles					
2,4-Dinitrotoluene	<0.01	mg/l	10/10/06	10/10/06	CRT
Hexachlorobenzene	<0.01	mg/l	10/10/06	10/10/06	CRT
Hexachlorobutadiene	<0.01	mg/l	10/10/06	10/10/06	CRT
Hexachloroethane	<0.01	mg/l	10/10/06	10/10/06	CRT
Nitrobenzene	<0.01	mg/l	10/10/06	10/10/06	CRT
Pentachlorophenol	<0.02	mg/l	10/10/06	10/10/06	CRT
Pyridine	<0.02	mg/l	10/10/06	10/10/06	CRT
2,4,5-Trichlorophenol	<0.01	mg/l	10/10/06	10/10/06	CRT
2,4,6-Trichlorophenol	<0.01	mg/l	10/10/06	10/10/06	CRT
Surrogate (2-Fluorophenol)	28	%R	10/10/06	10/10/06	CRT
Surrogate (Phenol-d5)	20	%R	10/10/06	10/10/06	CRT
Surrogate (2,4,6-Tribromophenol)	66	%R	10/10/06	10/10/06	CRT
Surrogate (Nitrobenzene-d5)	57	%R	10/10/06	10/10/06	CRT
Surrogate (2-Fluorobiphenyl)	55	%R	10/10/06	10/10/06	CRT
Surrogate (Terphenyl-d14)	74	%R	10/10/06	10/10/06	CRT
(1) EPA 9012 Reactive Cyanide					
Reactive Cyanide	<50	mg/kg		10/11/06	DRB
(1) EPA 9030A Reactive Sulfide					
Reactive Sulfide	51	mg/kg		10/11/06	AF
(1) EPA 9095 Paint Filter Test					
Paint Filter Test	Pass			10/9/06	MM
(1) SW846, 7.3 Reactivity Distillation					
Reactivity Distillation				10/9/06 11:45	MM



**5854 Butternut Drive**

**East Syracuse, NY 13057**

**Phone # (315) 445-1105**

**Client:** **Biasland, Bouck & Lee, Inc.**

**Address: 295 Woodcliff Drive**

**Fairport, NY 14450**

**Telefax # (315) 445-1301**

**Phone # 585-385-0090****Fax # 585-385-4198**

# Chain of Custody Record

**0617579**

# BIBLES Fairport

**Contact Person:** \_\_\_\_\_ **LSL Project #:** \_\_\_\_\_

**Joe Molina**

**ext. 12**

**Client's Site I.D.:**

**293 Court St. Binghamton, NY**

**Authorization:**

130.74,001

[illegible]

### Notes and Hazard identifications:

\* As written on bottles. 10/5/00

Derchent 10/9/98

\*\*\* Flash to ML.

22th JAN

Sampled By: Mr. B. L. H. Received By: \_\_\_\_\_

Received By:

Reinquished By: Mr. Z. L. L. Received By: Mr. Z. L. L.

Received By:

Retinquished By: *RCM*

Received for Lab 1

**Shipment Method:****Samples Received Intact: Y N**

14.90C



# QUICK RESPONSE FAX OF LABORATORY RESULTS

10-16-06  
Today's Date

PROJECT ID: 293 Court St., Binghamton, NY

TO:  
**Joseph Molina**  
**Blasland, Bouck & Lee, Inc.**  
**5853854198**

COPY TO:  
**Jason Golubski**

FROM: **LIFE SCIENCE LABORATORIES, INC.**

LSL PROJECT ID: 0617925

NUMBER OF PAGES TRANSMITTED:  
(INCLUDING COVER PAGE)

6

COMMENTS: \_\_\_\_\_

Thank you for the opportunity to be of service to you. We appreciate your business. If you need further assistance, please don't hesitate to contact us.

## Need help with ...

Questions About Your Results  
Price Quotations  
Requests for Sample Kits or Scheduling Pickup of Samples  
Status of Samples Currently Being Analyzed

## Please Ask For ...

The Quality Department  
The Client Services Department  
The Field Services Department  
The Technical Services Department

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**If you did not receive all of the pages please contact us immediately at (315) 445-1105.**

**LIFE SCIENCE LABORATORIES, INC.**  
**5854 Butternut Drive, E. Syracuse, NY 13057**



Joseph Molina  
Blasland, Bouck & Lee, Inc.  
295 Woodcliff Drive  
Third Floor, Suite 301  
Fairport, NY 14450

Phone: (585) 385-0090  
FAX: (585) 385-4198  
Authorization: PO #130.74.001

# Laboratory Analysis Report

For

**Blasland, Bouck & Lee, Inc.**

Client Project ID:

**293 Court St., Binghamton, NY**

LSL Project ID: **0617925**

Receive Date/Time: 10/11/06 15:40

Project Received by: GS

Life Science Laboratories, Inc. warrants, to the best of its knowledge and belief, the accuracy of the analytical test results contained in this report, but makes no other warranty, expressed or implied, especially no warranties of merchantability or fitness for a particular purpose. By the Client's acceptance and/or use of this report, the Client agrees that LSL is hereby released from any and all liabilities, claims, damages or causes of action affecting or which may affect the Client as regards to the results contained in this report. The Client further agrees that the only remedy available to the Client in the event of proven non-conformity with the above warranty shall be for LSL to re-perform the analytical test(s) at no charge to the Client. The data contained in this report are for the exclusive use of the Client to whom it is addressed, and the release of these data to any other party, or the use of the name, trademark or service mark of Life Science Laboratories, Inc. especially for the use of advertising to the general public, is strictly prohibited without express prior written consent of Life Science Laboratories, Inc. This report may only be reproduced in its entirety. No partial duplication is allowed. The Chain of Custody document submitted with these samples is considered by LSL to be an appendix of this report and may contain specific information that pertains to the samples included in this report. The analytical result(s) in this report are only representative of the sample(s) submitted for analysis. LSL makes no claim of a sample's representativeness, or integrity, if sampling was not performed by LSL personnel.

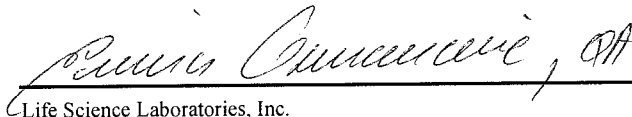
## Life Science Laboratories, Inc.

- (1) LSL Central Lab, East Syracuse, NY
- (2) LSL North Lab, Waddington, NY
- (3) LSL Finger Lakes Lab, Wayland, NY
- (4) LSL Southern Tier Lab, Cuba, NY
- (5) LSL MidLakes Lab, Canandaigua, NY
- (6) LSL Brittonfield Lab, East Syracuse, NY

(315) 445-1105  
(315) 388-4476  
(585) 728-3320  
(585) 968-2640  
(585) 396-0270  
(315) 437-0200

NYS DOH ELAP #10248 PA DEP #68-2556  
NYS DOH ELAP #10900  
NYS DOH ELAP #11667  
NYS DOH ELAP #10760  
NYS DOH ELAP #11369  
NYS DOH ELAP #10155

This report was reviewed by:

  
Life Science Laboratories, Inc.

Date:

10/16/06

A copy of this report was sent to: Jason Golubski

# - - LABORATORY ANALYSIS REPORT - -

*Blasland, Bouck & Lee, Inc. Fairport, NY*

<b>Sample ID:</b>	SP8-101106	<b>LSL Sample ID:</b>	0617925-001
<b>Location:</b>	293 Court St., Binghamton, NY		
<b>Sampled:</b>	10/11/06 8:00	<b>Sampled By:</b>	DMB
<b>Sample Matrix:</b>	SHW as Reed		

Analytical Method					
Analyte	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(5) ASTM E-502-84 Ignitability					
Ignitability	>60	Degrees C.		10/13/06	ASL
(1) Corrosivity as pH					
Corrosivity as pH	9.6	Std Units		10/13/06 13:40	MK
(1) EPA 1311 TCLP Extraction					
TCLP Non-Volatile Extraction				10/11/06	MFJ
(1) EPA 1311 TCLP Z.H. Extraction					
TCLP Zero Headspace Extraction				10/11/06	MFJ
(1) EPA 6010 TCLP Metals					
Arsenic	<1	mg/l	1/12/06	10/16/06	DP
Barium	<5	mg/l	1/12/06	10/16/06	DP
Cadmium	<0.5	mg/l	1/12/06	10/16/06	DP
Chromium	<1	mg/l	1/12/06	10/16/06	DP
Lead	<1	mg/l	1/12/06	10/16/06	DP
Selenium	<0.5	mg/l	1/12/06	10/16/06	DP
Silver	<1	mg/l	1/12/06	10/16/06	DP
(1) EPA 7471 TCLP Mercury					
Mercury	<0.002	mg/l		10/12/06	DP
(1) EPA 8082 PCB's					
Aroclor-1016	<0.02	mg/kg	10/12/06	10/13/06	BW
Aroclor-1221	<0.02	mg/kg	10/12/06	10/13/06	BW
Aroclor-1232	<0.02	mg/kg	10/12/06	10/13/06	BW
Aroclor-1242	<0.02	mg/kg	10/12/06	10/13/06	BW
Aroclor-1248	<0.02	mg/kg	10/12/06	10/13/06	BW
Aroclor-1254	<0.02	mg/kg	10/12/06	10/13/06	BW
Aroclor-1260	<0.02	mg/kg	10/12/06	10/13/06	BW
Surrogate (DCB)	105	%R	10/12/06	10/13/06	BW
(1) EPA 8260 TCLP Volatiles					
Benzene	<0.05	mg/l		10/13/06	BD
Carbon tetrachloride	<0.05	mg/l		10/13/06	BD
Chlorobenzene	<0.05	mg/l		10/13/06	BD
Chloroform	<0.05	mg/l		10/13/06	BD
1,4-Dichlorobenzene	<0.05	mg/l		10/13/06	BD
1,2-Dichloroethane	<0.05	mg/l		10/13/06	BD
1,1-Dichloroethene	<0.05	mg/l		10/13/06	BD
2-Butanone (MEK)	<0.1	mg/l		10/13/06	BD
Tetrachloroethene	<0.05	mg/l		10/13/06	BD
Trichloroethene	<0.05	mg/l		10/13/06	BD
Vinyl chloride	<0.02	mg/l		10/13/06	BD
Surrogate (1,2-DCA-d4)	101	%R		10/13/06	BD
Surrogate (Tol-d8)	93	%R		10/13/06	BD
Surrogate (4-BFB)	97	%R		10/13/06	BD
(1) EPA 8270 TCLP Semi-Volatiles					
Cresol, Total	<0.01	mg/l	10/12/06	10/12/06	CRT

# -- LABORATORY ANALYSIS REPORT --

Blasland, Bouck & Lee, Inc. Fairport, NY

Sample ID: SP8-101106 LSL Sample ID: 0617925-001  
Location: 293 Court St., Binghamton, NY  
Sampled: 10/11/06 8:00 Sampled By: DMB  
Sample Matrix: SHW as Recd

Analytical Method			Prep	Analysis	Analyst
Analyte	Result	Units	Date	Date & Time	Initials
(1) EPA 8270 TCLP Semi-Volatiles					
2,4-Dinitrotoluene	<0.01	mg/l	10/12/06	10/12/06	CRT
Hexachlorobenzene	<0.01	mg/l	10/12/06	10/12/06	CRT
Hexachlorobutadiene	<0.01	mg/l	10/12/06	10/12/06	CRT
Hexachloroethane	<0.01	mg/l	10/12/06	10/12/06	CRT
Nitrobenzene	<0.01	mg/l	10/12/06	10/12/06	CRT
Pentachlorophenol	<0.02	mg/l	10/12/06	10/12/06	CRT
Pyridine	<0.02	mg/l	10/12/06	10/12/06	CRT
2,4,5-Trichlorophenol	<0.01	mg/l	10/12/06	10/12/06	CRT
2,4,6-Trichlorophenol	<0.01	mg/l	10/12/06	10/12/06	CRT
Surrogate (2-Fluorophenol)	36	%R	10/12/06	10/12/06	CRT
Surrogate (Phenol-d5)	27	%R	10/12/06	10/12/06	CRT
Surrogate (2,4,6-Tribromophenol)	67	%R	10/12/06	10/12/06	CRT
Surrogate (Nitrobenzene-d5)	79	%R	10/12/06	10/12/06	CRT
Surrogate (2-Fluorobiphenyl)	72	%R	10/12/06	10/12/06	CRT
Surrogate (Terphenyl-d14)	80	%R	10/12/06	10/12/06	CRT
(1) EPA 9012 Reactive Cyanide					
Reactive Cyanide	<50	mg/kg		10/13/06	DRB
(1) EPA 9030A Reactive Sulfide					
Reactive Sulfide	<50	mg/kg		10/16/06	AF
(1) EPA 9095 Paint Filter Test					
Paint Filter Test	Pass			10/12/06	MM
(1) SW846, 7.3 Reactivity Distillation					
Reactivity Distillation				10/13/06 08:45	MM

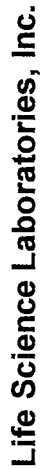




# SURROGATE RECOVERY CONTROL LIMITS FOR ORGANIC METHODS

<u>Method</u>	<u>Surrogate(s)</u>	<u>Water Limits, %R</u>	<u>SHW Limits, %R</u>
EPA 504	TCMX	80-120	NA
EPA 508	DCB	70-130	NA
EPA 515.4	DCAA	70-130	NA
EPA 524.2	1,2-DCA-d4, 4-BFB	80-120	NA
EPA 525.2	1,3-DM-2-NB, TPP, Per-d12	70-130	NA
EPA 526	1,3-DM-2-NB, TPP	70-130	NA
EPA 528	2-CP-3,4,5,6-d4, 2,4,6-TBP	70-130	NA
EPA 551.1	Decafluorobiphenyl	80-120	NA
EPA 552.2	2,3-DBPA	70-130	NA
EPA 601	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	NA
EPA 602	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	NA
EPA 608	TCMX, DCB	30-150	NA
EPA 624	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	NA
EPA 625, AE	2-Fluorophenol	21-110	NA
EPA 625, AE	Phenol-d5	10-110	NA
EPA 625, AE	2,4,6-Tribromophenol	10-123	NA
EPA 625, BN	Nitrobenzene-d5	35-114	NA
EPA 625, BN	2-Fluorobiphenyl	43-116	NA
EPA 625, BN	Terphenyl-d14	33-141	NA
EPA 8010	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8020	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8021	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8081	TCMX, DCB	30-150	30-150
EPA 8082	DCB	30-150	30-150
EPA 8151	DCAA	30-130	30-120
EPA 8260	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8270, AE	2-Fluorophenol	21-110	25-121
EPA 8270, AE	Phenol-d5	10-110	24-113
EPA 8270, AE	2,4,6-Tribromophenol	10-123	19-122
EPA 8270, BN	Nitrobenzene-d5	35-114	23-120
EPA 8270, BN	2-Fluorobiphenyl	43-116	30-115
EPA 8270, BN	Terphenyl-d14	33-141	18-137
DOH 310-13	Terphenyl-d14	40-110	40-110
DOH 310-14	Terphenyl-d14	40-110	40-110
DOH 310-15	Terphenyl-d14	40-110	40-110
DOH 310-34	4-BFB	50-150	50-150
DOH 313-4	DCB	NA	30-150
8015M_GRO	4-BFB	50-150	50-150
8015M_DRO	Terphenyl-d14	50-150	50-150

Units Key:	ug/l = microgram per liter ug/kg = microgram per kilogram mg/l = milligram per liter mg/kg = milligram per kilogram %R = Percent Recovery
------------	---



**East Syracuse, NY 13057**

**Telefax # (315) 445-1301**

**Phone # 585-385-0090****Fax # 585-385-4198**

Net. E-Time on Labels	33	130.74.001	Authorization:
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130.74.001  
Authorization:

# Chain of Custody Record

**0617925**

## BIBLES Fairport

**Contact Person:**

**LSL Project #:**

**Joe Molina**

**Client's Site I.D.:**

**293 Court St. Binghamton, NY**

130.74.001

[illegible]

### Notes and Hazard identifications:

三

sampled by: *Mr. B. L.*

Received By:

Relinquished By: Ph. K. L.

**Received By:**

Relinquished By: *Ram* Received for Lab By:

*Rm*

ivided for Lab By:

**Shipment Method:****Samples Received Intact: Y N**

8:40 on Ice

Perkins (8/11/12)



October 18, 2006

Mr. Jason Golubski  
BBL  
6723 Towpath Road  
Syracuse, NY 13214

Job #: G6JRH33  
Phone: (315) 446-9120  
Fax: (315) 449-4111

Reference: Recycle/Disposal (MGP Contaminated Steel & Cast Iron Debris/Tank Piping)

Dear Mr. Golubski:

Casie Protank is pleased to provide the following quotation for your review and approval.

Casie Protank will supply the manpower and equipment to properly Transport/Dispose the above Referenced material to include:

<input checked="" type="checkbox"/> Transportation (Via Roll-Off) .....	\$1,200.00 Per Load
<input checked="" type="checkbox"/> Disposal.....	\$285.00 Per Ton
	(20 ton Minimum load)
<input checked="" type="checkbox"/> Liner.....	\$45.00 Each
<input checked="" type="checkbox"/> Rental.....	\$20.00 Per Day

Total Estimated Job Cost based on Total Volume.

Note: Demurrage @ \$ 75.00 per hour after 1<sup>st</sup> free hour for loading @ site.

**Terms and Conditions:**

- Agreement must be signed and returned to our office prior to first shipment.
- Above pricing is based on profile supplied by customer and facility acceptance. Profiles can be found on our website [www.casieprotank.com](http://www.casieprotank.com)
- All pricing is contingent upon profile approval (physical, chemical and regulatory evaluation of material).
- Standard terms of payment are based upon date of service, not invoicing date.
- Net 30 days from date of service.
- All rates are plus current fuel charge, which is currently 18.5%. Percentages and invoice will reflect current market increases/decreases and percentages incurred at time of service. Fuel surcharge is adjusted every Tuesday morning based on the National Average as per the U.S. Department of Energy.
- All credit card payments are subject to an additional 3% service charge.
- Material must be approved by Casie Protank's technical staff prior to shipment
- This proposal and any subsequent contract related to the services provided herein, is predicated upon and assumes that any performance by Casie is subject to standard force majeure provisions allowing for delays, or schedule modifications based upon events or actions which are not within the absolute control of Casie.

Thank you for the opportunity of providing you with our quotation. If you should have any further questions, or concerns, please do not hesitate to contact our office at (856) 696-4401.

In order to serve you better, please refer to the Job # when making any inquiries, and/or written/verbal PO numbers.

Sincerely,  
CASIE/PROTANK



Greg W. Call  
Sales Manager

GWC:ada



## CONTRACT FOR ENVIRONMENTAL SERVICES

This contract is between Casie Ecology Oil Salvage, Inc. t/a Casie Protank (hereinafter known as "Casie Protank"), located at 3209 N. Mill Road, Vineland, New Jersey 08360, and BBL (hereinafter referred to as "Client"), located at 6723 Towpath Road, Syracuse, NY 13214

- (A) Project Site: Syracuse, NY
- (B) Job #: G6JRH33
- (C) General Scope of Work: Recycle/Disposal (MGP  
Contaminated Steel & Cast Iron  
Debris/Tank Piping)
- (D) Casie Protank's Estimated Charge to Buyer: Based on Transportation & Disposal

The attached estimate dated **October 18, 2006** sets forth the estimated charges to Client. Client acknowledges that this is an estimate based upon Casie Protank's present knowledge of the project and circumstances surrounding same, proposed scope of work, and Casie Protank's present costs. Consent for Casie Protank to charge additional fees may be given (a) orally by the buyer; (b) by the signing of Casie Protank's Time and Material records which shall act as an acknowledgment that the Client consents to the work or services performed; or (c) by any other appropriate means. In the event that consent to additional fees is given, paragraph H, I, and J of this contract shall be applicable to all additional fees charged.

(E) Authority to Approve Additional Fees:

Any individual employed by the Client or acting as an agent of the Client is authorized to approve additional fees. Specifically, but without limitation, the following individuals are authorized to approve additional fees:

Joe Molina / Construction Principal  
(Name and Title)  
Please Print

\_\_\_\_\_  
(Name and Title)  
Please Print



(F) Deposit for Job #: G6JRH33

Our company policy for jobs such as this (for companies without purchase orders) are as follows: 50% down to be submitted with signed contract prior to commencement of job, 50% down upon completion of job, and any additional costs incurred upon final billing. **For your convenience, we accept Visa, Mastercard, American Express and Discover.** Client should also include a valid credit application and/or a current D&B Report. If this Contract is terminated prior to the completion of the job, any unused portion of the deposit shall be returned to the Client.

(G) Information Concerning Site:

Client agrees to provide Casie Protank with such information concerning the project site as may be required by the Client from time to time, including, but not limited to, the location of any sub-surface structures (i.e. underground utilities) or the presence of any circumstances or conditions at the project site which pose a potential health or safety hazard or which may interfere with Casie Protank's performance of its obligation hereunder. If required, Client shall arrange for Casie Protank and its authorized representatives to have access to any adjacent properties.

(H) Failure to Pay:

In the event that the Client fails to pay invoices when due or otherwise breaches the contract and Casie Protank is required to take action to enforce the terms of this contract or otherwise seeks its legal rights, Client shall be responsible for all legal fees and other expenses incurred by Casie Protank for this purpose.

(I) Interest on Unpaid Balances:

Client acknowledges that all invoices must be paid within (30) days of service date. If any sum is unpaid after thirty days, Client agrees to pay interest on such unpaid balances at the rate of eighteen (18%) percent per year (1 and 1/2 percent per month) compounded daily.

(J) Governing Law:

In the event of any dispute, this Contract shall be governed by and construed in accordance with the laws of the State of New Jersey

(K) Indemnification:

Client shall indemnify, defend and hold harmless Casie, its affiliates and subsidiaries, their officers, directors and employees and their successors, heirs and representatives from any responsibility or liability in any way for claims, losses, damages, and/or expenses arising out of the death or injuries to, or damages to any person or property, including, but not limited to, loss of use, arising out of, incident to, or in connection with this Agreement caused by Client in the performance of services hereunder.





The terms of this contract are agreed to by the parties and are approved by their duly authorized representatives.

Witnesses:

(Client)

As to Client

By: Joe Maline

Title: Construction Principal

Dated: 10-31-06

As Required: SS# \_\_\_\_\_

Federal ID # 161448024

P.O. #: 13074.001

CASIE ECOLOGY OIL SALVAGE, INC.

As to Casie Protank

By: [Signature]

Title: Greg W. Call, Sales Manager

Dated: October 18, 2006

(L) Co-Obligor:

In addition to Client, the undersigned hereby agrees to be responsible for full payment of Casie Protank's invoices with respect to Casie Protank's charges respecting this project (Job #: G6JRH33) along with any legal fees, interest and other expenses for which Client becomes liable. This obligation is joint and several.

Witnesses:

(CO-OBLIGOR)

As to Client

By: Joe Maline

Title: Construction Principal

Dated: 10-31-06

## **Appendix R**

Nonhazardous Manifests and  
Transportation Ticket for Casie  
Protank

# CASIE / PROTANK

## ENVIRONMENTAL SERVICES

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.)

<b>NON-HAZARDOUS MANIFEST</b>		1. Generator's US EPA ID No. NY D P D D D 7 3 1 0 0 9		Document No. 9 2 5 9		2. Page 1 of 1	
3. Generator's Name and Mailing Address NYSEG - Binghamton 274-2815230 Court St Binghamton NY 13903				A. Non-hazardous Manifest Document Number NHZ020 217975			
4. Generator's Phone ( 607 ) 7627412				B. State Generator's ID NONE			
5. Transporter 1 Company Name Castle Ecology Oil Salvage, Inc.		6. US EPA ID Number NJ D 0 4 5 9 9 5 9 3		C. State Trans. ID 1 1 6 9 3 1		D. Transporter's Phone ( 800 ) 6864401	
7. Transporter 2 Company Name		8. US EPA ID Number		E. State Trans. ID			
9. Designated Facility Name and Site Address Castle Ecology Oil Salvage, Inc. 3200 North Mill Road Vineland NJ 08380				10. US EPA ID Number NJ D 0 4 5 9 9 5 9 3		F. Transporter's Phone ( )	
				G. State Facility's ID		H. Facility's Phone ( 800 6864401 )	
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)				12. Containers No. Type		13. Total Quantity	
a. Non-Haz Debris from MGP Non DOT Regulated.				0 0 1 C M		Y 1 D 2 7	
b.							
c.							
d.							
J. Additional Descriptions for Materials Listed Above (9) 9180 C				K. Handling Codes for Wastes Listed Above S O I			
15. Special Handling Instructions and Additional Information 24 hr emergency response #609-686-2156 G. Cell				Box # 68			
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. I hereby certify that the above-named material is not hazardous waste as defined by 40 CFR Part 261, 264 and 279 or any applicable state law.							
Printed/Typed Name DAVID M. BUDOSH				Signature [Signature]		Month Day Year 1/11/12 10/16	
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name Dora S. Gould				Signature [Signature]		Month Day Year 1/11/12 10/16	
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name				Signature		Month Day Year	
19. Discrepancy Indication Space							
20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest except as noted in Item 19. Printed/Typed Name APRIL Fisher				Signature [Signature]		Month Day Year 1/11/12 10/16	

In case of an emergency or spill, immediately call CASIE (800) 354-2684

2-TRANSPORTER 1 COPY

SIGNATURE AND INFORMATION MUST BE LEGIBLE ON ALL COPIES





ENVIRONMENTAL SERVICES

P.O. Box 92  
Franklinville, NJ 08322  
696-4401

10/09/03  
No 51835

Generator NYSEG - Binghamton

Trailer  
ID

Analyst ABG/KR

☒ Incoming ☐ Outgoing ☐ Sale CFI#

MANIFEST # NH2000 217975

LVC LABORATORY DATA

pH NA Total BS&W PFT - Only %

FLASH NA °F BS %

CHLORINE <10 PPM H<sub>2</sub>O %

PCB <10 PPM PAR %

WASTE CODE	GALLONS	LAB FEE
<u>1027</u>	<u>20Y</u>	

PLANT DATA	TIME LOG
Tank <u>1A</u> <u>1B</u> <u>1C</u>	

Submitted By:

Date



## **Appendix D**

66-inch Storm Sewer Replacement  
Construction Completion Report

**New York State Electric & Gas Corporation**

**66-Inch Storm Sewer Replacement  
Construction Completion Report**

**Court Street Former Manufactured Gas Plant Site**

Binghamton, New York

Site No. 7-04-031

September 2012

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O	Broome County Landfill Waste Profile and Approval Letter**
P	Nonhazardous Solid Waste Manifests and Weigh Tickets for Soil Disposed at Broome County Landfill**

## Certifications

I, Mark O. Gravelding, am currently a registered professional engineer licensed by the State of New York, I had primary direct responsibility for the implementation of the 66-inch storm sewer replacement program activities, and I certify that the *Final (100%) Remedial Design Report* was implemented and that all construction activities were completed in substantial conformance with the New York State Department of Environmental Conservation (NYSDEC) approved *Final (100%) 66-inch Storm Sewer Replacement Design Report*.

I certify that to the best of my knowledge and based on my inquiry of the persons involved with the observation of the replacement activities under my direction, the data submitted to the NYSDEC with this Construction Completion Report demonstrates that the construction requirements set forth in the *Final (100%) 66-inch Storm Sewer Replacement Design Report* and in all applicable statutes and regulations have been or will be achieved in accordance with the time frames, if any, established in for the design.

I certify that to the best of my knowledge and based on my inquiry of the persons involved in preparing this document, all information and statements in this certification form are true. I understand that a knowingly false statement made herein is punishable as a Class A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, Mark O. Gravelding, of 6723 Towpath Road, East Syracuse, New York, am certifying as Owner's Designated Site Representative for the site.



\_\_\_\_\_  
NYS Professional Engineer #

9/18/12

Date

Signature





## 66-Inch Storm Sewer Replacement Construction Completion Report

### List of Acronyms

amsl	above mean seal level
ASTM	American Society for Testing and Materials
ATL	Atlantic Testing Laboratories
BCL	Broome County Landfill
CAMP	Community Air Monitoring Plan
CCR	Construction Completion Report
CLSM	controlled low strength material
CQAP	Construction Quality Assurance Plan
CY	cubic yard
DNAPL	Dense Non-Aqueous Phase Liquid
DPR	Daily Progress Report
DR	diameter ratio
DRO	diesel range organics
ESMI	Environmental Soil Management Companies
GRO	gasoline range organics
HDPE	high-density polyethylene
LSL	Life Sciences Laboratory
MGP	manufactured gas plant
NAPL	non-aqueous phase liquid
NYSDEC	New York State Department of Environmental Conservation
PAHs	polycyclic aromatic hydrocarbons
PCBs	polychlorinated biphenyls
PPE	Personal Protective Equipment
PVC	polyvinyl chloride
RFI	Request for Information
RI	Remedial Investigation
RCP	Reinforced Concrete Pipe
SCOs	soil cleanup objectives
SPDES	State Pollution Discharge Elimination System
SVOCs	semi-volatile organic compounds
TAL	target analyte list
TCL	target compound list
TCLP	Toxicity Characteristic Leaching Procedure
TPH	Total petroleum hydrocarbon
TWTS	temporary water treatment system
USEPA	United States Environmental Protection Agency
VOCs	volatile organic compounds

## **1. Introduction**

### **1.1 General**

This *66-inch Storm Sewer Replacement Construction Completion Report* (CCR) describes the activities that were performed to replace a section of the storm sewer at the NYSEG Court Street Former Manufactured Gas Plant (MGP) Site (the site) located in Binghamton, New York. This CCR was prepared by ARCADIS of New York, Inc. (ARCADIS), on behalf NYSEG. The activities described herein were conducted in general conformance with the *66-inch Storm Sewer Replacement Design Report* (Design Report) (ARCADIS, 2011), which was approved by the New York State Department of Environmental Conservation (NYSDEC) in a July 13, 2011 letter.

The storm sewer replacement was conducted to address infiltration of impacted groundwater and non-aqueous phase liquid (NAPL) associated with the former MGP operations into an existing 66-inch diameter reinforced concrete pipe (RCP) storm sewer that transected NYSEG's property. The storm sewer replacement construction was conducted by AECOM (and their subcontractors) between October 2011 and March 2012. ARCADIS provided construction observation services.

The major elements of the storm sewer replacement consisted of the following:

- installing four new high density polyethylene (HDPE) manholes (manholes MH-1A through MH-1D)
- installing a new 63-inch external diameter 32.5 DR (diameter ratio) non-structural HDPE pipe
- connecting the new and existing storm sewer pipes via slip lined connections

### **1.2 Construction Completion Report Organization**

This CCR is organized into the following sections:

<b>Section</b>	<b>Purpose</b>
Section 1 – Introduction	Presents relevant background information related to the storm sewer replacement activities

<b>Section</b>	<b>Purpose</b>
Section 2 – Summary of Storm Sewer Replacement	Presents the objectives of the storm sewer replacement and a summary of the construction components.
Section 3 – Storm Sewer Replacement Activities	Describes the documents that governed the storm sewer replacement. Presents a list of contractors, subcontractors and consultants involved in the storm sewer replacement. Identifies project reporting and Site meetings that were conducted during construction. Describes deviations from the Design Report. Presents descriptions of the storm sewer replacement construction components.
Section 4 – Waste Handling and Disposal	Presents a summary of waste management and disposal practices followed during the storm sewer replacement construction activities.
Section 5 – References	Identifies references cited in this CCR

This report is also supported by drawings, tables and appendices as listed in the Table of Contents.

### **1.3 Site History**

The site formerly housed an MGP that manufactured gas from approximately 1888 to 1939, during which time operations gradually expanded westward from the eastern portion of the site and eventually covered the entire site. Various structures were located within the site, including four gas holders, seven oil tanks, a tar-separating well, machine shop, and a governor house. By about 1969, all aboveground structures associated with the MGP had been dismantled.

In 1836, the site appeared undeveloped and contained a canal identified as “Side Cut to Chenango Canal,” referred to hereafter as the “Brandywine Canal.” Brandywine Canal was aligned roughly north-south and conveyed water through the western portion of the site before passing beneath Court Street and joining the Susquehanna

River. Historical information suggests that the path of a tributary to the Susquehanna, Brandywine Creek, followed the approximate route of the Brandywine Canal. The Final Remedial Investigation (RI) Report (BBL, 2002) indicates that the Brandywine Canal was abandoned at some time between 1876 and 1885.

The 66-inch diameter storm sewer collected runoff from a large portion of the City of Binghamton. The storm sewer traversed the site from north to south and emptied into the Susquehanna River (River) through the Tompkins Road Pumping Station. Historical drawings indicate that the on-site portion of the storm sewer was constructed between 1885 and 1924 within the former bed of Brandywine Creek. The storm sewer is owned and maintained by the City of Binghamton.

#### **1.4 Location and Physical Setting**

The site is located in an industrial section of Binghamton, in Broome County, New York, and occupies 4.3 acres identified as 271-291 and 293 Court Street. The 293 Court Street property was formerly used as a natural gas service center by Columbia Gas Transmission Corporation (Columbia Gas). The remaining portion of the site is now a gravel lot and is used by NYSEG for equipment/material storage and parking.

The site is bordered to the north by a major Norfolk and Southern Railroad line and yard (formerly CSX), an asphalt works plant, and a scrap yard; to the south by Court Street, which runs parallel to the Susquehanna River; to the east by the 295 Court Street property, which contains a warehouse owned by the 295 Court Street Associates, LLC.; and to the west by Brandywine Avenue.

#### **1.5 Summary of Relevant Conditions at the Site**

##### **1.5.1 Relevant Environmental Conditions**

Based on the findings of previous investigations, NAPL has been observed in subsurface soils onsite, primarily coal-tar dense NAPL (DNAPL). NAPL is present in both unsaturated and saturated soils beneath the site.

To address the potentially mobile NAPL, a NAPL barrier was constructed along the western and southern property boundary (BBL, 2006).

### 1.5.2 Former Storm Sewer Conditions

The former storm sewer consisted of a buried 66-inch diameter RCP that conveyed storm water north to south across the western portion of the site. The section of the 66-inch diameter RCP storm sewer extending between upstream manhole (MH-2, located immediately north of the site property limits on Norfolk and Southern Railroad property), and the downstream manhole (MH-1, located immediately south of the site property limits on the north side of Court Street in the road right-of-way) measured approximately 420 linear feet.

Site investigations previously identified that potentially-impacted groundwater and NAPL were infiltrating into the storm sewer. The section of the existing storm sewer between manholes MH-2 and MH-1 was lined in 2003, utilizing a polyvinyl chloride (PVC) liner system manufactured by Danby of North America, Inc. (Danby) in an attempt to prevent infiltration of potentially-impacted ground water and coal tar NAPL into the storm sewer.

The Danby liner system consisted of an approximately 12-inch-wide; 1-inch-thick continuous sheet of PVC that was spirally wrapped around the inside of the 66-inch RCP storm sewer. This liner formed a continuous spiral joint along the entire length of the storm sewer. This joint was sealed with a continuous snap together gasket of a similar PVC material that created the pipe liner. The liner was anchored to the pipe with cement grout.

Following liner installation, ARCADIS performed annual visual inspections of the storm sewer pipe to monitor the condition of the liner. During the 2008 inspection event, ARCADIS observed that the pipe liner system appeared to be leaking in several locations along its continuous joint, potentially allowing groundwater and/or coal tar NAPL to enter the sewer. Based on the observations during the 2008 storm sewer monitoring event, NYSEG increased the sewer inspection frequency to three times per year. ARCADIS noted similar observations during the spring 2009 inspection.

NYSEG agreed to conduct destructive testing of the liner to assess the condition and integrity of the liner as well as evaluate options to prevent leakage of fluids into the sewer, if necessary. ARCADIS subcontracted Lash Contracting, Inc. (Lash) in July 2009 to perform destructive testing of the pipe liner system. Destructive testing consisted of removing one foot square coupons of liner material and grout (that was used to anchor the liner system to the pipe) where the visual evidence of leakage was the greatest and spanned the liner joints. The results of the destructive testing



## **66-Inch Storm Sewer Replacement Construction Completion Report**

indicated that the existing liner was compromised and could not prevent leakage of groundwater and coal tar NAPL into the pipe.

## **2. Summary of Storm Sewer Replacement**

This section presents a description of the 66-inch storm sewer replacement objectives along with a summary of the storm sewer replacement construction components. Table 1 presents a summary of the replacement construction chronology.

### **2.1 Storm Sewer Replacement Objectives**

The objective of the storm sewer replacement was to provide a water- and NAPL-tight storm sewer system across the site and prevent infiltration of potentially impacted groundwater and NAPL into the City of Binghamton storm sewer.

### **2.2 Storm Sewer Replacement Construction Components**

The construction components associated with the storm sewer replacement generally consisted of the following:

- Pre-mobilization activities
- Mobilization and site preparation
- Trench excavation to facilitate the installation of a new section of storm sewer and associated manholes.
- Installing new storm sewer piping and manholes.
- Abandoning the former storm sewer in place.
- Restoring the site.

Each of these construction components are described in more detail in Section 3.

### **3. Storm Sewer Replacement Construction Activities**

This section presents a detailed description of the storm sewer replacement construction activities. As described below, the storm sewer replacement construction was conducted in general accordance with the NYSDEC-approved Design Report (ARCADIS, October 2011). Deviations from the design are noted in this CCR.

#### **3.1 Construction Documents**

##### **3.1.1 Design Documents**

The primary design components included in the Design Report were presented in design drawings and technical specifications, which were included as Appendices A and B (respectively) in the Design Report.

The Design Report also included supporting documents, which are summarized in the following subsections.

##### **3.1.2 Community Air Monitoring Plan**

The *Community Air Monitoring Plan* (CAMP) was prepared by ARCADIS to support the implementation of the storm sewer replacement construction.

The purpose of the CAMP was to describe the activities that were conducted by the ARCADIS to monitor for potential airborne releases of constituents of concern and dust during the implementation of the storm sewer replacement activities. The CAMP specified the air emission action levels, air monitoring procedures, monitoring schedule and data collection and reporting to be performed during the implementation of remedial activities. The CAMP was included as Appendix C of the Design Report.

##### **3.1.3 Construction Quality Assurance Plan**

The *Construction Quality Assurance Plan* (CQAP) was prepared by ARCADIS to support the implementation of the storm sewer replacement construction. The CQAP described the materials, procedures, and testing necessary for proper construction, evaluation, and documentation during implementation of the storm sewer replacement. The CQAP was included as Appendix D of the Design Report.



### 3.1.4 Contingency Plan

The Contingency Plan was prepared by ARCADIS to address potential emergencies that arose as a result of operations during the storm sewer pipe replacement activities. The Contingency Plan summarized conditions during which to implement the contingency plan, and response and evacuation procedures for various emergencies. The Contingency Plan was included as Appendix E of the Design Report.

### 3.2 Contractors and Consultants

NYSEG retained ARCADIS to design the storm sewer replacement. NYSEG retained the following companies to implement the storm sewer replacement construction:

- ARCADIS provided construction observation and documentation as the Engineer-of-Record to observe that the storm sewer replacement construction activities were conducted in general accordance with the Design Report.
- AECOM served as the prime construction contractor and was responsible for constructing the storm sewer replacement.

AECOM subcontracted with the following companies to conduct specialty services during the storm sewer replacement construction.

Subcontractor	Service
Tioga Construction (Tioga)	Provided sheet pile installation and support activities associated with the installation of the HDPE manholes and pipe.
LRT	Performed operations and maintenance activities on the temporary water treatment system (TWTS).
Keystone Surveying and Mapping (Keystone)	Performed site survey activities
Vari-Tech, LLC (Vari-Tech)	Performed HDPE pipe butt fusing

<b>Subcontractor</b>	<b>Service</b>
	activities
Atlantic Testing Laboratories (ATL)	Performed compaction testing activities
Geo-Solutions, Inc. (Geo-Solutions)	Formulated “special grout mix” design activities for the slip-lined sections of the HDPE and RCP pipes.
Chenango Contracting, Inc. (Chenango)	Conducted HDPE flexible boot fabrication and installation activities

Additionally, NYSEG directly contracted with the following companies to provide services during the storm sewer replacement construction.

<b>Contractor</b>	<b>Service</b>
Test America, Inc. (Test America)	Provided analytical services for waste characterization samples collected during the project
Phoenix Environmental Laboratories, Inc. (Phoenix Laboratories)	Provided analytical services for waste characterization samples collected during the project
Environmental Soil Management Companies (ESMI)	Provided transportation of nonhazardous materials generated during the project to Broome County Landfill (BCL) for landfill disposal and material identified for low-temperature thermal desorption (LTTD) treatment by ESMI
BCL	Provided landfill disposal of nonhazardous materials generated during the project

Contractor	Service
ESMI	Provide offsite LTTD treatment and disposal of selected materials generated during the project

### 3.3 Project Reporting and Site Meetings

The following project reporting and site meetings were conducted in support of documenting the storm sewer replacement construction activities:

- Record drawings – Record drawings prepared by ARCADIS to document the 66-inch storm sewer replacement construction are provided in Appendix A
- Weekly project meetings/reports – Weekly project meetings were held at the site to review health and safety items, site controls, activities completed and planned, project schedule and general administrative items. ARCADIS prepared weekly meeting minutes, which are included as Appendix B to this report.
- Daily Progress Reports – ARCADIS prepared daily progress reports (DPRs) to document site activities. DPRs are included as Appendix C.
- Photo log – In addition to the photographs included in the DPR's, ARCADIS prepared a photo log that presents select photographs that have been arranged in chronological order to present photo documentation of the construction activities. The photo log is included as Appendix D.

### 3.4 Deviations from the Design Report

Deviations in the construction activities from the Design Report are described below. Design deviations were made based on site conditions that were encountered during the pipe replacement construction. The design deviations described below were incorporated into the Record Drawings (included as Appendix A) as well as the description of the storm sewer replacement construction components presented in Section 3.5.

Each proposed design deviation/modification was discussed between ARCADIS, AECOM, NYSEG and as appropriate, NYSDEC. As seemed necessary, AECOM submitted a Request for Information (RFI) proposing design deviations. ARCADIS reviewed each RFI, and returned to AECOM with approval, comment, and/or a request for additional detail on information.

- Manhole elevations and pipe slope deviated slightly from the design. The as-built elevations and pipe slope are depicted on Record Drawing 3.
- To speed up the sheet piling installation HP12x63 soldier piles were substituted with HP14x89 piles of similar length. The substitution followed a request from AECOM's subcontractor Tioga to utilize piles that were already in stock. This change is described in RFI review form No.1.
- Concrete collar thickness modification. Based on shipping limitations, the HDPE manholes were constructed with 18-inch long HDPE flange stubs for the inlet and outlet pipes. The design thickness of the concrete collars was modified from 48 inches to 36 inches with each flanged joint (i.e., between HDPE manholes and pipes) being centered in a concrete collar. This change is described in RFI No. 3.
- To allow for a water tight seal between the soldier pile and the sheet piles the soldier connection was modified to include a minimum 3-inch overlap. The soldier connection detail is presented in RFI No.4.
- In order to minimize the amount of time that the storm sewer bypass pumping system operated, manhole foundation slab for manholes MH-1A and MH-1D were pre-cast on the ground surface prior to being lowered into position within the trench. In order to facilitate placement of the manhole, anchor bolts were installed after the foundation slabs were cast by coring and epoxy setting anchor bolts into the slab. This change is described in RFI No. 5.
- MH-1 and MH-2 slip line connection modification. The contractor requested an alternate approach for making the flexible coupling between the new and existing pipe at manholes MH-1 and MH-2. The details of the connection are shown on Record Drawing 5. In general the deviations to the slip lined joints relative to the Design Report consisted of installing a protective extrusion welded HDPE boot over the joint between the existing and the new pipe on the end of the overlap away from the manhole. The boot was underlain by coal tar resistant Viton rubber bands that were wrapped around both the new and existing pipes and screwed

with two pairs of 316 stainless steel straps on each end of the boot. This change is described in RFI review form No.6.

- Backfilling the portion of the trench between MH-1 and the southernmost concrete collar and MH-2 and the northernmost concrete collar with controlled low strength material (CLSM).
- Modification to phasing of the trench excavation. AECOM installed the new storm sewer pipe and manholes from MH-1B to MH-1C as part of Phase I without removing the existing 66-inch storm sewer from service. Phase II consisted of installing storm sewer bypass, pumps and piping, and the remaining sections of storm sewer pipe (i.e., manhole MH-1A to MH-1B; MH-1C to MH-1D, and connections to existing manholes MH-1 and MH-2 to the south and north, respectively). The approximate limits of the phasing are shown on Record Drawing 2.

RFIs are included as Appendix E of this report.

### **3.5 Storm Sewer Replacement Construction Components**

This section presents a detailed description of the storm sewer replacement construction components. AECOM and its subcontractors conducted the storm sewer replacement between October 31, 2011 and March 30, 2012.

#### **3.5.1 Pre-Mobilization Activities**

Prior to mobilizing to the site, the following activities were performed to prepare for the storm sewer replacement:

- Obtaining a State Pollution Discharge Elimination System (SPDES) permit equivalent (i.e., SPDES permit equivalent). A copy of the SPDES Permit Equivalent is included as Appendix F.
- Conducting in situ pre-characterization sampling. ARCADIS collected a number of samples along the anticipated alignment of the new storm sewer prior to mobilization to the site. The samples were submitted for laboratory analysis in accordance with the requirements of the waste treatment/disposal facilities. The results of the pre-remediation sampling and laboratory analyses were used to evaluate the disposal/treatment options for materials generated during the

construction activities. The results of the pre-remediation sampling and laboratory analyses are presented in the *Pre-Remediation In-Situ Sampling and Analysis Report* (ARCADIS, 2011).

- Obtaining a hydrant permit from the City of Binghamton to allow the use of municipal water during the storm sewer replacement construction. A copy of the hydrant permit is included as Appendix G.

### 3.5.2 Mobilization and Site Preparation

In general, mobilization and site preparation activities consisted of mobilizing necessary personnel, equipment, and materials to complete the storm sewer replacement activities. Mobilization and site preparation activities commenced at the site during the week of October 31, 2011 and consisted of the following:

- Mobilizing necessary personnel, equipment, and materials to conduct the storm sewer replacement activities.
- Coordinating with Dig Safely New York prior to construction activities to mark all on-site underground utilities.
- Constructing a stabilized construction entrance.
- Mobilizing and establishing two field office trailers to be utilized by the Contractor, the Construction Observation Engineer, and NYSDEC during implementation of the construction activities.
- Contacting NYSEG's Customer Relations Center to establish electrical service. JP Rogers' electrician facilitated site electrical hookups.
- Conducting a pre-construction survey to verify existing site conditions and layout surveying (by Keystone), identifying, marking, and verifying the location(s) of all aboveground and underground utilities, equipment, and structures, as necessary, to implement the construction activities.
- Installing temporary fencing/erosion and sediment control measures.
- Deploying work zone air monitoring equipment for worker health and safety monitoring.

- Constructing a decontamination area for decontaminating trucks, equipment, and personnel that come into contact with potentially impacted materials during implementation of the construction activities.
- Mobilizing and constructing a temporary onsite water treatment system to treat water generated during the construction activities.

### 3.5.3 Trench Excavation

The storm sewer replacement construction activities were conducted in two separate phases:

- Phase I consisted of excavating areas where the new storm sewer pipe and manholes MH-1B and MH-1C were installed (i.e. between manholes MH-1B and MH-1C).
- Phase II consisted of excavating areas where manholes MH-1A and MH-1D, and the remaining sections of the storm sewer pipe were installed (i.e., between manholes MH-1 and MH-1B, and between manholes MH-1C and MH-2).

In general, AECOM conducted the following activities to excavate and prepare the trench for installation of the new storm sewer pipe:

- Pre-trenching
- Sheet pile installation
- Excavating a trench to facilitate installation of the storm sewer.
- Removing portions of the No. 4 Gas Holder foundation
- Installation a bypass pumping system
- Removing sections of the former RCP pipe
- Constructing an emergency spillway

Each of the trench excavation components are described in more detail below.

### *3.5.3.1 Pre-Trenching*

AECOM pre-trenched to a depth of at least six feet below grade to identify and remove obstructions (e.g., concrete, piping, etc.) along the proposed sheeting alignment. A summary of the obstructions encountered is presented below:

#### *Piping*

- A 30-inch diameter cast iron pipe was encountered approximately 1.5 feet below grade and 30 feet north of manhole MH-1B. The pipe was filled with soil and debris along with water and coal tar. AECOM removed and containerized liquids from the pipe for subsequent on-site treatment through the temporary water treatment system. AECOM saw cut the pipe at just beyond the sheet wall limits prior to sealing the pipe with a 1-foot thick concrete plug backed by sand bags.
- A 3-inch diameter steel pipe was encountered approximately six feet below grade, running perpendicular to the east sheeting alignment. This pipe was determined to be inactive and was removed at the same time as the 30 inch pipe.

Both pipes were transported off site for disposal at BCL as C&D debris.

#### *Concrete*

- Portions of the No. 4 gas holder foundation were demolished to facilitate the installation of the sheet piling.
- A concrete footing encountered approximately 30 feet south of MH-1C was excavated and transported for off-site disposal as C&D debris.

No additional pipes or obstructions were encountered during the pre-trench excavation activities. The trenches were backfilled with the excavated material immediately following completion.

As part of the pre-trenching activities, AECOM excavated two test pits to evaluate the location and alignment of the existing storm sewer. The first test pit was excavated adjacent to the northwest corner of the trench alignment to identify the location of the northern portion of the existing storm sewer. A second test pit was excavated adjacent to the southwest corner of the trench alignment to identify the location of the southern portion of the existing storm sewer. In addition, AECOM performed a non-permit



required confined space entry of the south manhole to evaluate the location and alignment of the existing storm sewer. AECOM identified the approximate alignment of the existing storm sewer and distance to the pipe bend. The location and approximate center line of the existing storm sewer in both the northern and southern portion of the property were marked and surveyed on the ground surface immediately adjacent to the excavation.

### *3.5.3.2 Sheet Pile Installation*

Following pre-trenching, Tioga installed NYSEG owned AZ-48 steel sheets to the approximate design depths presented in the Design Report (i.e., tip elevation approximately 796.0 feet above main sea level (amsl). Before threading sheet pairs, Tioga applied sealant (Swell Seal) along 20 feet of the female interlock channel, beginning approximately 5 feet below the top of the sheet.

Tioga installed Phase I sheet piles along the alignment of the new storm sewer and the location of manholes MH-1B and MH-1C. During the installation of steel sheeting in Phase I areas the following was observed:

- Compaction/densification of soil was observed some sections of the Phase I sheet wall. Although, compaction was generally minimal (approximately 6 inches); areas immediately adjacent to the sheet wall exhibited as much as 4 feet of settling. Cracking was also noted adjacent to the exterior of the sheet pile wall, running parallel with the sheeting and was offset a distance of approximately 2 to 10 feet from sheeting. After NYSEG approval, AECOM used existing stock piled soil and Type "F" stone (run of crusher) to fill the voids adjacent to the sheet piling.

Following installation of the new storm sewer piping and manholes during Phase I of the storm sewer construction, AECOM's subcontractor Tioga removed steel sheet piles from Phase I and re-used them in Phase II areas after being cleaned and caulked. Sheets were removed from Phase I starting at the center of the alignment to provide access across the Phase I area. AECOM placed run of crusher stone across the center portion of the Phase I area to create a new access road across the site. Simultaneously to the removal of Phase I steel sheet piles, Tioga began installing the cleaned sheets at the northern end of the Phase II areas, and welding the H-piles to the sheeting for the north and south ends of the Phase II areas. Phase II consisted of the installation of sheet pile in the remaining sections of the new storm sewer (i.e., manhole MH-1A to MH-1B; MH-1C to MH-1D), and the connections of the new pipe to

existing manholes MH-1 and MH-2 to the south and north, respectively. The following issues were noted during the installation of steel sheet pile in the Phase II area:

- Tioga encountered concrete obstructions on the eastern side of the trench near MH-2. The concrete obstructions (i.e., remnants of the arch footing) may be related to the former arch sewer located north of MH-2. Although the concrete obstructions were not removed due to their proximity to the railroad embankment, Tioga was able to drive sheeting through the obstructions.

Tioga installed as much of the Phase II sheeting as possible up to the pre-existing RCP storm sewer. Tioga then completed driving Phase II sheeting after installation of the bypass system and removal of a portion of the RCP as described below in Sections 3.5.3.6 and 3.5.3.7, respectively. The approximate limits of the Phase I and Phase II sheeting are shown on Record Drawing 2 (Appendix A)

#### *3.5.3.3 Trench Excavation*

In general, trench excavation consisted of removing and dewatering soil and debris within the limits of the sheet piles. Excavation activities were completed to design depths indicated on the Record Drawing (Appendix A). Excavated materials were direct loaded for transportation for offsite treatment/disposal. The approximate limits of the trench excavation are shown on Record Drawing 2. A summary of material handling, treatment and disposal is presented in Section 4.

During trench excavation, AECOM used BioSolve applied with pressure washers and misters to minimize odors during excavation and loading. In addition, AECOM applied odor suppressant foam over the exposed soil within the open excavation at the end of each day of excavation activities.

AECOM installed a dewatering sump in the north end of the trench of Phase I area, approximately 45 feet south of the north end of the alignment. The sump was installed 1 foot below the extent of excavation grade. Sump installation consisted of an 18-inch corrugated HDPE pipe secured to the western wall and surrounded with washed crushed stone. The collected water from the trench sump was transferred to influent weir tanks for treatment prior to discharge under the SPDES equivalent discharge permit.

During the excavation activities in Phase II areas, the No. 4 gas holder, a concrete structure (referred to as “pipe chase”) and portions of the 66-inch RCP were encountered. The removal of these structures is described below.

#### *3.5.3.4 No. 4 Gas Holder Foundation Removal*

AECOM demolished and excavated portions of the No.4 Gas Holder foundation to facilitate installation of the new storm sewer pipe. The following holder foundation features were noted during the demolition:

- Concrete debris potentially related to concrete footings.
- An approximately 8-inch thick upper slab was encountered at approximately 1.5 feet below grade.
- An approximately 8-inch thick secondary concrete slab was encountered approximately 6.5 feet below grade within the pipe trench alignment.
- An approximately 18-inch thick ring wall extending to the top of the pipe chase surrounding the 66-inch RCP storm sewer was encountered surrounding the edge of the holder.

#### *3.5.3.5 Concrete Pipe Chase Removal*

During the Phase II excavation activities in the southern portion of the site, AECOM encountered a reinforced concrete box structure (i.e., pipe chase) surrounding the 66-inch RCP storm sewer within the limits of the No. 4 Holder foundation. The pipe chase was rectangular in cross-section with a minimum of clearance of approximately 12 inches on three sides of the pipe. The RCP storm sewer rested in a concrete and wood cradle on the bottom of the pipe chase.

AECOM broke through the top of the pipe chase, which was located approximately 7 to 8 feet below grade. Upon opening the pipe chase, AECOM noted that the void space between the chase and the RCP pipe was full of water. The water was transferred for treatment through the on-site temporary water treatment system.

Where necessary to facilitate installation of the new HDPE storm sewer pipe, AECOM demolished the pipe chase and disposed of the debris as described in Section 4.

#### *3.5.3.6 Bypass Pumping System*

Prior to removing the pre-existing RCP storm sewer from service, AECOM installed a pumping system to bypass storm water around the section of the storm sewer being replaced (i.e., from manhole MH-2 to MH-1). After constructing a temporary head wall in manhole MH-2, AECOM installed the bypass pumping system, which consisted of a 8-inch diameter and a 12-inch diameter diesel powered pumps with associated discharge piping. The bypass piping system discharged to manhole MH-1 on the downstream side of the sluice gate. The bypass pumping system was capable of pumping approximately 7,000 to 8,000 gallons per minute.

#### *3.5.3.7 RCP Pipe Removal*

AECOM and Tioga removed portions of the pre-existing RCP storm sewer to facilitate the installation of the new HDPE manholes and piping. The approximate extent of the removed portions of the pre-existing storm sewer is shown on Record Drawing 2. Each 4-foot section of RCP was cut along the joint with a demo saw and then removed from the excavation area. As the RCP sections were removed, sections of the Danby liner and corresponding grout were removed from inside the RCP and loaded for off-site disposal. The RCP sections were placed on poly sheeting at the ground surface for decontamination, downsized and loaded for disposal as construction and demolition debris at BCL.

#### *3.5.3.8 Emergency Spillway*

Tioga poured emergency spillways in the bottom of the trench between manholes MH-1 and MH-1B and between manholes MH-2 and MH-1C. The spillways provided a separation between storm water and soil in the bottom of the trench in the event of a storm flow that exceeded the capacity of the bypass pumping system during the period of the time when the existing pipe was taken out of service (i.e. Phase II).

One such high flow storm event occurred on February 24, 2012. Storm water overtopped the sandbag bulk head in manhole MH-2. The storm water passed over the emergency spillway between MH-2 and MH-1C, through the new HDPE pipe, and over the emergency spillway between MH-1 and MH-1B. AECOM opened the sluice gate at MH-1 in order to allow water to discharge to the Susquehanna River to lower the water level. Following the storm event, AECOM and Tioga replaced and reinforced the sandbag bulkhead and resumed bypass pumping.

#### 3.5.4 HDPE Storm Sewer and Manhole Installation

As described above, HDPE storm sewer and manhole installation was conducted in two phases. Phase I consisted of installing HDPE manholes, piping and other components extending from new manholes MH-1B to MH-1C, and Phase II consisted of installing the remaining manholes (i.e., MH-1A and MH-1D) and associated piping and making the connections to the existing storm sewer system at manholes MH-1 and MH-2. Storm sewer and manhole installation components consisted of the following:

- Pipe bed preparation
- HDPE pipe fusion welding
- Concrete manhole foundation construction
- HDPE manhole installation
- HDPE pipe installation
- Flange joint connection and concrete collar construction
- HDPE to RCP slip line connection

The above components are described in more detail in the following subsections.

##### 3.5.4.1 *Pipe Bed Preparation*

AECOM's subcontractor Tioga placed crushed stone for the pipe bedding layer. Pipe bedding was comprised of an initial layer of #1 and #2 stone to level out and stabilize areas along the base of the trench followed by placing a minimum one-foot thick layer of run of crusher stone per the design specifications. The bedding layer was compacted by normal construction methods (i.e., using walk behind vibrator equipment). The top of the bedding was adjusted to allow for the difference between the plan invert (flowline) and pipe profile wall thickness.

ATL conducted nuclear density compaction testing for the compacted crushed stone. All of the final testing results indicated > 95 % compaction. Compaction testing results included in Appendix H.

#### *3.5.4.2 HDPE Pipe Fusion Welding*

HDPE pipes consisted of approximately 52-foot long sections of high density, high molecular weight virgin polyethylene pipes supplied by KWH Industries, Ontario Canada.

AECOM's subcontractor Vari-Tech conducted the pipe fusing of the HDPE pipe. In general, Vari-Tech fused adjacent sections of the HDPE pipe by trimming and sufficiently heating the end of the pipes to change the resin's molecular structure to a pliable state using a specialized fusion welder machine. After sufficiently heating the pipe ends, the fusion welder applied a prescribed force to adjoin two adjacent sections of the HDPE piping. Once the HDPE pipe ends surfaces cooled down, the material returned to a crystalline state creating one homogeneous pipe. The resulting fused pipe is as strong as the individual pipe sections and is leak free as further discussed in Section 3.5.5.

The pipe fusing activities were conducted at grade prior to lowering the pipe into the bottom of the trench. Fusion welding was conducted between adjacent pipes and from pipes to HDPE flange sections to facilitate mechanical connections to HDPE manholes.

Leak testing was conducted on the ground surface (i.e., prior to lowering the pipes into the trench) in order to identify defects in materials or workmanship during the HDPE pipe fusion welding. In general, the leak test procedure was conducted to ensure the structural stability of the fusion welded joints and consisted of the following activities:

- Attaching blind flanges to the end of the fused pipe section.
- Filling the entire HDPE pipe length with water via the city fire hydrant. The pipe was filled with water, and allowed to sit for a period of approximately two hours.
- Gravity draining the clean water from the HDPE pipe.

No leaks or change in water level were encountered during leak testing.

#### *3.5.4.3 Concrete Manhole Foundation Construction*

In general, the procedure to construct the concrete manhole foundations was similar for the four manholes utilized during the construction activities. However, foundations

for manholes MH-1C and MH-1B were cast-in-place, while the foundation for manholes MH-1A and MH-1D were pre-cast on the ground surface and then lowered into position within the trench. The following procedures were conducted to construct the manhole foundations:

- Excavating a 1-foot deep base for manholes MH-1B and MH-1C.
- Preparing a sub-base for each manhole. The sub-base was prepared placing #1 and #2 stone to level out the excavated area, and subsequently placing and compacting a minimum 1-foot layer of run of crusher stone. ATL verified that compaction was above 95%. Compaction testing reports are included in Appendix H.
- Assembling re-bar “cages” to be used for the manhole bases. Tioga assembled the cages on the ground surface and lowered them into position once the sub-base and form work were prepared.
- Placing the concrete forms in preparation for pouring the concrete.
- Pouring the concrete manhole foundation. As indicated above, foundations for manholes MH-1B and MH-1C were cast-in-place. Concrete foundations for manholes MH-1A and MH-1D were pre-cast in forms at the ground surface prior to being lowered into place. This was done to reduce the time that the bypass pumping was required (i.e., while the storm sewer was not in service).
- Collecting four cylinders for each manhole for compressive strength testing after 28 days. In addition to compressive strength testing, air entrainment and slump testing were conducted. All results were within project specifications in accordance with Materials and Performance Section 03301 of the 66-inch Storm Sewer Replacement Design Report (4,000 psi,  $6 \pm 1\%$  and 3 inches for compressive strength, air entrainment and slump testing, respectively). Concrete testing results are presented in Appendix I.
- Surveying the elevation and location of the bases for the each manhole. Keystone conducted the survey activities to verify the elevation at each manhole foundation.

Groundwater began upwelling from the subgrade after a silt/sand confining unit was penetrated during excavation to facilitate construction of the sub-base for manhole MH-

1A. AECOM and Tioga took the following measures to control groundwater and construct a stable sub-base for the manhole:

- AECOM over-excavated the silt/sand confining layer, approximately 1 foot below the design grade.
- AECOM placed non-woven geotextile fabric over the excavated manhole base footprint followed by a 12-inch drainage layer of 3- to 4-inch diameter stone.
- AECOM installed a sump to draw water from this drainage layer.
- Tioga placed an additional layer of non-woven geotextile fabric on top of the drainage layer followed by an approximately 12-inch thick layer of compacted run of crusher stone layer per design.

The precast concrete foundation slab was subsequently lowered into place on top of the compacted run of crusher sub-base material.

Tioga experienced similar conditions while installing the foundation slab for MH-1D although the flow of water was not as substantial. Tioga placed additional #2 drainage stone to improve the subgrade prior to placing the one-foot thick design layer of run of crusher stone sub-base.

#### *3.5.4.4 HDPE Manhole Installation*

A total of four HDPE manholes (manholes MH-1A to MH-1D) were supplied by Industrial Pipe Fitting, LLC, Houston TX. The HDPE manholes were manufactured of high density, high molecular weight virgin polyethylene.

Each manhole came pre-fit with 18-inch long HDPE flange stubs equipped with steel backer rigs to facilitate mechanical connection with the HDPE piping as described in Section 3.5.4.6. HDPE manhole details are shown in Record Drawing 4.

Class II concrete was utilized to form concrete fillets in each manhole in accordance with the Design Report. Each manhole was crane-lowered, positioned and secured to its appropriate concrete foundation accordance with design.



#### *3.5.4.5 HDPE Pipe Installation*

The HDPE pipe was crane-lowered and placed in the trench. Connections between HDPE manholes and HDPE piping were made using mechanical flange joints, which were further stabilized with concrete collars. The connection between HDPE piping and the existing RCP storm sewer near manholes MH-1 and MH-2 were made using a slip-line joint. The procedures for these connections are presented in the following sections.

#### *3.5.4.6 Flange Joint Connection and Concrete Collar Construction*

Flange joint connections were made at each point between a section of HDPE piping and an HDPE manhole. As indicated in Section 3.5.4.4 each manhole was equipped with a flanged inlet and outlet stub with steel backing rings. As indicated in Section 3.5.4.2, a flange connection was butt fused to ends of HDPE piping that were scheduled to be connected to the HDPE manholes. Backing rings on the pipe side of the flanged joint were cut in two pieces to facilitate connection to the mating backing ring on the manhole flange stub. During the installation of the flange joints the following activities were conducted:

- Aligning flange connections with laser levels.
- Placing standard round washers and lubricating bolts in accordance with manufacturer's recommendations.
- Aligning the backing rings on the manhole stub and pipe flanges.
- Tightening flange bolts in sequence and accordance with manufacturer's recommendations (850 psi).

Concrete collars were poured at each flanged pipe joint to limit movement of the pipe joint following installation. The concrete collars were installed across the entire width of the trench (i.e., sheet to sheet) and also serve as trench plugs to minimize the potential for trench fill materials and pipe bedding to serve as a potential conduit for NAPL and/or impacted groundwater. Each concrete collar measured approximately 3 feet in thickness centered on the flange joint. Construction of the concrete collars involved the following activities:

- Assembling re-bar "cages" to re-enforce the concrete collars. Tioga assembled the cages in place.

- Placing the concrete forms in preparation for pouring the concrete. The forms were made of plywood to provide continuous straight, smooth, exposed surfaces.
- Pouring the concrete collars. A C+C Ready Mix representative was onsite during concrete placement to add a concrete accelerant to each of the trucks. C+C representative added 4% of the additive to decrease the curing time. ATL was onsite to test the concrete. All concrete tests results were within specifications and are presented in Appendix I.
- Collecting four cylinders from each concrete collar for compressive strength testing after 7 days. In addition to compressive strength testing, air entrainment and slump testing were conducted. All results were within project specifications in accordance with Materials and Performance Section 03301 of the 66-inch Storm Sewer Replacement Design Report (3,200 psi,  $6 \pm 1\%$  and 3 inches for compressive strength, air entrainment and slump testing, respectively).
- Removing the concrete forms from the concrete collars.

During the removal of the sheet piles, Tioga cut the steel sheets that were embedded into the concrete collars at each of the manholes. Tioga cut the sheets at the top of the concrete collars in order to prevent possible damage to the collars during sheeting removal. A total of 16 sheets were cut (two on each side of each collar).

#### *3.5.4.7 HDPE to RCP Slip Line Connection*

The HDPE to RCP slip-lined joint connection consisted of:

- Preparing the interior surface of the RCP storm sewer pipe to be slip-lined;
- Physically inserting the HDPE pipe into the sections of RCP storm sewer up to manholes MH-1 and MH-2;
- Grouting the annular space between the HDPE and RCP pipe; and
- Installing a flexible HDPE boot across the HDPE/RCP slip-lined joint edge.

Descriptions of the activities are presented below.

Prior to slip-lining the HDPE pipe into the existing RCP, AECOM manually removed the Danby liner from the existing RCP. The PVC strips were separated by removing the joiner strip and unlocking the male and corresponding female locking edges. The grout was scraped from the walls after the removal of the Danby liner. The following was observed during the removal of the 4-foot sections of Danby liner and grout:

- Moderate amounts of impacted material were encountered between the existing RCP and the Danby liner system during the removal of sections of the Danby liner.
- Two types of grout material were encountered behind the Danby liner during the liner removal.

Prior to slip-lining the HDPE pipe into the RCP storm sewer, AECOM and Tioga utilized laser levels inside the manhole and at the ground surface to verify elevations and pipe alignment. The following procedure was conducted to slip line the joints:

- Patching leaking sections of RCP with hydraulic cement to prepare the slip-lined section for grout.
- Attaching HDPE spacers on the interior surface of the RCP to center the HDPE pipe within the RCP.
- Installing two grout tubes (1 ½ diameter iron pipe) at the top of the existing RCP. The grout tubes were used to pump grout into the annular space between the RCP and the HDPE pipe.
- Slip-lining the 63-inch HDPE pipe sections into the 66-inch RCP and manholes. The pipe was advanced as close as possible to existing manholes MH-1 and MH-2.
- Installing a wire mesh and hydraulic cement around the pipe annulus at each end of the slip-lined sections.
- Pumping a coal tar resistant non-shrink grout into the annular space between the HDPE and RCP storm sewer pipes. The grout was poured into the grout tubes until air was evacuated and grout started to seep from the second tube. The coal tar resistant non-shrink grout was a “special grout mix” created by Geo-Solutions that was comprised of:

- 158 gallons of water
- 105 pounds of Portland cement
- 950 pounds of Grade 120 Ground Granulated Slag
- 33 pounds of Bentonite

Chenango fabricated and installed a flexible HDPE boot across the HDPE/RCP slip-lined joint edge. The installation of the flexible HDPE boot consisted of the following activities:

- Cleaning the concrete pipe and all material beneath the pipe and removing any debris from the RCP and HDPE pipes.
- Placing ¼ inch thick by 6-inch wide Viton sheet gasket material around both the RCP and HDPE pipe.
- Placing a flat stock of 40 mm HDPE liner underneath the pipe and wrapping the material around the pipe joint. The HDPE liner was tightened around each pipe and due to the difference in the pipe diameters the liner material was folded over itself in a cone type fashion. An extrusion welder was utilized to connect the ends at the seam of the overlapped HDPE liner.
- Placing a pair of ¾ inch wide 316 stainless steel band clamps around the HDPE liner on the outside of the Viton Gasket at each pipe once the extrusion weld was completed. The bands were placed 6 inches apart on the pipes and aligned to compress both the HDPE liner and the Viton Gasket Material when tightened.
- Cutting a hole in the top of the HDPE as a fill port for the annular space within the connection. Standard non-shrink grout mix was poured to fill the annular space within this connection.
- Welding an HDPE patch back onto the fill hole on the HDPE liner.

Schematics of the as-built HDPE to RCP slip line connections are shown on Record Drawing 5.

### 3.5.5 System Leak Testing

The purpose of the leak test was to identify any defects in materials or workmanship during the installation of the HDPE pipe. A leak test was conducted on the HDPE pipe system once it was lowered and attached to the northern and southern manholes.

The system leak testing consisted of the following activities:

- Installing inflatable plugs at the northern and southern ends of the HDPE pipe.
- Filling the HDPE pipe from manhole MH-1 to manhole MH-2 with water (via the city fire hydrant) to perform a leak test. After the pipe was filled, the level of water in the HDPE manhole riser sections was noted/marked. The water filled pipe was allowed to sit for a minimum of two hours. Following this time the water level in the risers was checked/measured. No leaks or change in water level were noted.
- Draining the water from the system overnight with 2-inch and 3-inch pumps.

### 3.5.6 Former RCP Storm Sewer Abandonment

AECOM abandoned the replaced section of RCP storm sewer by filling the pipe with CLSM. This was accomplished by directly pouring CLSM into the pipe at either end of the pipe, at the former manhole located north of the No. 4 Holder foundation and at two other locations where holes were excavated in the top of the RCP storm sewer to facilitate the pipe abandonment. The approximate locations of the areas where the CLSM was poured into the pipe are shown as Record Drawing 2. A total of 192 cubic yards (CY) of CLSM was poured into the former sewer to facilitate the pipe abandonment.

## 3.6 Site Restoration

Site restoration consisted of restoring areas of the site that were disturbed during the implementation of the storm sewer replacement. Site restoration included backfilling activities and pouring manhole surface slabs and are discussed below.

### 3.6.1 Backfilling

AECOM provided samples from the backfill source(s) to the Construction Observation Engineer at least three (3) weeks prior to bringing backfill. The samples were submitted

for laboratory analysis for polychlorinated biphenyls (PCBs), pesticides, target compound list (TCL) volatile organic compounds (VOCs), TCL semi-volatile organic compounds (SVOCs), and target analysis list (TAL) inorganic constituents to verify that the proposed material met analytical requirements. All soil brought onsite by AECOM met the lower of either the commercial use soil cleanup objectives (SCOs) or the protection of groundwater values presented in 6 NYCRR Part 375-6.8(b). In addition, AECOM provided the Construction Observation Engineer with sieve analysis reports and moisture/density test results for the fill material as described in Technical Specifications Section 02201 and 02206 of the Design Report.

AECOM commenced backfilling the excavation area after installing sections of the new storm sewer pipe to the design specifications (i.e., locations, elevations and slopes). In general, backfilling activities consisted of the following:

- Removing standing water (precipitation or surface water runoff) and groundwater that accumulated within the excavation area. All water was pumped/transferred to the temporary water treatment system for treatment prior to discharge
- Placing and compacting 12-inch lifts of run of crusher on either side of the HDPE pipe to cover around the curvature of the bottom half of the pipe. The top half of the HDPE pipe was covered by placing and compacting 24-inch lifts. Backfill materials were shoveled under the pipe and compacted to 95 percent standard proctor density with a walk behind vibratory compactor. The trench was backfilled to 2 feet above the pipe with run of crusher, and with a 1-foot to 3-feet layer of Type "E" stone (run of bank gravel) on top of the run of crusher. The top 1-foot of the trench was backfilled with run of crusher as shown in Record Drawing 5. Due to the limited area between the collars a small "jumping jack" compactor was utilized to compact material in these areas.
- Performing deflection measurements inside of the HDPE pipe between MH-1B and MH-1C. Measurements were taken at 25-foot intervals inside the pipe to measure the "pre-backfill" conditions of the HDPE pipe. Measurements were taken at the same locations after the backfill was placed in order to verify that the pipe had not deflected due to the backfill placement.
- Placing the final surface lifts after the removal of the sheet piling.
- Performing compaction testing by ATL. Compaction testing was performed every 75 linear feet of pipe for each lift. Compaction results were above the specified

95% dry density of maximum dry unit weight as determined by Modified Proctor testing (American Society for Testing and Materials [ASTM] Method D1557). Compaction testing results are presented in Appendix H.

A summary of backfill quantities is presented in Table 2. As summarized in Table 2, approximately 2,660 tons of run of bank gravel and 3,730 tons of run of crusher were used to backfill the trench during the 66-inch Storm Sewer Replacement Construction Activities.

The portion of the trench between manhole MH-1 and the southernmost concrete collar and manhole MH-2 and the northernmost collar was backfilled with CLSM to the top of the corresponding collar. These portions were backfilled from the top of the concrete collar to final grade using run of crusher stone.

### 3.6.2 Manhole Slab Construction

Tioga constructed the manhole slabs at each of the new HDPE manholes. The following procedures were conducted to construct the manhole slabs:

- Assembling re-bar “cages” to be used for the manhole slabs.
- Placing the concrete forms in preparation for pouring the concrete.
- Pouring the concrete manhole slab.
- Collecting four cylinders for each manhole for compressive strength testing after 28 days. In addition to compressive strength testing, air entrainment and slump testing were conducted. All results were within project specifications in accordance with Materials and Performance Section 03301 of the 66-inch Storm Sewer Replacement Design Report (4,000 psi,  $6 \pm 1\%$  and 3 inches for compressive strength, air entrainment and slump testing, respectively). Concrete testing results are presented in Appendix I.

### 3.7 Air Monitoring

During pre-trenching excavation, trench excavation, and loading of impacted and non-impacted materials for offsite transportation and treatment/disposal, air monitoring was performed in accordance with Section 02507 – Odor, Vapor, and Dust Control and the CAMP (Appendices B and C, respectively, of the Design Report). The air monitoring

activities were performed to evaluate airborne constituent levels for the purpose of confirming that work procedures and personnel protective equipment (PPE) were adequate, and that the work activities did not result in exceedances of the site perimeter action levels.

The air monitoring activities consisted of the following:

- Air monitoring within active work areas for airborne particulates and organic vapor to determine appropriate PPE requirements and/or appropriate control measures.
- Air monitoring at the site perimeter for airborne particulates and organic vapor to determine appropriate corrective actions to reduce or abate the emissions, if actions levels, as presented in the CAMP were exceeded.

In general, air monitoring was performed on a daily basis (when intrusive activities were taking place) using Multi-Rae and Dust Trak (weather permitting) units. Air monitoring results were submitted to the NYSDEC on a weekly basis. No exceedances of action levels presented in the CAMP were observed or recorded. Air monitoring results are included in Appendix J.

### **3.8 Demobilization**

Demobilization activities were conducted in parallel to site restoration activities. The demobilization activities included:

- Cleaning the onsite frac and polyethylene tanks for subsequent demobilization.
- Final grading of the site.
- Removal of temporary fencing.
- Demobilization of equipment, labor, and materials.
- Dismantling the work area(s), staging area(s), and equipment and material decontamination areas.
- Removing certain erosion and sedimentation control measures as discussed under section 5.2 of the 66-inch Storm Sewer Replacement Design Report.



- Transporting residual wastes (e.g., disposable equipment, PPE, sampling equipment, cleaning residuals, etc.) remaining at the completion of the construction activities for offsite treatment and disposal in accordance with applicable rules and regulations.
- Removing all Contractor equipment, materials, and personnel from the site.

#### **4. Waste Handling and Disposal**

During the construction, various waste materials were generated and transported for off-site disposal. These waste materials included the following:

- Excavated soil
- Concrete construction and demolition material

Waste materials were transported by land by various trucking companies including R. Galusha Transport, LLC., Longhorn Transport, LLC., CASON, Cedar Hill Express, Northeast Enterprise, and JBG Transport, LLC. A summary of the activities performed to manage and transport these materials for offsite disposal/recycling is provided below.

In general, excavated material that contained visible NAPL, total polycyclic aromatic hydrocarbons (PAHs) at concentrations greater than 1,000 milligram per kilogram (mg/kg), or that was characteristically hazardous for benzene was transported to ESMI located in Fort Edward, NY for treatment via LTDD. Soil that did not exceed these criteria was transported and disposed of as a non-hazardous solid waste at BCL located in Broome County, NY.

##### **4.1 Waste Characterization Soil Sampling and Analysis**

Prior to the 66-inch Storm Sewer Replacement, pre-remediation sampling was conducted on March 29 and 30, 2011 in accordance with the March 10, 2011 *Pre-Remediation In-Situ Sampling and Analysis Work Plan* letter (Pre-Remediation Sampling Work Plan) that was submitted to the NYSDEC. The results of the pre-sampling activities are summarized in the *Pre-Remediation In-Situ Sampling and Analysis Report* (Pre-Remediation Sampling Report) submitted to NYSEG on July 26, 2011.

Per ESMI and BCL waste characterization sampling requirements, pre-remediation sampling sufficed to characterize the following:

- 300 tons of waste material for ESMI
- 3,000 tons of waste material for BCL

No additional soil characterization sampling beyond that conducted during the re-remediation in-situ sampling was required for BCL. However, additional soil characterization was required for ESMI based on the quantity of soil transported for thermal desorption. Additional waste characterization samples were collected/analyzed at the following frequencies:

- One additional sample for the next 450 tons (i.e., following the initial 300 tons); and
- One additional sample for each additional 750 tons (after the initial 750 tons)

The composite samples were submitted to Test America or Phoenix laboratories for waste characterization analyses including:

- Total petroleum hydrocarbon (TPH) [gasoline range organics (GRO) and diesel range organics (DRO)] using United States Environmental Protection Agency (USEPA) Method 8015.
- Total VOCs, SVOCs, PCBs and Metals (plus antimony, beryllium, nickel, thallium, vanadium, and zinc) using USEPA Method 8260B, Method 8270C, Method 8080 and Method 6010B, respectively.
- Mercury using USEPA Method 7471B
- Total Cyanide using USEPA Method 9010
- Percent Sulfur using USEPA Method D129-64
- BTU using ASTM D240-87
- Toxicity by using the Toxicity Characteristic Leaching Procedure (TCLP) for VOCs, SVOCs, Metals and mercury using USEPA Method 8260, USEPA Method 8270, USEPA Method 6010B and USEPA Method 7471, respectively.
- Pesticides/Herbicides using USEPA Method 8081/8151A
- PCBs (total) using USEPA Method 8082
- Corrosivity (pH) using USEPA Method 9040C

- Reactivity (Cyanide) using USEPA Method 9012
- Reactivity (Sulfide) using USEPA Method 9030A
- Ignitibility using USEPA Method 9010

In general, excavated materials were directly loaded on trucks for transportation and off-site treatment/disposal. A total of six additional waste characterization samples were collected and analyzed by Test America (three samples) and Phoenix Laboratories (three samples).

The analytical results for the additional waste characterization samples are included in Appendix K, and were submitted to ESMI and BCL. A summary of the results is presented in Table 3.

#### **4.2 Treated Water Sampling and Analysis**

Water was generated during the trench excavation; decontamination of equipment, trucks and personnel; and due to precipitation and surface water runoff that entered the excavation areas. Water was treated in the on-site TWTS prior to discharge to the Susquehanna River under a SPDES permit equivalent that was procured prior to the commencement of the construction activities.

Batch treated water samples were collected and submitted to Phoenix laboratories for analysis for discharge permit analytes. A total of 24 water samples were collected from the treated effluent. A summary of the water samples and the analytes that were analyzed for is presented in Table 4. The following issues were observed during the operation of the TWTS:

- Analytical results from select water samples (i.e., batches 1-2, 2, 2-2, 6, 7, 10 and 11) exhibited the presence of VOCs (i.e., 1,2 dichloroethene, 1,2 dichloroethane, ethylbenzene, m&p-xylene, o-xylene, toluene, benzene) at concentrations greater than permit discharge limits. Confirmatory samples were sent to the Life Sciences Laboratory (LSL) in Syracuse, NY. AECOM water treatment subcontractor LRT evaluated the treatment system and recommended the following:
  - Bleeding air from the system to minimize the potential for channelization of water through the treatment media.

- Conducting media back-flushing once per week or every 60,000 gallons of treated water.
- Installing a gate valve at the discharge end of the TWTS to restrict effluent flow from the system, thereby increasing the system's pressure to reduce the potential for channelization of water through the carbon vessels.
- The initial samples of treated water from the system had pH values below the acceptable limits of the discharge permit. AECOM's subcontractor LRT installed a pH adjustment pump which added a solution of sodium hydroxide to increase pH prior to discharge.

Once post-remedy water samples did not exhibited VOC-related analytes, treated water was disposed of into the Susquehanna River. Water analytical results are included in Appendix L.

#### **4.3 Offsite Transportation and Disposal of Soil Materials to ESMI**

A waste profile was prepared and submitted to ESMI to obtain approval for the offsite treatment of MGP-related impacted soil generated during the 66-inch storm pipe replacement. Based on the waste profile and the waste characterization analytical results, ESMI approved this waste stream for LTDD treatment. A copy of the waste profile and approval letter from ESMI are included in Appendix M

The materials were loaded into transport vehicles, a canvas tarp was placed over the top of each transport vehicle's bed, and a hazardous solid waste manifest was prepared and signed by the driver and a NYSEG representative for each truck prior to transporting the material for LTDD treatment. Each truckload of material transported to ESMI was weighed prior to treatment. A copy of the solid waste manifest and weight ticket for each truckload of material transported to ESMI are included in Appendix N. As summarized in Table 5, approximately 4,683.84 tons of materials were treated using LTDD at ESMI during the 66-inch storm pipe replacement.

#### **4.4 Offsite Transportation and Disposal of Soil Materials to Broome County Landfill**

A waste profile was prepared and submitted to BCL to obtain approval from this facility for the offsite disposal of non-visually impacted materials generated during the 66-inch storm pipe replacement. As indicated in Section 3.1, waste characterization soil samples were collected prior to the 66-inch storm sewer replacement construction and

the analytical data was submitted to BCL. Based on the waste profile and the waste characterization analytical results, BCL approved this waste stream as a nonhazardous waste for landfill disposal. A copy of the waste profile and approval letter from BCL are included in Appendix O.

A total of 2221.47 tons of non-impacted material was consolidated for offsite disposal to BCL as summarized in Table 6. In general the disposal material consisted of trenched soil (1,739.96 tons), and C&D debris (481.51 tons [e.g. concrete and asphalt]). A copy of the solid waste manifest and weigh ticket for each truckload of material transported to BCL are included in Appendix P.

## **5. References**

ARCADIS, 2011. *66-Inch Storm Sewer Replacement Design Report* prepared for New York State Electric & Gas Corporation, Binghamton Court Street Former Manufacturer Gas Plant Site, New York (October 2011).

ARCADIS, 2011. *Pre-Remediation In-Situ Sampling and Analysis Report* prepared for New York State Electric & Gas Corporation, Binghamton Court Street Former Manufacturer Gas Plant Site, New York (July 2011)

ARCADIS BBL, 2006. *NAPL Barrier Wall Interim Remedial Measure Work Plan* prepared for New York State Electric & Gas Corporation, Binghamton Court Street Former Manufacturer Gas Plant Site, New York (July 2006).

BBL, 2002. *Final Remedial Investigation Report*. Prepared for New York State Electric & Gas Corporation, Binghamton, New York (December 2002).

## Tables



**Table 1**  
**Replacement Construction Milestone Chronology**

**66-Inch Storm Sewer Replacement Construction Completion Report**  
**NYSEG - Court Street Site - Binghamton, New York**

<b>Milestone</b>	<b>Completion Date</b>
Contractor mobilization	11/4/2011
Completion of pre-trenching for Phase I	11/8/2011
Completion of sheeting for Phase I	12/8/2011
Pouring of foundation slabs for MH-1C	12/22/2011
Completion of trenching for Phase I	1/3/2012
Completion of flange connections for Phase I	1/3/2012
Installation of MH-1C	1/9/2012
Pouring of foundation slabs for MH-1B	1/11/2012
Installation of MH-1B	1/17/2012
Completion of Phase I pipe fusion	1/3/2012
Installation of piping for manholes MH-1B and MH-1C	1/25/2012
Completion of concrete collars at MH-1B and MH-1C	1/27/2012
Completion of backfilling for Phase I	1/30/2012
Completion of pre-trenching for Phase II	1/31/2012
Completion of sheeting for Phase II	2/14/2012
Pouring of foundation slabs for MH-1A and MH-1D	2/15/2012
Installation of bypass pumping system	2/17/2012
Pouring of emergency sluiceway between MH-1C and MH-2	2/21/2012
Completion of trenching for Phase II	2/22/2012
Installation of MH-1D	2/23/2012
Installation of MH-1A	2/29/2012
Completion of slip Lining in MH-1 and MH-2	3/1/2012
Completion of concrete collars at MH-1A and MH-1D	3/2/2012
Installation of piping for manholes MH-1A and MH-1D	3/2/2012
Removal of bypass pumping system	3/7/2012
Completion of Fernco Alternate connection at MH-1 and MH-2	3/16/2012
Completion of backfilling for Phase II	3/26/2012
Completion of concrete slabs	3/28/2012
Contractor demobilization	3/29/2012

**Table 2**  
**Summary of Backfill Quantities**

**66-Inch Storm Sewer Replacement Construction Completion Report**  
**NYSEG - Court Street Site - Binghamton, New York**

Date	Transporter Name	Gorick Truck Number	Daily Truck Total	Type of Material	Crusher Run (Tons)	Daily Quantity (Crusher Run)	Cumulative Quantity (Crusher Run)	Bank Run (tons)	Daily Quantity (Bank Run)	Cumulative Quantity (Bank Run)	#1 Crushed Stone	#2 Crushed Stone	#3 /#4 Stone	Washed Sand
10/31/2011	Gorick	75	1	Crusher Run	22.91		22.91							
10/31/2011	Gorick	75	2	Crusher Run	21.3		44.21							
10/31/2011	Gorick	75	3	Crusher Run	23.53	67.74	67.74							
11/1/2011	Gorick	75	1	Crusher Run	23.36		91.10							
11/1/2011	Gorick	75	2	Crusher Run	23.94		115.04							
11/2/2011	Gorick	75	1	Washed Sand	0		115.04							22.81
11/2/2011	Gorick	75	2	Washed Sand	0		115.04							26.09
11/2/2011	Gorick	75	3	Crusher Run	24.39	24.39	139.43							
11/3/2011	Gorick	75	1	#1 crushed	0		139.43				22.95			
11/3/2011	Gorick	75	2	#1 crushed	0		139.43				22.82			
11/3/2011	Gorick	75	3	Washed Sand	0		139.43							17.99
11/17/2011	Gorick	75	1	#1 crushed	0		139.43				22.83			
11/23/2011	Gorick	75	1	#1 crushed	0		139.43				22.9			
11/28/2011	Gorick	75	1	#1 crushed	0		139.43				22.79			
11/28/2011	Gorick	75	2	#1 crushed	0		139.43				22.79			
11/30/2011	Gorick	75	1	#1 crushed	0		139.43				22.86			
12/6/2011	Gorick	75	1	#1 crushed	0		139.43				21.85			
12/12/2011	Gorick	75	1	#1 crushed	0		139.43				20.01			
12/16/2011	Gorick	95	1	Crusher Run	22.84		162.27							
12/16/2011	Gorick	76	2	Crusher Run	23.34		185.61							
12/16/2011	Gorick	76	3	Crusher Run	22.3		207.91							
12/16/2011	Gorick	93	4	Crusher Run	23.43		231.34							
12/16/2011	Gorick	76	5	Crusher Run	20.76		252.10							
12/16/2011	Gorick	95	6	Crusher Run	23.55		275.65							
12/16/2011	Gorick	95	7	Crusher Run	23.49		299.14							
12/16/2011	Gorick	76	8	Crusher Run	21.99	181.7	321.13							
12/19/2011	Gorick	79	1	#2 crushed	0		321.13					21.84		
12/19/2011	Gorick	79	2	#2 crushed	0		321.13					19.36		
12/21/2011	Gorick	76	1	Crusher Run	21.89		343.02							
12/21/2011	Gorick	79	2	Crusher Run	21.25		364.27							
12/21/2011	Gorick	76	3	Crusher Run	24.28		388.55							
12/21/2011	Gorick	79	4	Crusher Run	22.68		411.23							
12/21/2011	Gorick	76	5	Crusher Run	22.23		433.46							
12/21/2011	Gorick	79	6	Crusher Run	22.83	135.16	456.29							
1/18/2012	Gorick	98	1	Crusher Run	17.68		473.97							
1/18/2012	Gorick	98	2	Crusher Run	18.73		492.70							

**Table 2**  
**Summary of Backfill Quantities**

**66-Inch Storm Sewer Replacement Construction Completion Report**  
**NYSEG - Court Street Site - Binghamton, New York**

Date	Transporter Name	Gorick Truck Number	Daily Truck Total	Type of Material	Crusher Run (Tons)	Daily Quantity (Crusher Run)	Cumulative Quantity (Crusher Run)	Bank Run (tons)	Daily Quantity (Bank Run)	Cumulative Quantity (Bank Run)	#1 Crushed Stone	#2 Crushed Stone	#3 /#4 Stone	Washed Sand
1/18/2012	Gorick	98	3	Crusher Run	17.81		510.51							
1/18/2012	Gorick	98	4	Crusher Run	18.55	72.77	529.06							
1/19/2012	Gorick	98	1	Crusher Run	19.48		548.54							
1/19/2012	Gorick	98	2	Crusher Run	19.08		567.62							
1/19/2012	Gorick	98	3	Crusher Run	18.94		586.56							
1/19/2012	Gorick	98	4	Crusher Run	16.18		602.74							
1/19/2012	Gorick	98	5	Crusher Run	17.94	91.62	620.68							
1/20/2012	Gorick	98	1	Crusher Run	17.78		638.46							
1/20/2012	Gorick	75	2	Crusher Run	23.52		661.98							
1/20/2012	Gorick	98	3	Crusher Run	18.89		680.87							
1/20/2012	Gorick	76	4	Crusher Run	23.55		704.42							
1/20/2012	Gorick	75	5	Crusher Run	23.25		727.67							
1/20/2012	Gorick	75	6	Crusher Run	24.56		752.23							
1/20/2012	Gorick	75	7	Crusher Run	22.41		774.64							
1/20/2012	Gorick	75	8	Crusher Run	19.75		794.39							
1/20/2012	Gorick	76	9	Crusher Run	22.8		817.19							
1/20/2012	Gorick	76	10	Crusher Run	23.02		840.21							
1/20/2012	Gorick	76	11	Crusher Run	23.84		864.05							
1/20/2012	Gorick	76	12	Crusher Run	21.24		885.29							
1/20/2012	Gorick	98	13	Crusher Run	17.54		902.83							
1/20/2012	Gorick	98	14	Crusher Run	17.8		920.63							
1/20/2012	Gorick	98	15	Crusher Run	17.51		938.14							
1/20/2012	Gorick	98	16	Crusher Run	17.29	334.75	955.43							
1/23/2012	Gorick	94	1	Crusher Run	23.8		979.23							
1/23/2012	Gorick	94	2	Crusher Run	20.74		999.97							
1/23/2012	Gorick	94	3	Crusher Run	22.83		1022.80							
1/23/2012	Gorick	94	4	Crusher Run	22.96		1045.76							
1/23/2012	Gorick	98	5	Crusher Run	19.63		1065.39							
1/23/2012	Gorick	98	6	Crusher Run	19.43		1084.82							
1/23/2012	Gorick	98	7	Crusher Run	18		1102.82							
1/23/2012	Gorick	94	8	Crusher Run	22.99		1125.81							
1/23/2012	Gorick	77	9	Crusher Run	23.43		1149.24							
1/23/2012	Gorick	77	10	Crusher Run	22.94		1172.18							
1/23/2012	Gorick	98	11	Crusher Run	16.96		1189.14							
1/23/2012	Gorick	98	12	Crusher Run	17.33		1206.47							
1/23/2012	Gorick	76	13	Crusher Run	21.06		1227.53							

**Table 2**  
**Summary of Backfill Quantities**

**66-Inch Storm Sewer Replacement Construction Completion Report**  
**NYSEG - Court Street Site - Binghamton, New York**

Date	Transporter Name	Gorick Truck Number	Daily Truck Total	Type of Material	Crusher Run (Tons)	Daily Quantity (Crusher Run)	Cumulative Quantity (Crusher Run)	Bank Run (tons)	Daily Quantity (Bank Run)	Cumulative Quantity (Bank Run)	#1 Crushed Stone	#2 Crushed Stone	#3 /#4 Stone	Washed Sand
1/23/2012	Gorick	77	14	Crusher Run	19.29		1246.82							
1/23/2012	Gorick	77	15	Crusher Run	24.2		1271.02							
1/23/2012	Gorick	77	16	Crusher Run	21.32		1292.34							
1/23/2012	Gorick	76	17	Crusher Run	24.45		1316.79							
1/23/2012	Gorick	76	18	Crusher Run	21.86		1338.65							
1/23/2012	Gorick	76	19	Crusher Run	22.92		1361.57							
1/23/2012	Gorick	76	20	Crusher Run	23.49	429.63	1385.06							
1/23/2012	Gorick	98	21	Bank Run			1385.06	21.58		21.58				
1/23/2012	Gorick	94	22	Bank Run			1385.06	23.14		44.72				
1/23/2012	Gorick	76	23	Bank Run			1385.06	20.03		64.75				
1/23/2012	Gorick	77	24	Bank Run			1385.06	20.89	85.64	85.64				
1/24/2012	Gorick	77	1	Crusher Run	23.67		1408.73	0.00		85.64				
1/24/2012	Gorick	77	2	Crusher Run	23.44		1432.17	0.00		85.64				
1/24/2012	Gorick	77	3	Crusher Run	23.83		1456.00	0.00		85.64				
1/24/2012	Gorick	77	4	Crusher Run	24.26		1480.26	0.00		85.64				
1/24/2012	Gorick	94	5	Crusher Run	23.66		1503.92	0.00		85.64				
1/24/2012	Gorick	94	6	Crusher Run	23.94		1527.86	0.00		85.64				
1/24/2012	Gorick	94	7	Crusher Run	19.65		1547.51	0.00		85.64				
1/24/2012	Gorick	94	8	Crusher Run	22.87		1570.38	0.00		85.64				
1/24/2012	Gorick	98	9	Crusher Run	19		1589.38	0.00		85.64				
1/24/2012	Gorick	98	10	Crusher Run	16.24		1605.62	0.00		85.64				
1/24/2012	Gorick	98	11	Crusher Run	18.77		1624.39	0.00		85.64				
1/24/2012	Gorick	76	12	Crusher Run	23.87		1648.26	0.00		85.64				
1/24/2012	Gorick	76	13	Crusher Run	21.73		1669.99	0.00		85.64				
1/24/2012	Gorick	76	14	Crusher Run	24.16		1694.15	0.00		85.64				
1/24/2012	Gorick	76	15	Crusher Run	23.32	332.41	1717.47	0.00		85.64				
1/24/2012	Gorick	98	16	Bank Run	0		1717.47	21.58		107.22				
1/24/2012	Gorick	77	17	Bank Run	0		1717.47	20.72		127.94				
1/24/2012	Gorick	94	18	Bank Run	0		1717.47	20.73		148.67				
1/24/2012	Gorick	94	19	Bank Run	0		1717.47	22.34		171.01				
1/24/2012	Gorick	77	20	Bank Run	0		1717.47	24.5		195.51				
1/24/2012	Gorick	76	21	Bank Run	0		1717.47	25.1		220.61				
1/24/2012	Gorick	76	22	Bank Run	0		1717.47	21.06		241.67				
1/24/2012	Gorick	98	23	Bank Run	0		1717.47	20.47		262.14				
1/24/2012	Gorick	98	24	Bank Run	0		1717.47	20.71	197.21	282.85				
1/25/2012	Gorick	74	1	Bank Run	0		1717.47	22.35		305.20				

**Table 2**  
**Summary of Backfill Quantities**

**66-Inch Storm Sewer Replacement Construction Completion Report**  
**NYSEG - Court Street Site - Binghamton, New York**

Date	Transporter Name	Gorick Truck Number	Daily Truck Total	Type of Material	Crusher Run (Tons)	Daily Quantity (Crusher Run)	Cumulative Quantity (Crusher Run)	Bank Run (tons)	Daily Quantity (Bank Run)	Cumulative Quantity (Bank Run)	#1 Crushed Stone	#2 Crushed Stone	#3 /#4 Stone	Washed Sand
1/25/2012	Gorick	74	2	Bank Run	0		1717.47	25.03		330.23				
1/25/2012	Gorick	74	3	Bank Run	0		1717.47	21.93		352.16				
1/25/2012	Gorick	77	4	Bank Run	0		1717.47	25.49		377.65				
1/25/2012	Gorick	74	5	Bank Run	0		1717.47	23.84		401.49				
1/25/2012	Gorick	74	6	Bank Run	0		1717.47	25.99		427.48				
1/25/2012	Gorick	77	7	Bank Run	0		1717.47	25.95		453.43				
1/25/2012	Gorick	77	8	Bank Run	0		1717.47	21.66		475.09				
1/25/2012	Gorick	77	9	Bank Run	0		1717.47	24.39		499.48				
1/25/2012	Gorick	77	10	Bank Run	0		1717.47	24.51		523.99				
1/25/2012	Gorick	98	11	Bank Run	0		1717.47	18.64		542.63				
1/25/2012	Gorick	98	12	Bank Run	0		1717.47	17.62		560.25				
1/25/2012	Gorick	77	13	Bank Run	0		1717.47	21.64		581.89				
1/25/2012	Gorick	98	14	Bank Run	0		1717.47	17.50		599.39				
1/25/2012	Gorick	74	15	Bank Run	0		1717.47	23.93		623.32				
1/25/2012	Gorick	98	16	Bank Run	0		1717.47	19.94		643.26				
1/25/2012	Gorick	98	17	Bank Run	0		1717.47	20.57		663.83				
1/25/2012	Gorick	98	18	Bank Run	0		1717.47	16.65	397.63	680.48				
1/26/2012	Gorick	77	1	Bank Run	0		1717.47	25.19		705.67				
1/26/2012	Gorick	77	2	Bank Run	0		1717.47	20.78		726.45				
1/26/2012	Gorick	77	3	Bank Run	0		1717.47	22.72		749.17				
1/26/2012	Gorick	77	4	Bank Run	0		1717.47	22.76		771.93				
1/26/2012	Gorick	77	5	Bank Run	0		1717.47	26.85		798.78				
1/26/2012	Gorick	77	6	Bank Run	0		1717.47	23.08		821.86				
1/26/2012	Gorick	74	7	Bank Run	0		1717.47	22.52		844.38				
1/26/2012	Gorick	74	8	Bank Run	0		1717.47	22.16		866.54				
1/26/2012	Gorick	74	9	Bank Run	0		1717.47	25.48		892.02				
1/26/2012	Gorick	74	10	Bank Run	0		1717.47	24.45		916.47				
1/26/2012	Gorick	76	11	Bank Run	0		1717.47	21.15		937.62				
1/26/2012	Gorick	76	12	Bank Run	0		1717.47	21.07		958.69				
1/26/2012	Gorick	76	13	Bank Run	0		1717.47	21.00		979.69				
1/26/2012	Gorick	76	14	Bank Run	0		1717.47	21.63		1001.32				
1/26/2012	Gorick	98	15	Bank Run	0		1717.47	19.15		1020.47				
1/26/2012	Gorick	98	16	Bank Run	0		1717.47	19.12		1039.59				
1/26/2012	Gorick	98	17	Bank Run	0		1717.47	17.58		1057.17				
1/26/2012	Gorick	98	18	Bank Run	0		1717.47	17.89		1075.06				
1/26/2012	Gorick	98	19	Bank Run	0		1717.47	20.56		1095.62				

**Table 2  
Summary of Backfill Quantities**

**66-Inch Storm Sewer Replacement Construction Completion Report  
NYSEG - Court Street Site - Binghamton, New York**

Date	Transporter Name	Gorick Truck Number	Daily Truck Total	Type of Material	Crusher Run (Tons)	Daily Quantity (Crusher Run)	Cumulative Quantity (Crusher Run)	Bank Run (tons)	Daily Quantity (Bank Run)	Cumulative Quantity (Bank Run)	#1 Crushed Stone	#2 Crushed Stone	#3 /#4 Stone	Washed Sand
1/26/2012	Gorick	98	20	Bank Run	0		1717.47	17.96		1113.58				
1/26/2012	Gorick	74	21	Bank Run	0		1717.47	21.38		1134.96				
1/26/2012	Gorick	74	22	Bank Run	0		1717.47	25.17	479.65	1160.13				
1/30/2012	Gorick	74	1	Bank Run	0		1717.47	23.35		1183.48				
1/30/2012	Gorick	74	2	Bank Run	0		1717.47	23.47		1206.95				
1/30/2012	Gorick	74	3	Bank Run	0		1717.47	23.32		1230.27				
1/30/2012	Gorick	77	4	Bank Run	0		1717.47	25.33		1255.60				
1/30/2012	Gorick	77	5	Bank Run	0		1717.47	22.98		1278.58				
1/30/2012	Gorick	77	6	Bank Run	0		1717.47	24.38		1302.96				
1/30/2012	Gorick	74	7	Bank Run	0		1717.47	24.68		1327.64				
1/30/2012	Gorick	74	8	Bank Run	0		1717.47	25.03		1352.67				
1/30/2012	Gorick	77	9	Bank Run	0		1717.47	22.63		1375.30				
1/30/2012	Gorick	77	10	Bank Run	0		1717.47	24.93		1400.23				
1/30/2012	Gorick	77	11	Bank Run	0		1717.47	22.87		1423.10				
1/30/2012	Gorick	77	12	Bank Run	0		1717.47	23.46	286.43	1446.56				
2/2/2012	Gorick	77	1	Crusher Run	24.42		1741.89							
2/2/2012	Gorick	77	2	Crusher Run	22.91		1764.80							
2/2/2012	Gorick	77	3	Crusher Run	23.6		1788.40							
2/2/2012	Gorick	77	4	Crusher Run	24.2	95.13	1812.60							
2/6/2012	Gorick	98	1	#1 crushed	0		1717.47			1446.56	15.7			
2/6/2012	Gorick	98	2	#1 crushed	0		1717.47			1446.56	15			
2/14/2012	Gorick	98	1	Crusher Run	15.61		1733.08			1446.56				
2/14/2012	Gorick	98	2	Crusher Run	17.91		1750.99			1446.56				
2/14/2012	Gorick	98	3	Crusher Run	18.12		1769.11			1446.56				
2/14/2012	Gorick	98	4	Crusher Run	19.04		1788.15			1446.56				
2/14/2012	Gorick	98	5	Crusher Run	18.18	88.86	1806.33			1446.56				
2/17/2012	Gorick	76	1	Crusher Run	23.64		1829.97			1446.56				
2/17/2012	Gorick	76	2	Crusher Run	22.69		1852.66			1446.56				
2/17/2012	Gorick	76	3	Crusher Run	24.18		1876.84			1446.56				
2/17/2012	Gorick	76	4	Crusher Run	23.55		1900.39			1446.56				
2/17/2012	Gorick	76	5	Crusher Run	20.14		1920.53			1446.56				
2/17/2012	Gorick	76	6	Crusher Run	21.36	135.56	1941.89			1446.56				
2/20/2012	Gorick	94	1	#2 crushed	0		1941.89			1446.56		21.2		
2/20/2012	Gorick	94	2	#2 crushed	0		1941.89			1446.56		19.7		
2/20/2012	Gorick	94	3	Crusher Run	23.3		1965.19			1446.56				
2/20/2012	Gorick	94	4	Crusher Run	24.65		1989.84			1446.56				

**Table 2**  
**Summary of Backfill Quantities**

**66-Inch Storm Sewer Replacement Construction Completion Report**  
**NYSEG - Court Street Site - Binghamton, New York**

Date	Transporter Name	Gorick Truck Number	Daily Truck Total	Type of Material	Crusher Run (Tons)	Daily Quantity (Crusher Run)	Cumulative Quantity (Crusher Run)	Bank Run (tons)	Daily Quantity (Bank Run)	Cumulative Quantity (Bank Run)	#1 Crushed Stone	#2 Crushed Stone	#3 /#4 Stone	Washed Sand
2/20/2012	Gorick	94	5	Crusher Run	24.36		2014.20			1446.56				
2/20/2012	Gorick	94	6	Crusher Run	23.75	96.06	2037.95			1446.56				
2/21/2012	Gorick	76	1	Crusher Run	23.23		2061.18			1446.56				
2/21/2012	Gorick	76	2	Crusher Run	21.34		2082.52			1446.56				
2/21/2012	Gorick	76	3	Crusher Run	24.63		2107.15			1446.56				
2/21/2012	Gorick	76	4	Crusher Run	23.22		2130.37			1446.56				
2/21/2012	Gorick	76	5	Crusher Run	24.06		2154.43			1446.56				
2/21/2012	Gorick	76	6	Crusher Run	23.88	140.36	2178.31			1446.56				
2/22/2012	Gorick	76	1	#3 crushed	0		2178.31			1446.56			22.8	
2/22/2012	Gorick	76	2	#3 crushed	0		2178.31			1446.56			23.37	
2/24/2012	Gorick	76	1	Crusher Run	23.12		2201.43			1446.56				
2/24/2012	Gorick	76	2	Crusher Run	23.26		2224.69			1446.56				
2/24/2012	Gorick	76	3	Crusher Run	24.36		2249.05			1446.56				
2/24/2012	Gorick	76	4	Crusher Run	23.93		2272.98			1446.56				
2/24/2012	Gorick	76	5	Crusher Run	24.65		2297.63			1446.56				
2/24/2012	Gorick	76	6	Crusher Run	22.81	142.13	2320.44			1446.56				
3/5/2012	Gorick	77	1	Crusher Run	22.67		2343.11			1446.56				
3/5/2012	Gorick	77	2	Crusher Run	25.69		2368.80			1446.56				
3/5/2012	Gorick	77	3	Crusher Run	24.32		2393.12			1446.56				
3/5/2012	Gorick	77	4	Crusher Run	25.31		2418.43			1446.56				
3/5/2012	Gorick	98	5	Crusher Run	22.36		2440.79			1446.56				
3/5/2012	Gorick	98	6	Crusher Run	19.3		2460.09			1446.56				
3/5/2012	Gorick	77	7	Crusher Run	25.47		2485.56			1446.56				
3/5/2012	Gorick	77	8	Crusher Run	25.2		2510.76			1446.56				
3/5/2012	Gorick	98	9	Crusher Run	18.38		2529.14			1446.56				
3/5/2012	Gorick	98	10	Crusher Run	17.35		2546.49			1446.56				
3/5/2012	Gorick	98	11	Crusher Run	19.35		2565.84			1446.56				
3/5/2012	Gorick	98	12	Crusher Run	20		2585.84			1446.56				
3/5/2012	Gorick	98	13	Crusher Run	18.16		2604.00			1446.56				
3/5/2012	Gorick	76	14	Crusher Run	24.51		2628.51			1446.56				
3/5/2012	Gorick	76	15	Crusher Run	22.47		2650.98			1446.56				
3/5/2012	Gorick	76	16	Crusher Run	23.54		2674.52			1446.56				
3/5/2012	Gorick	76	17	Crusher Run	24.17		2698.69			1446.56				
3/5/2012	Gorick	76	18	Crusher Run	24.98		2723.67			1446.56				
3/5/2012	Gorick	76	19	Crusher Run	24.55	427.78	2748.22			1446.56				
3/6/2012	Gorick	98	1	Crusher Run	18.05		2766.27			1446.56				

**Table 2  
Summary of Backfill Quantities**

**66-Inch Storm Sewer Replacement Construction Completion Report  
NYSEG - Court Street Site - Binghamton, New York**

Date	Transporter Name	Gorick Truck Number	Daily Truck Total	Type of Material	Crusher Run (Tons)	Daily Quantity (Crusher Run)	Cumulative Quantity (Crusher Run)	Bank Run (tons)	Daily Quantity (Bank Run)	Cumulative Quantity (Bank Run)	#1 Crushed Stone	#2 Crushed Stone	#3 /#4 Stone	Washed Sand
3/6/2012	Gorick	98	2	Crusher Run	18.41		2784.68			1446.56				
3/6/2012	Gorick	98	3	Crusher Run	19.06		2803.74			1446.56				
3/6/2012	Gorick	98	4	Crusher Run	19.34		2823.08			1446.56				
3/6/2012	Gorick	77	5	Crusher Run	23.85		2846.93			1446.56				
3/6/2012	Gorick	77	6	Crusher Run	23.86		2870.79			1446.56				
3/6/2012	Gorick	98	7	Crusher Run	18.78		2889.57			1446.56				
3/6/2012	Gorick	98	8	Crusher Run	19.87		2909.44			1446.56				
3/6/2012	Gorick	77	9	Crusher Run	22.81		2932.25			1446.56				
3/6/2012	Gorick	77	10	Crusher Run	23.88		2956.13			1446.56				
3/6/2012	Gorick	77	11	Crusher Run	24.73		2980.86			1446.56				
3/6/2012	Gorick	77	12	Crusher Run	22.48		3003.34			1446.56				
3/6/2012	Gorick	98	13	Crusher Run	17.84	272.96	3021.18			1446.56				
3/8/2012	Gorick	98	1	Crusher Run	17.92		3039.10			1446.56				
3/8/2012	Gorick	98	2	Crusher Run	17.4		3056.50			1446.56				
3/8/2012	Gorick	98	3	Crusher Run	18.8		3075.30			1446.56				
3/8/2012	Gorick	76	4	Crusher Run	22.56		3097.86			1446.56				
3/8/2012	Gorick	76	5	Crusher Run	23.22		3121.08			1446.56				
3/8/2012	Gorick	77	6	Crusher Run	24.09		3145.17			1446.56				
3/8/2012	Gorick	77	7	Crusher Run	23.24		3168.41			1446.56				
3/8/2012	Gorick	98	8	Crusher Run	18.46		3186.87			1446.56				
3/8/2012	Gorick	77	9	Bank Run	0		3186.87	22.65		1469.21				
3/8/2012	Gorick	77	10	Bank Run	0		3186.87	22.59		1491.80				
3/8/2012	Gorick	77	11	Bank Run	0		3186.87	22.50		1514.30				
3/8/2012	Gorick	77	12	Bank Run	0		3186.87	24.15		1538.45				
3/8/2012	Gorick	76	13	Bank Run	0		3186.87	23.74		1562.19				
3/8/2012	Gorick	76	14	Bank Run	0		3186.87	22.78		1584.97				
3/8/2012	Gorick	76	15	Bank Run	0		3186.87	23.09		1608.06				
3/8/2012	Gorick	76	16	Bank Run	0		3186.87	24.05		1632.11				
3/8/2012	Gorick	98	17	Bank Run	0		3186.87	20.17		1652.28				
3/8/2012	Gorick	98	18	Bank Run	0		3186.87	19.37		1671.65				
3/8/2012	Gorick	98	19	Bank Run	0	165.69	3186.87	19.18	244.27	1690.83				
3/9/2012	Gorick	77	1	Bank Run	0		3186.87	23.61		1714.44				
3/9/2012	Gorick	77	2	Bank Run	0		3186.87	21.63		1736.07				
3/9/2012	Gorick	77	3	Bank Run	0		3186.87	24.42		1760.49				
3/9/2012	Gorick	77	4	Bank Run	0		3186.87	24.77		1785.26				
3/9/2012	Gorick	77	5	Bank Run	0		3186.87	23.17		1808.43				



**Table 2  
Summary of Backfill Quantities**

**66-Inch Storm Sewer Replacement Construction Completion Report  
NYSEG - Court Street Site - Binghamton, New York**

Date	Transporter Name	Gorick Truck Number	Daily Truck Total	Type of Material	Crusher Run (Tons)	Daily Quantity (Crusher Run)	Cumulative Quantity (Crusher Run)	Bank Run (tons)	Daily Quantity (Bank Run)	Cumulative Quantity (Bank Run)	#1 Crushed Stone	#2 Crushed Stone	#3 /#4 Stone	Washed Sand
3/9/2012	Gorick	77	6	Bank Run	0		3186.87	23.07		1831.50				
3/9/2012	Gorick	98	7	Bank Run	0		3186.87	21.45		1852.95				
3/9/2012	Gorick	98	8	Bank Run	0		3186.87	20.60		1873.55				
3/9/2012	Gorick	98	9	Bank Run	0		3186.87	20.85		1894.40				
3/9/2012	Gorick	98	10	Bank Run	0		3186.87	20.26		1914.66				
3/9/2012	Gorick	98	11	Bank Run	0		3186.87	20.49		1935.15				
3/9/2012	Gorick	98	12	Bank Run	0		3186.87	19.91		1955.06				
3/9/2012	Gorick	77	13	Bank Run	0		3186.87	23.37	287.60	1978.43				
3/12/2012	Gorick	75	1	Bank Run	0		3186.87	24.00		2002.43				
3/12/2012	Gorick	75	2	Bank Run	0		3186.87	21.84		2024.27				
3/12/2012	Gorick	77	3	Bank Run	0		3186.87	23.34		2047.61				
3/12/2012	Gorick	77	4	Bank Run	0		3186.87	23.86		2071.47				
3/12/2012	Gorick	75	5	Bank Run	0		3186.87	23.09		2094.56				
3/12/2012	Gorick	77	6	Bank Run	0		3186.87	22.29		2116.85				
3/12/2012	Gorick	77	7	Bank Run	0		3186.87	24.43		2141.28				
3/12/2012	Gorick	77	8	Bank Run	0		3186.87	23.91		2165.19				
3/12/2012	Gorick	75	9	Bank Run	0		3186.87	24.36		2189.55				
3/12/2012	Gorick	75	10	Bank Run	0		3186.87	23.61		2213.16				
3/12/2012	Gorick	75	11	Bank Run	0		3186.87	23.81	258.54	2236.97				
3/13/2012	Gorick		1		0		3186.87	24.56		2261.53				
3/13/2012	Gorick		2		0		3186.87	24.82		2286.35				
3/13/2012	Gorick		3		0		3186.87	26.15		2312.50				
3/13/2012	Gorick		4		0		3186.87	21.45		2333.95				
3/13/2012	Gorick		5		0		3186.87	24.92		2358.87				
3/13/2012	Gorick		6		0		3186.87	21.13		2380.00				
3/13/2012	Gorick		7	Crusher Run	19.73		3206.60	0.00		2380.00				
3/13/2012	Gorick		8	Crusher Run	22.6	42.33	3229.20	0.00	143.03	2380.00				
3/21/2012	Gorick	98	1	Bank Run			3229.20	19.98		2399.98				
3/21/2012	Gorick	74	2	Bank Run			3229.20	23.58		2423.56				
3/21/2012	Gorick	74	3	Bank Run			3229.20	21.99		2445.55				
3/21/2012	Gorick	74	4	Bank Run			3229.20	21.85		2467.40				
3/21/2012	Gorick	98	5	Bank Run			3229.20	19.87		2487.27				
3/21/2012	Gorick	98	6	Bank Run			3229.20	18.39		2505.66				
3/21/2012	Gorick	98	7	Bank Run			3229.20	19.96		2525.62				
3/21/2012	Gorick	98	8	Bank Run			3229.20	18.99		2544.61				
3/21/2012	Gorick	74	9	Crusher Run	22.02		3251.22			2544.61				

**Table 2  
Summary of Backfill Quantities**

**66-Inch Storm Sewer Replacement Construction Completion Report  
NYSEG - Court Street Site - Binghamton, New York**

Date	Transporter Name	Gorick Truck Number	Daily Truck Total	Type of Material	Crusher Run (Tons)	Daily Quantity (Crusher Run)	Cumulative Quantity (Crusher Run)	Bank Run (tons)	Daily Quantity (Bank Run)	Cumulative Quantity (Bank Run)	#1 Crushed Stone	#2 Crushed Stone	#3 /#4 Stone	Washed Sand
3/21/2012	Gorick	74	10	Crusher Run	22.43		3273.65			2544.61				
3/21/2012	Gorick	74	11	Crusher Run	22.35		3296.00			2544.61				
3/21/2012	Gorick	98	12	Crusher Run	16.42	83.22	3312.42		164.61	2544.61				
3/23/2012	Gorick	74	1	Bank Run			3312.42	22.91		2567.52				
3/23/2012	Gorick	74	2	Bank Run			3312.42	22.39		2589.91				
3/23/2012	Gorick	74	3	Bank Run			3312.42	23.12		2613.03				
3/23/2012	Gorick	4	4	Bank Run			3312.42	20.36		2633.39				
3/23/2012	Gorick	74	5	Bank Run			3312.42	24.69	113.47	2658.08				
3/26/2012	Gorick	75	1	Crusher Run	22.74		3335.16			2658.08				
3/26/2012	Gorick	75	2	Crusher Run	21.75		3356.91			2658.08				
3/26/2012	Gorick	75	3	Crusher Run	22.35		3379.26			2658.08				
3/26/2012	Gorick	75	4	Crusher Run	22.85		3402.11			2658.08				
3/26/2012	Gorick	75	5	Crusher Run	21.06		3423.17			2658.08				
3/26/2012	Gorick	75	6	Crusher Run	21.1	131.85	3444.27			2658.08				
3/28/2012	Gorick	98	1	Crusher Run	17.67		3461.94			2658.08				
3/28/2012	Gorick	98	2	Crusher Run	17.38		3479.32			2658.08				
3/28/2012	Gorick	98	3	Crusher Run	16.54		3495.86			2658.08				
3/28/2012	Gorick	98	4	Crusher Run	17.22		3513.08			2658.08				
3/28/2012	Gorick	98	5	Crusher Run	19.37		3532.45			2658.08				
3/28/2012	Gorick	98	6	Crusher Run	17.87		3550.32			2658.08				
3/28/2012	Gorick	98	7	Crusher Run	17.11	123.16	3567.43			2658.08				
3/29/2012	Gorick	98	1	Crusher Run	19.04		3586.47			2658.08				
3/29/2012	Gorick	98	2	Crusher Run	17.33		3603.80			2658.08				
3/29/2012	Gorick	98	3	Crusher Run	17.76		3621.56			2658.08				
3/29/2012	Gorick	98	4	Crusher Run	18.11		3639.67			2658.08				
3/29/2012	Gorick	98	5	Crusher Run	17.8		3657.47			2658.08				
3/29/2012	Gorick	98	6	Crusher Run	20.28	110.32	3677.75			2658.08				
3/30/2012	Gorick	98	1	Crusher Run	18.24		3695.99			2658.08				
3/30/2012	Gorick	98	2	Crusher Run	17.4		3713.39			2658.08				
3/30/2012	Gorick	98	3	Crusher Run	16.9	52.54	3730.29			2658.08				
<b>TOTALS</b>							<b>3730.29</b>			<b>2658.08</b>	<b>232.5</b>	<b>82.1</b>	<b>46.17</b>	<b>66.89</b>

**Table 3**  
**Summary of Waste Characterization Analysis**

**66-Inch Storm Sewer Replacement Construction Completion Report**  
**NYSEG - Court Street Site - Binghamton, New York**

Location ID: NYSDEC Part			TW-11-1	TW-11-1	TW-11-2	TW-11-2	TW-11-3	TW-11-3	TW-11-4	TW-11-4	S-WC-1	S-WC-2	S-WC-3	S-WC-4	S-WC-5	S-WC-6
Sample Depth(Feet): 371 TCLP		Units	0 - 8	8 - 16	0 - 8	8 - 15	0 - 7.5	7.5 - 16	0 - 7.5	7.5 - 16	--	--	--	--	--	--
Date Collected:	Criteria		03/29/11	03/29/11	03/29/11	03/29/11	03/30/11	03/30/11	03/30/11	03/30/11	12/01/11	12/07/11	12/07/11	12/12/11	12/12/11	12/12/11
<b>TPH</b>																
Diesel Range Organics [C10-C28]	--	mg/kg	260	2,900	1,600	14,000	700	790	1,100	1,700	4,510	1,410	2,230	1,100	1000	890
GRO (C6-C10)	--	mg/kg	2.4	140	110	77	2.8	130	32	62	82.1	40.6	34.9	20 U	20 U	20 U
<b>PCBs</b>																
PCB-1016	--	mg/kg	0.018 U	0.022 U	0.088 U	0.020 U	0.17 U	0.19 U	0.18 U	0.20 U	0.042 U	0.044 U	0.043 U	0.42 U	0.41 U	0.41 U
PCB-1221	--	mg/kg	0.018 U	0.022 U	0.088 U	0.020 U	0.17 U	0.19 U	0.18 U	0.20 U	0.042 U	0.044 U	0.043 U	0.42 U	0.41 U	0.41 U
PCB-1232	--	mg/kg	0.018 U	0.022 U	0.088 U	0.020 U	0.17 U	0.19 U	0.18 U	0.20 U	0.042 U	0.044 U	0.043 U	0.42 U	0.41 U	0.41 U
PCB-1242	--	mg/kg	0.018 U	0.022 U	0.088 U	0.020 U	0.17 U	0.19 U	0.18 U	0.20 U	0.042 U	0.044 U	0.043 U	0.42 U	0.41 U	0.41 U
PCB-1248	--	mg/kg	0.018 U	0.022 U	0.088 U	0.020 U	0.17 U	0.19 U	0.18 U	0.20 U	0.042 U	0.044 U	0.043 U	0.42 U	0.41 U	0.41 U
PCB-1254	--	mg/kg	0.018 U	0.022 U	0.088 U	0.020 U	0.17 U	0.19 U	0.18 U	0.20 U	0.042 U	0.044 U	0.043 U	0.42 U	0.41 U	0.41 U
PCB-1260	--	mg/kg	0.013 J	0.020 J	0.088 U	0.020 U	0.17 U	0.13 J	0.18 U	0.20 U	0.042 U	0.044 U	0.043 U	0.42 U	0.41 U	0.41 U
<b>VOCs</b>																
1,1,1-Trichloroethane	--	mg/kg	0.0053 U	0.66 U	0.051 U	0.61 U	0.0052 U	0.054 U	0.041 U	0.057 U	0.125 U	0.123 U	0.124 U	1.6 U	0.31 U	1.6 U
1,1,2,2-Tetrachloroethane	--	mg/kg	0.0053 U	0.66 U	0.051 U	0.61 U	0.0052 U	0.054 U	0.041 U	0.057 U	0.125 U	0.123 U	0.124 U	1.6 U	0.31 U	1.6 U
1,1,2-Trichloro-1,2,2-trifluoroethane	--	mg/kg	0.0053 U	0.66 U	0.051 U	0.61 U	0.0052 U	0.054 U	0.041 U	0.057 U	0.125 U	0.123 U	0.124 U	NA	NA	NA
1,1,2-Trichloroethane	--	mg/kg	0.0053 U	0.66 U	0.051 U	0.61 U	0.0052 U	0.054 U	0.041 U	0.057 U	0.312 U	0.307 U	0.309 U	1.6 U	0.31 U	1.6 U
1,1-Dichloroethane	--	mg/kg	0.0053 U	0.66 U	0.051 U	0.61 U	0.0052 U	0.054 U	0.041 U	0.057 U	0.125 U	0.123 U	0.124 U	1.6 U	0.31 U	1.6 U
1,1-Dichloroethene	--	mg/kg	0.0053 U	0.66 U	0.051 U	0.61 U	0.0052 U	0.054 U	0.041 U	0.057 U	0.125 U	0.123 U	0.124 U	1.6 U	0.31 U	1.6 U
1,2,4-Trichlorobenzene	--	mg/kg	0.0053 U	0.66 U	0.051 U	0.61 U	0.0052 U	0.054 U	0.041 U	0.057 U	0.125 U	0.123 U	0.124 U	1.6 U	0.31 U	1.6 U
1,2-Dibromo-3-Chloropropane	--	mg/kg	0.0053 U	0.66 U	0.051 U	0.61 U	0.0052 U	0.054 U	0.041 U	0.057 U	3.12 U	0.307 U	0.309 U	1.6 U	0.31 U	1.6 U
1,2-Dibromoethane	--	mg/kg	0.0053 U	0.66 U	0.051 U	0.61 U	0.0052 U	0.054 U	0.041 U	0.057 U	0.125 U	0.123 U	0.124 U	NA	NA	NA
1,2-Dichlorobenzene	--	mg/kg	0.0053 U	0.66 U	0.051 U	0.61 U	0.0052 U	0.054 U	0.041 U	0.057 U	0.125 U	0.123 U	0.124 U	1.6 U	0.31 U	1.6 U
1,2-Dichloroethane	--	mg/kg	0.0053 U	0.66 U	0.051 U	0.61 U	0.0052 U	0.054 U	0.041 U	0.057 U	0.125 U	0.123 U	0.124 U	1.6 U	0.31 U	1.6 U
1,2-Dichloropropane	--	mg/kg	0.0053 U	0.66 U	0.051 U	0.61 U	0.0052 U	0.054 U	0.041 U	0.057 U	0.125 U	0.123 U	0.124 U	1.6 U	0.31 U	1.6 U
1,3-Dichlorobenzene	--	mg/kg	0.0053 U	0.66 U	0.051 U	0.61 U	0.0052 U	0.054 U	0.041 U	0.057 U	0.125 U	0.123 U	0.124 U	1.6 U	0.31 U	1.6 U
1,4-Dichlorobenzene	--	mg/kg	0.0053 U	0.66 U	0.051 U	0.61 U	0.0052 U	0.054 U	0.041 U	0.057 U	0.125 U	0.123 U	0.124 U	1.6 U	0.31 U	1.6 U
2-Butanone	--	mg/kg	0.027 U	3.3 U	0.25 U	3.0 U	0.026 U	0.27 U	0.21 U	0.28 U	3.12 U	0.307 U	0.309 U	NA	NA	NA
2-Hexanone	--	mg/kg	0.027 U	3.3 U	0.25 U	3.0 U	0.026 U	0.27 U	0.21 U	0.28 U	3.12 U	0.307 U	0.309 U	7.9U	1.6 U	7.8 U
4-Methyl-2-pentanone	--	mg/kg	0.027 U	3.3 U	0.25 U	3.0 U	0.026 U	0.27 U	0.21 U	0.28 U	3.12 U	0.307 U	0.309 U	7.9U	1.6 U	7.8 U
Acetone	--	mg/kg	0.027 U	3.3 U	0.070 J	3.0 U	0.0044 J	0.27 U	0.039 J	0.11 J	3.12 U	0.307 U	0.309 U	7.9U	1.6 U	7.8 U
Benzene	--	mg/kg	0.0011 J	0.61 J	0.94	2.1	0.00069 J	0.20	0.0067 J	0.20	1.3	0.997	0.603	1.6 U	0.31 U	1.6 U
Bromodichloromethane	--	mg/kg	0.0053 U	0.66 U	0.051 U	0.61 U	0.0052 U	0.054 U	0.041 U	0.057 U	0.125 U	0.123 U	0.124 U	1.6 U	0.31 U	1.6 U
Bromoform	--	mg/kg	0.0053 U	0.66 U	0.051 U	0.61 U	0.0052 U	0.054 U	0.041 U	0.057 U	0.125 U	0.123 U	0.124 U	1.6 U	0.31 U	1.6 U
Bromomethane	--	mg/kg	0.0053 U	0.66 U	0.051 U	0.61 U	0.0052 U	0.054 U	0.041 U	0.057 U	0.125 U	0.123 U	0.124 U	1.6 U	0.31 U	1.6 U
Carbon Disulfide	--	mg/kg	0.0053 U	0.66 U	0.051 U	0.61 U	0.0052 U	0.054 U	0.041 U	0.057 U	0.312 U	0.307 U	0.309 U	1.6 U	0.31 U	1.6 U
Carbon Tetrachloride	--	mg/kg	0.0053 U	0.66 U	0.051 U	0.61 U	0.0052 U	0.054 U	0.041 U	0.057 U	0.125 U	0.123 U	0.124 U	1.6 U	0.31 U	1.6 U
Chlorobenzene	--	mg/kg	0.0053 U	0.66 U	0.051 U	0.61 U	0.0052 U	0.054 U	0.041 U	0.057 U	0.125 U	0.123 U	0.124 U	1.6 U	0.31 U	1.6 U
Chloroethane	--	mg/kg	0.0053 U	0.66 U	0.051 U	0.61 U	0.0052 U	0.054 U	0.041 U	0.057 U	0.312 U	0.307 U	0.309 U	1.6 U	0.31 U	1.6 U
Chloroform	--	mg/kg	0.0053 U	0.66 U	0.051 U	0.61 U	0.0052 U	0.054 U	0.041 U	0.057 U	0.125 U	0.123 U	0.124 U	1.6 U	0.31 U	1.6 U
Chloromethane	--	mg/kg	0.0053 U	0.66 U	0.051 U	0.61 U	0.0052 U	0.054 U	0.041 U	0.057 U	0.125 U	0.123 U	0.124 U	1.6 U	0.31 U	1.6 U
cis-1,2-Dichloroethene	--	mg/kg	0.0053 U	0.66 U	0.051 U	0.61 U	0.0052 U	0.054 U	0.041 U	0.057 U	0.125 U	0.123 U	0.124 U	1.6 U	0.31 U	1.6 U
cis-1,3-Dichloropropene	--	mg/kg	0.0053 U	0.66 U	0.051 U	0.61 U	0.0052 U	0.054 U	0.041 U	0.057 U	0.125 U	0.123 U	0.124 U	1.6 U	0.31 U	1.6 U
Cyclohexane	--	mg/kg	0.0053 U	0.66 U	0.051 U	0.61 U	0.0052 U	0.054 U	0.041 U	0.057 U	0.625 U	0.615 U	0.619 U	NA	NA	NA
Dibromochloromethane	--	mg/kg	0.0053 U	0.66 U	0.051 U	0.61 U	0.0052 U	0.054 U	0.041 U	0.057 U	0.125 U	0.123 U	0.124 U	1.6 U	0.31 U	1.6 U
Dichlorodifluoromethane	--	mg/kg	0.0053 U	0.66 U	0.051 U	0.61 U	0.0052 U	0.054 U	0.041 U	0.057 U	0.125 U	0.123 U	0.124 U	1.6 U	0.31 U	1.6 U
Ethylbenzene	--	mg/kg	0.0013 J	91	9.3	30	0.0026 J	1.4	0.39	7.0	20.4	2.54	0.68	6.7	0.31 U	1.6 U
Isopropylbenzene	--	mg/kg	0.0053 U	9.3	0.26	3.1	0.0052 U	0.21	0.044	0.23	2.45	0.741	0.643	1.6 U	0.31 U	1.6 U
Methyl acetate	--	mg/kg	0.0053 U	0.66 U	0.051 U	0.61 U	0.0052 U	0.054 U	0.041 U	0.057 U	0.625 U	0.615 U	0.619 U	NA	NA	NA
Methyl tert-butyl ether	--	mg/kg	0.0053 U	0.66 U	0.051 U	0.61 U	0.0052 U	0.054 U	0.041 U	0.057 U	0.125 U	0.123 U	0.124 U	3.2	0.63	3.1 U
Methylcyclohexane	--	mg/kg	0.0053 U	2.4	0.051 U	0.61 U	0.0052 U	0.011 J	0.041 U	0.0098 J	0.625 U	0.615 U	0.619 U	NA	NA	NA
Methylene chloride	--	mg/kg	0.013 B	0.66 U	0.11 B	0.61 U	0.013 B	0.11 B	0.090 B	0.13 B	0.625 U	0.615 U	0.619 U	150	0.31 U	1.6 U
Styrene	--	mg/kg	0.0053 U	0.66 U	0.051 U	0.61 U	0.0052 U	0.054 U	0.041 U	0.057 U	0.125 U	0.123 U	0.124 U	1.6 U	0.31 U	1.6 U
Tetrachloroethene	--	mg/kg	0.0053 U	0.66 U	0.051 U	0.61 U	0.0052 U	0.054 U	0.041 U	0.057 U	0.125 U	0.123 U	0.124 U	1.6 U	0.31 U	1.6 U
Toluene	--	mg/kg	0.0043 JB	0.32 J	0.36 B	0.27 J	0.00076 JB	0.020 JB	0.013 JB	0.052 JB	0.931	0.123 U	0.124 U	1.6 U	0.31 U	1.6 U
Total Xylenes	--	mg/kg	0.0011 J	90	3.4	17	0.0022 J	0.72	0.30	1.4	13.9	1.63	0.668	10	0.31 U	1.6 U
trans-1,2-Dichloroethene	--	mg/kg	0.0053 U	0.66 U	0.051 U	0.61 U	0.0052 U	0.054 U	0.041 U	0.057 U	0.125 U	0.123 U	0.124 U	1.6 U	0.31 U	1.6 U
trans-1,3-Dichloropropene	--	mg/kg	0.0053 U	0.66 U	0.051 U	0.61 U	0.0052 U	0.054 U	0.041 U	0.057 U	0.125 U	0.123 U	0.124 U	1.6 U	0.31 U	1.6 U

**Table 3**  
**Summary of Waste Characterization Analysis**

**66-Inch Storm Sewer Replacement Construction Completion Report**  
**NYSEG - Court Street Site - Binghamton, New York**

Location ID: NYSDEC Part			TW-11-1	TW-11-1	TW-11-2	TW-11-2	TW-11-3	TW-11-3	TW-11-4	TW-11-4	S-WC-1	S-WC-2	S-WC-3	S-WC-4	S-WC-5	S-WC-6
Sample Depth(Feet): 371 TCLP			0 - 8	8 - 16	0 - 8	8 - 15	0 - 7.5	7.5 - 16	0 - 7.5	7.5 - 16	--	--	--	--	--	--
Date Collected:	Criteria	Units	03/29/11	03/29/11	03/29/11	03/29/11	03/30/11	03/30/11	03/30/11	03/30/11	12/01/11	12/07/11	12/07/11	12/12/11	12/12/11	12/12/11
Trichloroethene	--	mg/kg	0.0053 U	0.66 U	0.051 U	0.61 U	0.0052 U	0.054 U	0.041 U	0.057 U	0.125 U	0.123 U	0.124 U	1.6 U	0.31 U	1.6 U
Trichlorofluoromethane	--	mg/kg	0.0053 U	0.66 U	0.051 U	0.61 U	0.0052 U	0.054 U	0.041 U	0.057 U	0.125 U	0.123 U	0.124 U	1.6 U	0.31 U	1.6 U
Vinyl chloride	--	mg/kg	0.0053 U	0.66 U	0.051 U	0.61 U	0.0052 U	0.054 U	0.041 U	0.057 U	0.125 U	0.124 U	0.124 U	1.6 U	0.31 U	1.6 U
Total BTEX	--	mg/kg	0.0078 J	180 J	14	49 J	0.0063 J	2.3 J	0.71 J	8.7 J	NA	NA	NA	NA	NA	NA
<b>SVOCs</b>																
2,2'-Oxybis(1-Chloropropane)	--	mg/kg	3.6 U	11 U	3.6 U	10 U	8.7 U	10 U	9.1 U	9.8 U	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	--	mg/kg	3.6 U	11 U	3.6 U	10 U	8.7 U	10 U	9.1 U	9.8 U	1.05 U	5.48 U	5.43 U	0.29 U	0.28 U	0.29 U
2,4,6-Trichlorophenol	--	mg/kg	3.6 U	11 U	3.6 U	10 U	8.7 U	10 U	9.1 U	9.8 U	0.418 U	2.19 U	2.17 U	0.29 U	0.28 U	0.29 U
2,4-Dichlorophenol	--	mg/kg	3.6 U	11 U	3.6 U	10 U	8.7 U	10 U	9.1 U	9.8 U	0.418 U	2.19 U	2.17 U	0.29 U	0.28 U	0.29 U
2,4-Dimethylphenol	--	mg/kg	3.6 U	11 U	3.6 U	10 U	8.7 U	10 U	9.1 U	9.8 U	0.418 U	2.19 U	2.17 U	0.29 U	0.28 U	0.29 U
2,4-Dinitrophenol	--	mg/kg	7.1 U	22 U	6.9 U	20 U	17 U	19 U	18 U	19 U	0.418 U	2.19 U	2.17 U	0.29 U	0.65 U	0.29 U
2,4-Dinitrotoluene	--	mg/kg	3.6 U	11 U	3.6 U	10 U	8.7 U	10 U	9.1 U	9.8 U	0.418 U	2.19 U	2.17 U	0.29 U	0.28 U	0.29 U
2,6-Dinitrotoluene	--	mg/kg	3.6 U	11 U	3.6 U	10 U	8.7 U	10 U	9.1 U	9.8 U	0.418 U	2.19 U	2.17 U	0.29 U	0.28 U	0.29 U
2-Chloronaphthalene	--	mg/kg	3.6 U	11 U	3.6 U	10 U	8.7 U	10 U	9.1 U	9.8 U	0.418 U	2.19 U	2.17 U	0.29 U	0.28 U	0.29 U
2-Chlorophenol	--	mg/kg	3.6 U	11 U	3.6 U	10 U	8.7 U	10 U	9.1 U	9.8 U	0.418 U	2.19 U	2.17 U	0.29 U	0.28 U	0.29 U
2-Methylnaphthalene	--	mg/kg	3.6 U	60	52	84	0.86 J	34	21	33	38.2	3.61	6.06	45	42	0.29 U
2-Methylphenol	--	mg/kg	3.6 U	11 U	3.6 U	10 U	8.7 U	10 U	9.1 U	9.8 U	0.418 U	2.19 U	2.17 U	0.29 U	0.28 U	0.29 U
2-Nitroaniline	--	mg/kg	7.1 U	22 U	6.9 U	20 U	17 U	19 U	18 U	19 U	1.05 U	5.48 U	5.43 U	0.66 U	0.65 U	0.29 U
2-Nitrophenol	--	mg/kg	3.6 U	11 U	3.6 U	10 U	8.7 U	10 U	9.1 U	9.8 U	0.418 U	2.19 U	2.17 U	0.29 U	0.28 U	0.29 U
3,3'-Dichlorobenzidine	--	mg/kg	3.6 U	11 U	3.6 U	10 U	8.7 U	10 U	9.1 U	9.8 U	0.837 U	4.39 U	4.35 U	0.5 U	0.49 U	0.5 U
3-Nitroaniline	--	mg/kg	7.1 U	22 U	6.9 U	20 U	17 U	19 U	18 U	19 U	1.05 U	5.48 U	5.43 U	0.66 U	0.65 U	0.66 U
4,6-Dinitro-2-methylpheno	--	mg/kg	7.1 U	22 U	6.9 U	20 U	17 U	19 U	18 U	19 U	0.418 U	2.19 U	2.17 U	1.2 U	1.2 U	1.2 U
4-Bromophenyl phenyl ether	--	mg/kg	3.6 U	11 U	3.6 U	10 U	8.7 U	10 U	9.1 U	9.8 U	0.418 U	2.19 U	2.17 U	0.42 U	0.41 U	0.41 U
4-Chloro-3-methylpheno	--	mg/kg	3.6 U	11 U	3.6 U	10 U	8.7 U	10 U	9.1 U	9.8 U	0.418 U	2.19 U	2.17 U	0.29 U	0.28 U	0.29 U
4-Chloroaniline	--	mg/kg	3.6 U	11 U	3.6 U	10 U	8.7 U	10 U	9.1 U	9.8 U	0.418 U	2.19 U	2.17 U	0.29 U	0.28 U	0.29 U
4-Chlorophenyl phenyl ether	--	mg/kg	3.6 U	11 U	3.6 U	10 U	8.7 U	10 U	9.1 U	9.8 U	0.418 U	2.19 U	2.17 U	0.29 U	0.28 U	0.29 U
4-Methylphenol	--	mg/kg	7.1 U	22 U	6.9 U	20 U	17 U	19 U	18 U	19 U	0.418 U	2.19 U	2.17 U	0.42 U	0.41 U	0.41 U
4-Nitroaniline	--	mg/kg	7.1 U	22 U	6.9 U	20 U	17 U	19 U	18 U	19 U	1.05 U	5.48 U	5.43 U	0.66 U	0.65 U	0.66 U
4-Nitrophenol	--	mg/kg	7.1 U	22 U	6.9 U	20 U	17 U	19 U	18 U	19 U	0.418 U	2.19 U	2.17 U	1.2 U	1.2 U	1.2 U
Acenaphthene	--	mg/kg	3.6 U	80	28	46	0.84 J	8.3 J	6.2 J	14	71.0	1.86	4.23	35	30	11
Acenaphthylene	--	mg/kg	1.5 J	8.5 J	11	8.9 J	9.4	4.7 J	6.3 J	5.5 J	4.15	0.441 U	0.696	3.6	4.4	2.1
Acetophenone	--	mg/kg	3.6 U	11 U	3.6 U	10 U	8.7 U	10 U	9.1 U	9.8 U	NA	NA	NA	0.29 U	0.28 U	0.29 U
Anthracene	--	mg/kg	0.62 J	25	18	25	2.5 J	4.9 J	4.4 J	7.5 J	18.6	0.803	1.99	11	11	3.8
Atrazine	--	mg/kg	3.6 U	11 U	3.6 U	10 U	8.7 U	10 U	9.1 U	9.8 U	NA	NA	NA	NA	NA	NA
Benzaldehyde	--	mg/kg	3.6 U	11 U	3.6 U	10 U	8.7 U	10 U	9.1 U	9.8 U	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	--	mg/kg	2.8 J	9.7 J	13	15	4.9 J	6.1 J	5.0 J	7.7 J	8.59	0.544	1.34	3.5	3.8	1.4
Benzo(a)pyrene	--	mg/kg	2.0 J	7.4 J	15	17	14	7.9 J	7.7 J	8.5 J	5.87	0.445	1.06	2.3	2.3	0.79
Benzo(b)fluoranthene	--	mg/kg	3.7	5.2 J	12 K	13	12 K	5.6 J	6.3 J	8.8 J	4.21	0.441 U	0.663	2.3	2	0.68
Benzo(ghi)perylene	--	mg/kg	2.3 J	3.3 J	8.5	10	13	5.7 J	6.8 J	7.2 J	2.9	0.441 U	0.631	0.46	0.67	0.29 U
Benzo(k)fluoranthene	--	mg/kg	3.6 U	2.3 J	3.6 U	10 U	8.7 U	3.4 J	9.1 U	9.8 U	2.69	0.441 U	0.437 U	0.71	.53	0.29 U
Biphenyl	--	mg/kg	3.6 U	11	8.6	15	8.7 U	2.6 J	2.2 J	3.8 J	NA	NA	NA	NA	NA	NA
Bis(2-chloroethoxy) methane	--	mg/kg	3.6 U	11 U	3.6 U	10 U	8.7 U	10 U	9.1 U	9.8 U	0.418 U	2.19 U	2.17 U	0.29 U	0.28 U	0.29 U
Bis(2-chloroethyl) ether	--	mg/kg	3.6 U	11 U	3.6 U	10 U	8.7 U	10 U	9.1 U	9.8 U	0.418 U	2.19 U	2.17 U	0.42 U	0.41 U	0.41 U
Bis(2-ethylhexyl) phthalate	--	mg/kg	3.6 U	11 U	3.6 U	10 U	8.7 U	10 U	9.1 U	9.8 U	0.418 U	2.19 U	2.17 U	0.29 U	0.28 U	0.29 U
Butyl benzyl phthalate	--	mg/kg	3.6 U	11 U	3.6 U	10 U	8.7 U	10 U	9.1 U	9.8 U	0.418 U	2.19 U	2.17 U	0.29 U	0.28 U	0.29 U
Caprolactam	--	mg/kg	3.6 U	11 U	3.6 U	10 U	8.7 U	10 U	9.1 U	9.8 U	NA	NA	NA	NA	NA	NA
Carbazole	--	mg/kg	3.6 U	11 U	0.45 J	10 U	8.7 U	10 U	9.1 U	9.8 U	0.418 U	2.19 U	2.17 U	0.62 U	0.61 U	0.62 U
Chrysene	--	mg/kg	3.4 J	8.3 J	11	14	5.3 J	5.8 J	5.4 J	6.9 J	8.09	0.542	1.15	2.8	2.5	0.89
Dibenzo(a,h)anthracene	--	mg/kg	0.63 J	1.0 J	1.9 J	2.1 J	2.6 J	1.2 J	1.2 J	1.4 J	0.782	1.26	1.31	0.29 U	0.28 U	0.29 U
Dibenzofuran	--	mg/kg	3.6 U	9.0 J	2.9 J	3.6 J	8.7 U	0.89 J	0.88 J	1.5 J	7.38	2.19 U	2.17 U	0.29 U	4.8	1.4
Diethyl phthalate	--	mg/kg	3.6 U	11 U	3.6 U	10 U	8.7 U	10 U	9.1 U	9.8 U	0.418 U	2.19 U	2.17 U	0.29 U	0.28 U	0.29 U
Dimethyl phthalate	--	mg/kg	3.6 U	11 U	3.6 U	10 U	8.7 U	10 U	9.1 U	9.8 U	0.418 U	2.19 U	2.17 U	0.29 U	0.28 U	0.29 U
Di-n-butyl phthalate	--	mg/kg	3.6 U	11 U	3.6 U	10 U	8.7 U	10 U	9.1 U	9.8 U	0.418 U	2.19 U	2.17 U	0.29 U	0.28 U	0.29 U
Di-n-octyl phthalate	--	mg/kg	3.6 U	11 U	3.6 U	10 U	8.7 U	10 U	9.1 U	9.8 U	0.418 U	2.19 U	2.17 U	0.29 U	0.28 U	0.29 U
Fluoranthene	--	mg/kg	3.1 J	20	24	27	3.6 J	11	6.4 J	11	17.2	1.13	2.94	7.3	7.5	2.4
Fluorene	--	mg/kg	3.6 U	55	20	23	1.0 J	6.8 J	6.0 J	11	58.9	1.34	2.93	30	26	9.6
Hexachlorobenzene	--	mg/kg	3.6 U	11 U	3.6 U	10 U	8.7 U	10 U	9.1 U	9.8 U	0.418 U	2.19 U	2.17 U	0.29 U	0.28 U	0.29 U

**Table 3**  
**Summary of Waste Characterization Analysis**

**66-Inch Storm Sewer Replacement Construction Completion Report**  
**NYSEG - Court Street Site - Binghamton, New York**

Location ID: Sample Depth(Feet): Date Collected:	NYSEDEC Part 371 TCLP Criteria	Units	TW-11-1 0 - 8 03/29/11	TW-11-1 8 - 16 03/29/11	TW-11-2 0 - 8 03/29/11	TW-11-2 8 - 15 03/29/11	TW-11-3 0 - 7.5 03/30/11	TW-11-3 7.5 - 16 03/30/11	TW-11-4 0 - 7.5 03/30/11	TW-11-4 7.5 - 16 03/30/11	S-WC-1 -- 12/01/11	S-WC-2 -- 12/07/11	S-WC-3 -- 12/07/11	S-WC-4 -- 12/12/11	S-WC-5 -- 12/12/11	S-WC-6 -- 12/12/11
Hexachlorobutadiene	--	mg/kg	3.6 U	11 U	3.6 U	10 U	8.7 U	10 U	9.1 U	9.8 U	0.418 U	2.19 U	2.17 U	0.29 U	0.28 U	0.29 U
Hexachlorocyclopentadiene	--	mg/kg	3.6 U	11 U	3.6 U	10 U	8.7 U	10 U	9.1 U	9.8 U	0.418 U	2.19 U	2.17 U	0.29 U	0.28 U	0.29 U
Hexachloroethane	--	mg/kg	3.6 U	11 U	3.6 U	10 U	8.7 U	10 U	9.1 U	9.8 U	0.418 U	2.19 U	2.17 U	0.29 U	0.28 U	0.29 U
Indeno(1,2,3-cd)pyrene	--	mg/kg	1.8 J	2.5 J	5.9	5.8 J	8.4 J	3.8 J	4.9 J	4.6 J	2.37	1.18	1.36	0.44	0.6	0.29 U
Isophorone	--	mg/kg	3.6 U	11 U	3.6 U	10 U	8.7 U	10 U	9.1 U	9.8 U	0.418 U	2.19 U	2.17 U	0.29 U	0.28 U	0.29 U
Naphthalene	--	mg/kg	3.6 U	91	100	160	1.6 J	44	26	53	72.1	4.08	17.8	53	49	16
Nitrobenzene	--	mg/kg	3.6 U	11 U	3.6 U	10 U	8.7 U	10 U	9.1 U	9.8 U	0.418 U	2.19 U	2.17 U	0.29 U	0.28 U	0.29 U
N-Nitroso-Di-n-propylamine	--	mg/kg	3.6 U	11 U	3.6 U	10 U	8.7 U	10 U	9.1 U	9.8 U	0.418 U	2.19 U	2.17 U	0.29 U	0.28 U	0.29 U
N-nitrosodiphenylamine	--	mg/kg	3.6 U	11 U	3.6 U	10 U	8.7 U	10 U	9.1 U	9.8 U	0.418 U	2.19 U	2.17 U	0.42 U	0.41 U	0.41 U
Pentachlorophenol	--	mg/kg	7.1 U	22 U	6.9 U	20 U	17 U	19 U	18 U	19 U	1.05 U	5.48 U	5.43 U	0.42 U	0.41 U	0.41 U
Phenanthrene	--	mg/kg	1.7 J	120	69	91	1.9 J	19	15	27	97.8	3.28	8.34	66	57	21
Phenol	--	mg/kg	3.6 U	11 U	3.6 U	10 U	8.7 U	10 U	9.1 U	9.8 U	0.418 U	2.19 U	2.17 U	0.29 U	0.28 U	0.29 U
Pyrene	--	mg/kg	4.0	22	37	42	9.6	13	11	18	22.4	1.79	4.39	9.8	11	3.1
Total CPAHs	--	mg/kg	14 J	36 J	59 J	67 J	47 J	34 J	31 J	38 J	NA	NA	NA	NA	NA	NA
Total PAHs	--	mg/kg	28 J	530 J	430 J	590 J	92 J	190 J	140 J	230 J	NA	NA	NA	NA	NA	NA
<b>Inorganics</b>																
Aluminum	--	mg/kg	10,200	11,400	7,510	12,400	8,480	8,050	9,280	10,900	12,500	16,000	13,800	NA	NA	NA
Antimony	--	mg/kg	15.9 U	19.1 U	16.2 U	18.2 U	15.8 U	17.4 U	16.6 U	17.6 U	12.6 U	12.6 U	12.8 U	3.9 U	3.8 U	4.2 U
Arsenic	--	mg/kg	8.50	10.5	9.90	4.70	6.90	6.70	7.30	5.40	11.7	8.75	7.77	6.24	5.85	9.39
Barium	--	mg/kg	85.3	140	63.1	88.2	187	85.7	74.6	83.4	125	113	92.6	NA	NA	NA
Beryllium	--	mg/kg	0.440	0.310	0.350	0.480	0.430	0.410	0.410	0.490	1.26 U	1.26 U	1.28 U	0.62	0.65	0.68
Cadmium	--	mg/kg	0.390	0.0660 J	0.290	0.240	0.630	1.20	0.410	0.370	1.26 U	1.26 U	1.28 U	1.06	0.99	1.04
Calcium	--	mg/kg	11,300 B	762 B	151,000 B	8,230 B	26,200 B	32,000 B	31,300 B	18,600 B	43,200	1,450	1,490	NA	NA	NA
Chromium	--	mg/kg	16.1	17.6	9.70	15.9	12.7	11.7	12.2	12.9	13.5	16.2	14.1	17.6	18.2	18.1
Cobalt	--	mg/kg	8.40	6.10	7.50	7.20	8.10	6.90	7.60	9.20	10.0	9.69	9.44	NA	NA	NA
Copper	--	mg/kg	31.5	22.1	20.9	12.1	26.5	33.2	57.6	25.6	80.9	49.5	36	NA	NA	NA
Cyanide, Reactive	--	mg/kg	10.0 U	1.60 J	10.0 U	NA	10.0 U	10.0 U	10.0 U	10.0 U	NA	NA	NA	NA	NA	NA
Cyanide, Total	--	mg/kg	8.20	1.50 U	1.40	1.10 U	1.00 U	6.00	2.00	1.40	2.51 U	2.66 U	2.64 U	3.6	3	4
Iron	--	mg/kg	23,100 B	27,600 B	13,800 B	17,200 B	18,600	19,400	17,700	19,400	24,800	28,500	28,900	NA	NA	NA
Lead	--	mg/kg	102	25.6	68.8	101	146	244	150	97.5	75.1	36.3	81.7	28.5	16.4	16.2
Magnesium	--	mg/kg	4,180	2,980	5,530	2,990	4,260	5,000	6,550	3,560	3,500	3,710	3,440	NA	NA	NA
Manganese	--	mg/kg	478 B7	210 B7	574 B7	220 B7	413 B	336 B	482 B	320 B	336	213	235	NA	NA	NA
Mercury	--	mg/kg	3.1 H	0.04 H	0.30 H	0.24 H	0.33 H	2.8 H	0.15 H	0.21 H	0.87	0.13 U	0.13 U	0.09 U	0.1 U	0.09 U
Nickel	--	mg/kg	19.8	17.6	15.2	18.4	18.8	22.6	17.3	18.9	51.9	22.5	21.5	27.3	30.2	26
Potassium	--	mg/kg	1,250	974	1,140	1,200	1,170	1,080	1,140	1,110	1,460	1,650	702	NA	NA	NA
Selenium	--	mg/kg	1.10 J	5.10 U	1.70 J	0.980 J	4.20 U	4.70 U	4.40 U	4.70 U	2.54	2.53 U	2.56 U	1.6 U	1.5 U	1.7 U
Silver	--	mg/kg	0.530 U	0.640 U	0.540 U	0.610 U	0.530 U	0.580 U	0.550 U	0.590 U	1.26 U	1.26 U	1.28 U	0.39 U	0.38 U	0.42 U
Sodium	--	mg/kg	172	80.1 J	161	131 J	173	167	117 J	136 J	266	253 U	256 U	NA	NA	NA
Thallium	--	mg/kg	6.30 U	7.60 U	6.50 U	7.30 U	0.330 J	7.00 U	6.70 U	7.00 U	2.51 U	2.53 U	2.56 U	3.5 U	3.4 U	3.8 U
Vanadium	--	mg/kg	16.8	17.1	12.1	16.4	14.5	13.8	14.5	14.5	149	23.4	18.2	35.8	25	24.2
Zinc	--	mg/kg	84.7	49.0	58.7	74.5	143	151	86.7	73.6	115	69.8	71.4	88.3	85.4	78
<b>Miscellaneous</b>																
Flashpoint	--	°F	>176	>176	>176	NA	>176	>176	>176	>176	NA	NA	NA	NA	NA	NA
Free Liquid	--	mL/100g	passed	passed	passed	NA	passed	passed	passed	passed	NA	NA	NA	NA	NA	NA
Gross Calorific Value	--	BTU/lb	358	230	274	276	319	715	876	1,370	200 U	2,500	1,680	500 U	500 U	500 U
pH	--	SU	7.63	6.55	10.4	NA	8.39	7.66	7.90	7.87	NA	NA	NA	NA	NA	NA
Sulfide, Reactive	--	mg/kg	10.0 U	40.1	10.0 U	NA	10.0 U	20.5	20.5	20.5	NA	NA	NA	NA	NA	NA

**Table 3**  
**Summary of Waste Characterization Analysis**

**66-Inch Storm Sewer Replacement Construction Completion Report**  
**NYSEG - Court Street Site - Binghamton, New York**

Location ID: NYSDEC Part	Sample Depth(Feet): 371 TCLP	Date Collected:	Criteria	Units	TW-11-1 0 - 8 03/29/11	TW-11-1 8 - 16 03/29/11	TW-11-2 0 - 8 03/29/11	TW-11-2 8 - 15 03/29/11	TW-11-3 0 - 7.5 03/30/11	TW-11-3 7.5 - 16 03/30/11	TW-11-4 0 - 7.5 03/30/11	TW-11-4 7.5 - 16 03/30/11	S-WC-1 -- 12/01/11	S-WC-2 -- 12/07/11	S-WC-3 -- 12/07/11	S-WC-4 -- 12/12/11	S-WC-5 -- 12/12/11	S-WC-6 -- 12/12/11
<b>VOCs-TCLP</b>																		
1,1-Dichloroethene	0.7	mg/L	0.010 U	0.010 U	0.010 U	NA	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	0.5	mg/L	0.010 U	0.010 U	0.010 U	NA	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	NA	NA	NA	NA	NA	NA
2-Butanone	200	mg/L	0.050 U	0.050 U	0.050 U	NA	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	NA	NA	NA	NA	NA	NA
Benzene	0.5	mg/L	0.010 U	0.025	0.011	NA	0.010 U	0.016	0.010 U	0.011	0.010 U	0.011	NA	NA	NA	NA	NA	NA
Carbon Tetrachloride	0.5	mg/L	0.010 U	0.010 U	0.010 U	NA	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	NA	NA	NA	NA	NA	NA
Chlorobenzene	100	mg/L	0.010 U	0.010 U	0.010 U	NA	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	NA	NA	NA	NA	NA	NA
Chloroform	6.0	mg/L	0.010 U	0.010 U	0.010 U	NA	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	NA	NA	NA	NA	NA	NA
Tetrachloroethene	0.7	mg/L	0.010 U	0.010 U	0.010 U	NA	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	NA	NA	NA	NA	NA	NA
Trichloroethene	0.5	mg/L	0.010 U	0.010 U	0.010 U	NA	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	NA	NA	NA	NA	NA	NA
Vinyl chloride	0.2	mg/L	0.010 U	0.010 U	0.010 U	NA	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	NA	NA	NA	NA	NA	NA
<b>SVOCs-TCLP</b>																		
1,4-Dichlorobenzene	7.5	mg/L	0.010 U	0.010 U	0.010 U	NA	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	400	mg/L	0.005 U	0.005 U	0.005 U	NA	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	2.0	mg/L	0.005 U	0.005 U	0.005 U	NA	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	30.13	mg/L	0.005 U	0.005 U	0.005 U	NA	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA	NA	NA	NA	NA
2-Methylphenol	4,200	mg/L	0.005 U	0.005 U	0.005 U	NA	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA	NA	NA	NA	NA
3-Methylphenol	4,200	mg/L	0.010 U	0.010 U	0.010 U	NA	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	NA	NA	NA	NA	NA	NA
4-Methylphenol	4,200	mg/L	0.010 U	0.010 U	0.010 U	NA	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	30.13	mg/L	0.005 U	0.005 U	0.005 U	NA	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	0.5	mg/L	0.005 U	0.005 U	0.005 U	NA	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA	NA	NA	NA	NA
Hexachloroethane	3.0	mg/L	0.005 U	0.005 U	0.005 U	NA	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA	NA	NA	NA	NA
Nitrobenzene	2.0	mg/L	0.005 U	0.005 U	0.005 U	NA	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA	NA	NA	NA	NA
Pentachlorophenol	100	mg/L	0.010 U	0.010 U	0.010 U	NA	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	NA	NA	NA	NA	NA	NA
Pyridine	35	mg/L	0.025 U	0.025 U	0.025 U	NA	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	NA	NA	NA	NA	NA	NA
<b>Organochlorine Pesticides-TCLP</b>																		
Chlordane (technical)	0.03	mg/L	0.002 U	0.040 U	0.002 U	NA	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	NA	NA	NA	NA	NA	NA
Endrin	0.02	mg/L	0.00020 U	0.004 U	0.00020 U	NA	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	NA	NA	NA	NA	NA	NA
gamma-BHC (Lindane)	0.4	mg/L	0.00020 U	0.004 U	0.00020 U	NA	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	NA	NA	NA	NA	NA	NA
Heptachlor	0.008	mg/L	0.00020 U	0.004 U	0.00020 U	NA	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	NA	NA	NA	NA	NA	NA
Heptachlor epoxide	- -	mg/L	0.00020 U	0.004 U	0.00020 U	NA	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	NA	NA	NA	NA	NA	NA
Methoxychlor	10	mg/L	0.00020 U	0.004 U	0.00020 U	NA	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	NA	NA	NA	NA	NA	NA
Toxaphene	0.5	mg/L	0.002 U	0.040 U	0.002 U	NA	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	NA	NA	NA	NA	NA	NA
<b>Herbicides-TCLP</b>																		
2,4-D	10.0	mg/L	0.002 U	0.002 U	0.002 U	NA	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	NA	NA	NA	NA	NA	NA
Silvex (2,4,5-TP)	1.0	mg/L	0.002 U	0.002 U	0.002 U	NA	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	NA	NA	NA	NA	NA	NA
<b>Inorganics-TCLP</b>																		
Arsenic	5.0	mg/L	0.010 U	0.028	0.015	NA	0.010 U	0.0088 J	0.010 U	0.012	NA	NA	NA	NA	NA	NA	NA	NA
Barium	100	mg/L	0.920 B	1.10 B	0.910 B	NA	0.770 B	0.690 B	0.730 B	0.790 B	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	1.0	mg/L	0.0036	0.000720 J	0.0022	NA	0.0053	0.011	0.004	0.0032	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	5.0	mg/L	0.0055 B	0.011 B	0.0072 B	NA	0.0073 N	0.0049 B	0.0029 JB	0.013 B	NA	NA	NA	NA	NA	NA	NA	NA
Lead	5.0	mg/L	0.070	0.037	0.071	NA	0.061	0.160	0.058	0.160	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	0.2	mg/L	0.00015 J	0.00015 J	0.00020 U	NA	0.00020 U	0.00020 U	0.00020 U	0.00017 J	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	1.0	mg/L	0.015 U	0.015 U	0.015 U	NA	0.015 U	0.015 U	0.015 U	0.015 U	NA	NA	NA	NA	NA	NA	NA	NA
Silver	5.0	mg/L	0.003 U	0.003 U	0.003 U	NA	0.003 U	0.003 U	0.003 U	0.003 U	NA	NA	NA	NA	NA	NA	NA	NA

**Notes:**

1. Samples collected by ARCADIS on the dates indicated
2. Samples analyzed by TestAmerica in Amherst, New York
3. B - Indicates compound was found in the sample blank and within the sample
4. B7 - Indicates the target analyte detected in method blank at or above the method reporting limit. Concentration found in the sample was 10 times above than the concentration found in the sample blank.
5. J - Indicates the result is less than the Reporting Limit but greater than or equal to the Method Detection Limit and the concentration is an approximate value
6. K - Indicates that benzo(b&k)fluoranthene are unresolved due to matrix and the results is reported as benzo(b)fluoranthene
7. U - The compound was analyzed for but not detected. The associated value is the compound quantitation limit
8. H - Indicates the samples was prepared and analyzed beyond the specified holding time

**Table 4**  
**Summary of Treated Water Analytes**

**66-Inch Storm Sewer Replacement Construction Completion Report**  
**NYSEG - Court Street Site - Binghamton, New York**

<b>Batch No.</b>	<b>Priority Pollutant Metals</b>	<b>Oil and Grease</b>	<b>VOCs</b>	<b>SVOCs</b>	<b>PAHs</b>	<b>Total Suspended Solids</b>	<b>Total Cyanide</b>	<b>pH</b>
1-2	X	X	X	X	X	X	X	X
1-3	--	--	X	--	--	--	--	X
2	X	X	X	X	X	X	X	X
2-2	X	X	X	X	X	X	X	X
3	X	X	X	X	X	X	X	X
4	X	X	X	X	X	X	X	X
5	X	X	X	X	X	X	X	X
6	X	X	X	X	X	X	X	X
6-2	--	--	X	--	--	--	--	--
7	X	X	X	X	X	X	X	X
7-2	--	--	X	--	--	--	--	--
8	X	X	X	X	X	X	X	X
9	X	X	X	X	X	X	X	X
10	X	X	X	X	X	X	X	X
10-2	--	--	X	--	--	--	--	--
11	X	X	X	X	X	X	X	X
12	X	X	X	X	X	X	X	X
13	X	X	X	X	X	X	X	X
14	X	X	X	X	X	X	X	X
15	X	X	X	X	X	X	X	X
16	--	--	X	--	--	--	--	--
17	--	--	X	--	--	--	--	--
18	X	X	X	X	X	X	X	X
19	X	X	X	X	X	X	X	X

**Table 5**  
**Summary of Material Quantities Treated at ESMI**

**66-Inch Storm Sewer Replacement Construction Completion Report**  
**NYSEG - Court Street Site - Binghamton, New York**

Manifest Document No.	Date	Transporter Name	Transporter ID No.	Trailer No.	Estimated Quantity (Tons)	Actual Quantity (Tons)	Cumulative Quantity (Tons)
BING COURT-CE-11-0001	11/9/2011	Galusha	5A-735	NY-AW375373	35	35.61	--
BING COURT-CE-11-0002	11/9/2011	Galusha	5A-735	NY-AR77091	35	31.78	67.39
BING COURT-CE-11-0003	11/14/2011	Galusha	5A-735	NY-BA36336	35	41.8	109.19
BING COURT-CE-11-0004	11/28/2011	Cedar Hill	4A-314	NY-AE 65993	35	39.97	149.16
BING COURT-CE-11-0005	11/28/2011	Cedar Hill	4A-314	NY-AE65965	35	38.11	187.27
BING COURT-CE-11-0006	11/28/2011	Cedar Hill	4A-314	NY-1173C5	35	37.39	224.66
BING COURT-CE-11-0007	11/28/2011	Cedar Hill	4A-314	NY-AV96868	35	36.74	261.4
BING COURT-CE-11-0008	11/28/2011	Cedar Hill	4A-314	NY-1030B3	35	36.61	298.01
BING COURT-CE-11-0009	12/2/2011	Longhorn	4A-485	NY-BA36336	35	35.37	333.38
BING COURT-CE-11-0010	12/2/2011	Longhorn	4A-485	NY-AC81317	35	41.17	374.55
BING COURT-CE-11-0011	12/2/2011	Longhorn	4A-485	NY-AC81450	35	39.53	414.08
BING COURT-CE-11-0012	12/2/2011	Longhorn	4A-485	NY-BA36403	35	49.47	463.55
BING COURT-CE-11-0013	12/2/2011	Longhorn	4A-485	NY-BA36416	35	48.89	512.44
BING COURT-CE-11-0014	12/5/2011	Longhorn	4A-485	NY-BA36372	35	41.23	553.67
BING COURT-CE-11-0015	12/5/2011	Longhorn	4A-485	NY-BA36413	35	38.96	592.63
BING COURT-CE-11-0016	12/5/2011	Longhorn	4A-485	NY-AC81335	35	35.97	628.6
BING COURT-CE-11-0017	12/5/2011	Longhorn	4A-485	NY-AV35790	35	41.48	670.08
BING COURT-CE-11-0018	12/5/2011	Longhorn	4A-485	NY-BA36405	35	41.42	711.5
BING COURT-CE-11-0019	12/6/2011	Longhorn	4A-485	NY-AC81450	35	40.47	751.97
BING COURT-CE-11-0020	12/6/2011	Longhorn	4A-485	NY-AC81335	35	39.33	791.3
BING COURT-CE-11-0021	12/6/2011	Longhorn	4A-485	NY-AC81317	35	36.9	828.2
BING COURT-CE-11-0022	12/6/2011	Longhorn	4A-485	NY-BA36403	35	47.11	875.31
BING COURT-CE-11-0023	12/6/2011	Longhorn	4A-485	NY-BA36416	35	42.47	917.78
BING COURT-CE-11-0024	12/7/2011	Longhorn	4A-485	NY-AC81317	35	41.38	959.16
BING COURT-CE-11-0025	12/7/2011	Longhorn	4A-485	NY-AC81335	35	38.4	997.56
BING COURT-CE-11-0026	12/7/2011	Longhorn	4A-485	NY-AC81450	35	39.09	1036.65
BING COURT-CE-11-0027	12/7/2011	Galusha	5A-735	NY-AP7446	35	30.57	1067.22
BING COURT-CE-11-0028	12/7/2011	Galusha	5A-735	NY-AV79951	35	34.14	1101.36
BING COURT-CE-11-0029	12/7/2011	Galusha	5A-735	NY-AV50711	35	37.1	1138.46
BING COURT-CE-11-0030	12/7/2011	Galusha	5A-735	NY-AT26725	35	44.42	1182.88
BING COURT-CE-11-0031	12/7/2011	Galusha	5A-735	NY-AW57373	35	36.1	1218.98
BING COURT-CE-11-0032	12/8/2011	Galusha	5A-735	NY-AV50710	35	41	1259.98
BING COURT-CE-11-0033	12/8/2011	Galusha	5A-735	NY-AM67493	35	45	1304.98
BING COURT-CE-11-0034	12/8/2011	Galusha	5A-735	NY-AV79951	35	34.94	1339.92
BING COURT-CE-11-0035	12/8/2011	JBG	5A-683	NY-AS63350	35	36.63	1376.55
BING COURT-CE-11-0036	12/8/2011	Galusha	5A-735	NY-BC25855	35	36.97	1413.52
BING COURT-CE-11-0037	12/8/2011	Galusha	5A-735	NY-AT26426	35	34.17	1447.69
BING COURT-CE-11-0038	12/8/2011	Galusha	5A-735	NY-AV35629	35	35.03	1482.72
BING COURT-CE-11-0039	12/8/2011	Galusha	5A-735	NY-AV50711	35	34.15	1516.87
BING COURT-CE-11-0040	12/9/2011	Cedar Hill	4A-314	NY-AE65993	35	36.58	1553.45
BING COURT-CE-11-0041	12/9/2011	Cedar Hill	4A-314	NY-1272B1	35	34.77	1588.22
BING COURT-CE-11-0042	12/9/2011	Cedar Hill	4A-314	NY-AV96868	35	39.85	1628.07
BING COURT-CE-11-0043	12/9/2011	Cedar Hill	4A-314	NY-AA10180	35	39.96	1668.03
BING COURT-CE-11-0044	12/9/2011	Northeast Enterprise	4A-548	NY-AR76120	35	34.11	1702.14
BING COURT-CE-11-0045	12/9/2011	Cedar Hill	4A-314	NY-1173C5	35	37.9	1740.04
BING COURT-CE-11-0046	12/9/2011	Cedar Hill	4A-314	NY-1030B3	35	37.5	1777.54
BING COURT-CE-11-0047	12/9/2011	Cedar Hill	4A-314	NY-AR85395	35	38.3	1815.84
BING COURT-CE-11-0048	12/9/2011	Cedar Hill	4A-314	NY-1193B3	35	41.13	1856.97
BING COURT-CE-11-0049	12/13/2011	Longhorn	4A-485	NY-AC81317	35	37.38	1894.35
BING COURT-CE-11-0050	12/13/2011	Galusha	5A-735	NY-AM7943	35	39.91	1934.26
BING COURT-CE-11-0051	12/13/2011	JBG	5A-683	NY-AS63350	35	41.59	1975.85
BING COURT-CE-11-0052	12/13/2011	ANJ	6A-270	NY-AS99586	35	39.22	2015.07
BING COURT-CE-11-0053	12/13/2011	Cason	4A-267	NY-BA50302	35	37.05	2052.12
BING COURT-CE-11-0054	12/13/2011	Longhorn	4A-485	NY-AC81335	35	36.72	2088.84
BING COURT-CE-11-0055	12/13/2011	Cason	4A-267	NY-AW99095	35	38.29	2127.13
BING COURT-CE-11-0056	12/13/2011	Cason	4A-267	NY-1031B3	35	43.6	2170.73
BING COURT-CE-11-0057	12/13/2011	Longhorn	4A-485	NY-AC81450	35	39.28	2210.01
BING COURT-CE-11-0058	12/13/2011	Longhorn	4A-485	NY-AV35790	35	43.03	2253.04



**Table 5**  
**Summary of Material Quantities Treated at ESMI**

**66-Inch Storm Sewer Replacement Construction Completion Report**  
**NYSEG - Court Street Site - Binghamton, New York**

Manifest Document No.	Date	Transporter Name	Transporter ID No.	Trailer No.	Estimated Quantity (Tons)	Actual Quantity (Tons)	Cumulative Quantity (Tons)
BING COURT-CE-11-0059	12/14/2011	ANJ	6A-270	NY-AV79551	35	37.08	2290.12
BING COURT-CE-11-0060	12/14/2011	ANJ	6A-270	NY-AT 76033	35	36.78	2326.9
BING COURT-CE-11-0061	12/14/2011	Cason	4A-267	NY-AV52984	35	36.82	2363.72
BING COURT-CE-11-0062	12/14/2011	Cason	4A-267	NY-AV12287	35	33.43	2397.15
BING COURT-CE-11-0063	12/14/2011	Longhorn	4A-485	NY-AC81317	35	41.01	2438.16
BING COURT-CE-11-0064	12/14/2011	Cason	4A-267	NY-BA50301	35	40.36	2478.52
BING COURT-CE-11-0065	12/14/2011	Cason	4A-267	NY-AT62411	35	37.79	2516.31
BING COURT-CE-11-0066	12/14/2011	Longhorn	4A-485	NY-AC81335	35	40.05	2556.36
BING COURT-CE-11-0067	12/14/2011	Longhorn	4A-485	NY-BA36405	35	40.9	2597.26
BING COURT-CE-11-0068	12/14/2011	Longhorn	4A-485	NY-AC81450	35	35.7	2632.96
BING COURT-CE-11-0069	12/15/2011	Galusha	5A-735	NY-AW6472	35	33.08	2666.04
BING COURT-CE-11-0070	12/15/2011	Cedar Hill	4A-314	NY-AD80326	35	35	2701.04
BING COURT-CE-11-0071	12/15/2011	Cedar Hill	4A-314	NY-AV96868	35	38.07	2739.11
BING COURT-CE-11-0072	12/15/2011	Northeast Enterprise	4A-548	NY-AR76120	35	33.45	2772.56
BING COURT-CE-11-0073	12/15/2011	Cedar Hill	4A-314	NY AR85395	35	37.1	2809.66
BING COURT-CE-11-0074	12/15/2011	Galusha	5A-735	NY AT26426	35	32.61	2842.27
BING COURT-CE-11-0075	12/15/2011	Galusha	5A-735	NY AV50711	35	34.25	2876.52
BING COURT-CE-11-0076	12/16/2011	Galusha	5A-735	NY AT26426	35	33.85	2910.37
BING COURT-CE-11-0077	12/16/2011	JBG	5A-683	NY AS63350	35	40.16	2950.53
BING COURT-CE-11-0078	12/16/2011	Galusha	5A-735	NY AV35629	35	34.96	2985.49
BING COURT-CE-11-0079	12/19/2011	JBG	5A-683	NY BA80243	35	33.87	3019.36
BING COURT-CE-11-0080	12/19/2011	Cason	4A-267	NY BA50302	35	36.69	3056.05
BING COURT-CE-11-0081	12/19/2011	ANJ	6A-270	NY AV79957	35	34.67	3090.72
BING COURT-CE-11-0082	12/19/2011	Galusha	5A-735	NY AV50711	35	36.96	3127.68
BING COURT-CE-11-0083	12/19/2011	Galusha	5A-735	NY AT26426	35	33.53	3161.21
BING COURT-CE-11-0084	12/20/2011	Longhorn	4A-485	NY-AC81335	35	39.77	3200.98
BING COURT-CE-11-0085	12/20/2011	Cason	4A-267	NY-BA50301	35	32.46	3233.44
BING COURT-CE-11-0086	12/20/2011	Longhorn	4A-485	NY-AC81450	35	37.48	3270.92
BING COURT-CE-11-0087	12/21/2011	Cason	4A-267	NY-BA50302	35	38.77	3309.69
BING COURT-CE-11-0088	12/22/2011	Galusha	5A-735	NY-BC25806	35	26.71	3336.4
BING COURT-CE-11-0089	1/10/2012	JBG	5A-683	NY-BA80243	35	45.16	3381.56
BING COURT-CE-11-0090	2/8/2012	Galusha	5A-735	NY-BC25805	35	38.16	3419.72
BING COURT-CE-11-0091	2/8/2012	Galusha	5A-735	NY-AU50711	35	37.61	3457.33
BING COURT-CE-11-0092	2/8/2012	Galusha	5A-735	NY-AT26275	35	40.62	3497.95
BING COURT-CE-11-0093	2/9/2012	Galusha	5A-735	NY-AT26275	35	40.15	3538.1
BING COURT-CE-11-0094	2/9/2012	Galusha	5A-735	NY-AV35629	35	34.83	3572.93
BING COURT-CE-11-0095	2/10/2012	Galusha	5A-735	NY-AT26275	35	38.73	3611.66
BING COURT-CE-11-0096	2/10/2012	Galusha	5A-735	NY-AU50711	35	32.58	3644.24
BING COURT-CE-11-0097	2/13/2012	Galusha	5A-735	NY-AR77091	35	31.37	3675.61
BING COURT-CE-11-0098	2/15/2012	Galusha	5A-735	NY-AT26275	35	38.84	3714.45
BING COURT-CE-11-0099	2/16/2012	JBG	5A-683	NY-AS63350	35	39.79	3754.24
BING COURT-CE-11-0100	2/16/2012	Galusha	5A-735	NY-BC25805	35	39.4	3793.64
BING COURT-CE-11-0101	2/16/2012	Galusha	5A-735	NY-AT26275	35	33.47	3827.11
BING COURT-CE-11-0102	2/16/2012	Galusha	5A-735	NY-AP7446	35	35.7	3862.81
BING COURT-CE-11-0103	2/17/2012	Galusha	5A-735	NY-AU50710	35	41.87	3904.68
BING COURT-CE-11-0104	2/17/2012	JBG	5A-683	NY-AS63350	35	39.86	3944.54
BING COURT-CE-11-0105	2/17/2012	Galusha	5A-735	NY-AW57373	35	33.99	3978.53
BING COURT-CE-11-0106	2/17/2012	Galusha	5A-735	NY-AV35629	35	37.25	4015.78
BING COURT-CE-11-0107	2/17/2012	Galusha	5A-735	NY-AT26275	35	38.02	4053.8
BING COURT-CE-11-0108	2/17/2012	Galusha	5A-735	NY-AU50711	35	38.87	4092.67
BING COURT-CE-11-0109	2/20/2012	JBG	5A-683	NY-AS63350	35	39.04	4131.71
BING COURT-CE-11-0110	2/20/2012	Galusha	5A-735	NY-AU50711	35	33.95	4165.66
BING COURT-CE-11-0111	2/20/2012	Galusha	5A-735	NY-AT26426	35	37.94	4203.6
BING COURT-CE-11-0112	2/20/2012	Galusha	5A-735	NY-AR77091	35	34.38	4237.98
BING COURT-CE-11-0113	2/20/2012	Galusha	5A-735	NY-AV35629	35	40.9	4278.88
BING COURT-CE-11-0114	2/20/2012	Galusha	5A-735	NY-AU50710	35	31.01	4309.89
BING COURT-CE-11-0115	2/20/2012	Galusha	5A-735	NY-AP37446	35	25.29	4335.18
BING COURT-CE-11-0116	2/20/2012	Galusha	5A-735	NY-AW64872	35	25.62	4360.8

**Table 5**  
**Summary of Material Quantities Treated at ESMI**

**66-Inch Storm Sewer Replacement Construction Completion Report**  
**NYSEG - Court Street Site - Binghamton, New York**

Manifest Document No.	Date	Transporter Name	Transporter ID No.	Trailer No.	Estimated Quantity (Tons)	Actual Quantity (Tons)	Cumulative Quantity (Tons)
BING COURT-CE-11-0117	2/21/2012	JBG	5A-683	NY-AS63350	35	38.64	4399.44
BING COURT-CE-11-0118	2/21/2012	Galusha	5A-735	NY-AU50710	35	33.97	4433.41
BING COURT-CE-11-0119	2/21/2012	Galusha	5A-735	NY-AT26426	35	33.42	4466.83
BING COURT-CE-11-0120	2/21/2012	Galusha	5A-735	NY-AP37446	35	30.97	4497.8
BING COURT-CE-11-0121	2/22/2012	JBG	5A-683	NY-AS63350	35	40.68	4538.48
BING COURT-CE-11-0122	2/22/2012	Galusha	5A-735	NY-AU50711	35	36.31	4574.79
BING COURT-CE-11-0123	2/22/2012	Galusha	5A-735	NY-AP37446	35	35.32	4610.11
BING COURT-CE-11-0124	2/22/2012	Galusha	5A-735	NY-AT26426	35	32.65	4642.76
BING COURT-CE -11-0125	3/28/2012	Galusha	5A-735	NY-AT26275	35	41.08	4683.84
						Total:	4683.84

**Table 6**  
**Summary of Material Quantities Disposed at Broome County Landfill**

**66-Inch Storm Sewer Replacement Construction Completion Report**  
**NYSEG - Court Street Site - Binghamton, New York**

Manifest Document No.	Date	Transporter Name	Transporter ID No.	Trailer No.	Type of Material	Estimated (tons)	Actual Quantity (Soil)	Cumulative Quantity (Soil)	Actual Quantity (C+D)	Cumulative Quantity (C+D)
BING COURT-RW-11-0001	11/10/2011	Longhorn	4A-485	NY-AC81317	Soil	35	37.95	--	--	--
BING COURT-RW-11-0002	11/10/2011	Longhorn	4A-485	NY-AC81317	Soil	35	40.14	78.09	--	--
BING COURT-RW-11-0003	11/10/2011	Longhorn	4A-485	NY-AC81317	Soil	35	36.93	115.02	--	--
BING COURT-RW-11-0004	11/14/2011	Longhorn	4A-485	NY-AC81317	Soil	35	38.06	153.08	--	--
BING COURT-RW-11-0005	11/14/2011	Longhorn	4A-485	NY-AC81450	Soil	35	39.07	192.15	--	--
BING COURT-RW-11-0006	11/14/2011	Longhorn	4A-485	NY-AC81317	Soil	35	41.87	234.02	--	--
BING COURT-RW-11-0007	11/14/2011	Longhorn	4A-485	NY-AC81450	Soil	35	40.23	274.25	--	--
BING COURT-RW-11-0008	11/14/2011	Longhorn	4A-485	NY-AC81317	Soil	35	40.25	314.5	--	--
BING COURT-RW-11-0009	11/14/2011	Longhorn	4A-485	NY-AC81450	Soil	35	40.12	354.62	--	--
BING COURT-RW-11-0010	11/14/2011	Longhorn	4A-485	NY-AC81317	Soil	35	39.7	394.32	--	--
BING COURT-RW-11-0011	11/15/2011	Longhorn	4A-485	NY-AC81317	Soil	35	39.42	433.74	--	--
BING COURT-RW-11-0012	11/15/2011	Longhorn	4A-485	Ny-AC81317	Soil	35	37.05	470.79	--	--
BING COURT-RW-11-0013	11/15/2011	Longhorn	4A-485	NY-AC81317	Soil	35	41.71	512.5	--	--
BING COURT-RW-11-0014	11/17/2011	Galusha	5A-735	NY-BC2506	C&D	35	--	512.5	23.59	23.59
BING COURT-RW-11-0015	11/17/2011	Galusha	5A-735	NY-BC2506	C&D	35	--	512.5	24.31	47.9
BING COURT-RW-11-0016	11/17/2011	Galusha	5A-735	NY-BC2506	C&D	35	--	512.5	26.22	74.12
BING COURT-RW-11-0017	11/29/2011	Galusha	5A-735	NY-BC25806	C&D	35	--	512.5	24.3	98.42
BING COURT-RW-11-0018	11/29/2011	Galusha	5A-735	NY-BC25806	C&D	35	--	512.5	25.21	123.63
BING COURT-RW-11-0019	11/29/2011	Galusha	5A-735	NY-BC25806	C&D	35	--	512.5	22.47	146.1
BING COURT-RW-11-0020	11/29/2011	Galusha	5A-735	NY-BC25806	C&D	35	--	512.5	14.82	160.92
BING COURT-RW-11-0021	12/15/2011	Galusha	5A-735	NY-AT26426	Soil	35	31.72	544.22	--	160.92
BING COURT-RW-11-0022	12/15/2011	Galusha	5A-735	NY-AV50711	Soil	35	27.75	571.97	--	160.92
BING COURT-RW-11-0023	12/16/2011	Galusha	5A-735	NY-AV35639	Soil	35	35.39	607.36	--	160.92
BING COURT-RW-11-0024	12/19/2011	ANJ	6A-270	NY-AV79957	Soil	35	30.84	638.2	--	160.92
BING COURT-RW-11-0025	12/19/2011	Galusha	5A-735	NY-AT26426	Soil	35	37.88	676.08	--	160.92
BING COURT-RW-11-0026	12/19/2011	Galusha	5A-735	NY-AV50711	Soil	35	30.71	706.79	--	160.92
BING COURT-RW-11-0027	12/21/2011	Galusha	5A-735	NY-AT26426	Soil	35	33.52	740.31	--	160.92
BING COURT-RW-11-0028	12/21/2011	Galusha	5A-735	NY-BC25806	C&D	35	--	740.31	25.06	185.98
BING COURT-RW-11-0029	12/21/2011	Galusha	5A-735	NY-BC25806	C&D	35	--	740.31	24.07	210.05
BING COURT-RW-11-0030	12/21/2011	Galusha	5A-735	NY-BC25806	Soil	35	26.2	766.51	--	210.05
BING COURT-RW-11-0031	12/21/2011	Galusha	5A-735	NY-BC25806	Soil	35	26.2	792.71	--	210.05
BING COURT-RW-11-0032	12/21/2011	Galusha	5A-735	NY-BC25806	Soil	35	26.05	818.76	--	210.05
BING COURT-RW-11-0033	12/22/2011	Galusha	5A-735	NY-BC25806	Soil	35	21.43	840.19	--	210.05
BING COURT-RW-11-0034	1/26/2012	Galusha	5A-735	NY-BC25806	C&D	35	--	840.19	26.06	236.11
BING COURT-RW-11-0035	1/26/2012	Galusha	5A-735	NY-BC25806	C&D	35	--	840.19	26.2	262.31
BING COURT-RW-11-0036	1/26/2012	Galusha	5A-735	NY-BC25806	C&D	35	--	840.19	27.28	289.59
BING COURT-RW-11-0037	2/8/2012	Galusha	5A-735	NY-BC25805	Soil	35	34.44	874.63	--	289.59
BING COURT-RW-11-0038	2/8/2012	Galusha	5A-735	NY-BC25806	C&D	35	--	874.63	26.14	315.73
BING COURT-RW-11-0039	2/8/2012	Galusha	5A-735	NY-AT26275	Soil	35	--	874.63	--	315.73
BING COURT-RW-11-0040	2/8/2012	Galusha	5A-735	NY-AU50711	Soil	35	33	907.63	--	315.73
BING COURT-RW-11-0041	2/8/2012	Galusha	5A-735	NY-BC25806	C&D	35	--	907.63	26.41	342.14
BING COURT-RW-11-0042	2/8/2012	Galusha	5A-735	NY-AT26275	Soil	35	--	907.63	--	342.14
BING COURT-RW-11-0043	2/8/2012	Galusha	5A-735	NY-BC25805	Soil	35	27.31	934.94	--	342.14
BING COURT-RW-11-0044	2/9/2012	Galusha	5A-735	NY-AT26275	Soil	35	40	974.94	--	342.14
BING COURT-RW-11-0045	2/9/2012	Galusha	5A-735	NY-BC25806	Soil	35	24.07	999.01	--	342.14
BING COURT-RW-11-0046	2/9/2012	Galusha	5A-735	NY-AT26275	Soil	35	35.79	1034.8	--	342.14
BING COURT-RW-11-0047	2/9/2012	Galusha	5A-735	NY-BC25806	Soil	35	24.65	1059.45	--	342.14
BING COURT-RW-11-0048	2/9/2012	Galusha	5A-735	NY-AT26275	Soil	35	40.46	1099.91	--	342.14
BING COURT-RW-11-0049	2/9/2012	Galusha	5A-735	NY-AV35639	Soil	35	31.8	1131.71	--	342.14
BING COURT-RW-11-0050	2/10/2012	Galusha	5A-735	NY-AT26275	Soil	35	36.18	1167.89	--	342.14
BING COURT-RW-11-0051	2/10/2012	Galusha	5A-735	NY-AU50711	Soil	35	30.92	1198.81	--	342.14
BING COURT-RW-11-0052	2/13/2012	Galusha	5A-735	NY-AR77091	Soil	35	31.78	1230.59	--	342.14
BING COURT-RW-11-0053	2/15/2012	Galusha	5A-735	NY-AT26275	Soil	35	38.42	1269.01	--	342.14
BING COURT-RW-11-0054	2/15/2012	Galusha	5A-735	NY-AT26275	Soil	35	43.16	1312.17	--	342.14
BING COURT-RW-11-0055	2/16/2012	Galusha	5A-735	NY-BC25805	Soil	35	34.27	1346.44	--	342.14
BING COURT-RW-11-0056	2/16/2012	Galusha	5A-735	NY-BC25805	Soil	35	33.08	1379.52	--	342.14

**Table 6**  
**Summary of Material Quantities Disposed at Broome County Landfill**

**66-Inch Storm Sewer Replacement Construction Completion Report**  
**NYSEG - Court Street Site - Binghamton, New York**

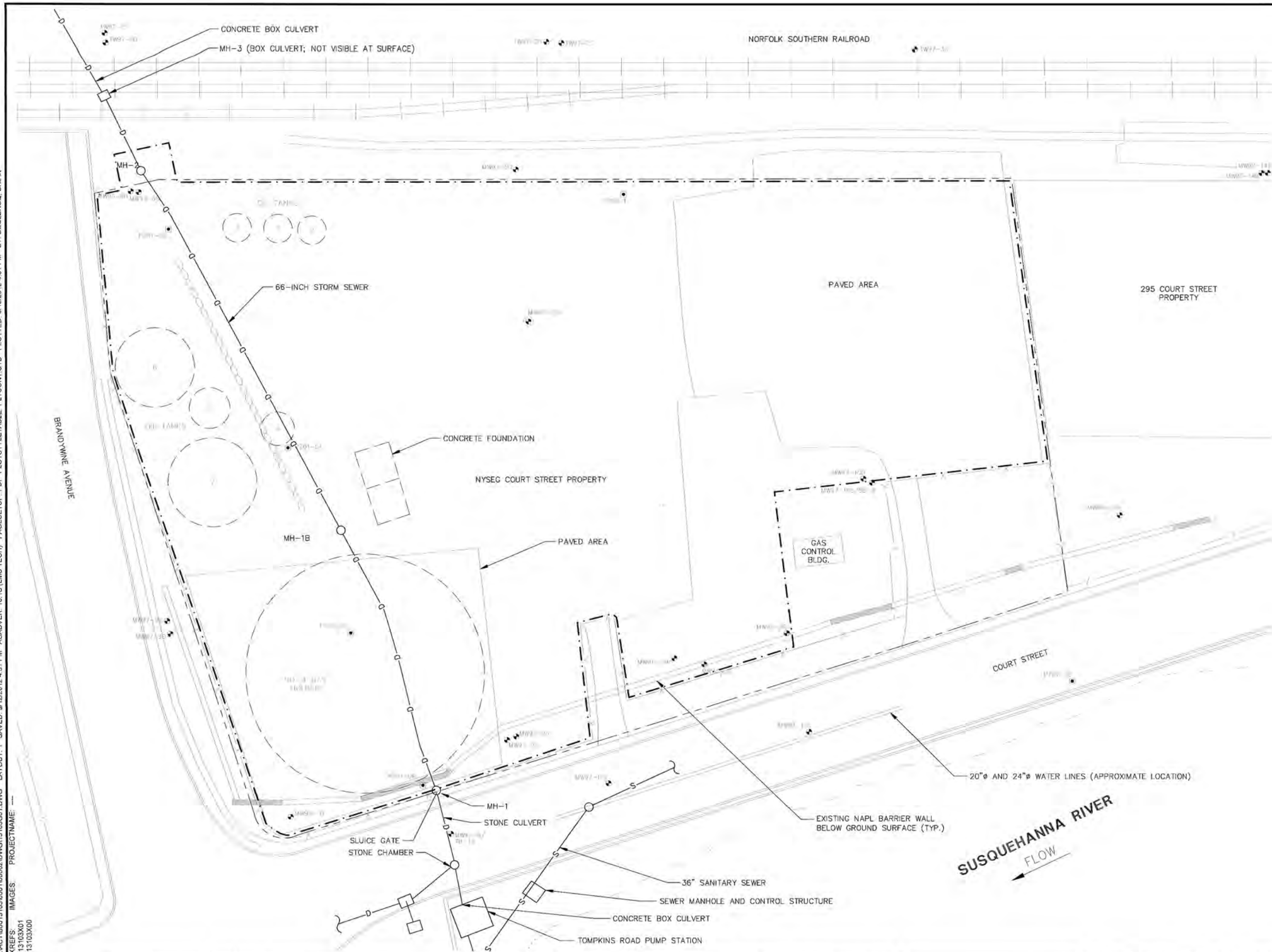
Manifest Document No.	Date	Transporter Name	Transporter ID No.	Trailer No.	Type of Material	Estimated (tons)	Actual Quantity (Soil)	Cumulative Quantity (Soil)	Actual Quantity (C+D)	Cumulative Quantity (C+D)
BING COURT-RW-11-0057	2/16/2012	Galusha	5A-735	NY-BC25805	Soil	35	35.84	1415.36	--	342.14
BING COURT-RW-11-0058	2/17/2012	Galusha	5A-735	NY-AT26275	Soil	35	38.26	1453.62	--	342.14
BING COURT-RW-11-0059	2/17/2012	Galusha	5A-735	NY-AU50711	Soil	35	33.22	1486.84	--	342.14
BING COURT-RW-11-0060	2/17/2012	Galusha	5A-735	NY-AV35639	Soil	35	37.88	1524.72	--	342.14
BING COURT-RW-11-0061	2/17/2012	Galusha	5A-735	NY-AT26275	Soil	35	36.82	1561.54	--	342.14
BING COURT-RW-11-0062	2/17/2012	Galusha	5A-735	NY-AU50711	Soil	35	32.74	1594.28	--	342.14
BING COURT-RW-11-0063	2/22/2012	Galusha	5A-735	NY-AP37446	Soil	35	33.47	1627.75	--	342.14
BING COURT-RW-11-0064	2/22/2012	Galusha	5A-735	NY-AT26426	Soil	35	33.02	1660.77	--	342.14
BING COURT-RW-11-0065	2/23/2012	Galusha	5A-735	NY-BC25806	C&D	35	--	1660.77	15.39	357.53
BING COURT-RW-11-0066	2/23/2012	Galusha	5A-735	NY-BC25806	C&D	35	--	1660.77	18.53	376.06
BING COURT-RW-11-0067	2/23/2012	Galusha	5A-735	NY-BC25806	C&D	35	--	1660.77	20.21	396.27
BING COURT-RW-11-0068	2/24/2012	Galusha	5A-735	NY-BC25806	C&D	35	--	1660.77	19.19	415.46
BING COURT-RW-11-0069	2/24/2012	Galusha	5A-735	NY-BC25806	C&D	35	--	1660.77	19.29	434.75
BING COURT-RW-11-0070	2/24/2012	Galusha	5A-735	NY-BC25806	C&D	35	--	1660.77	18.87	453.62
BING COURT-RW-11-0071	2/24/2012	Galusha	5A-735	NY-BC25806	C&D	35	--	1660.77	27.89	481.51
<b>Totals =</b>								<b>1739.96</b>	<b>Totals =</b>	<b>481.51</b>



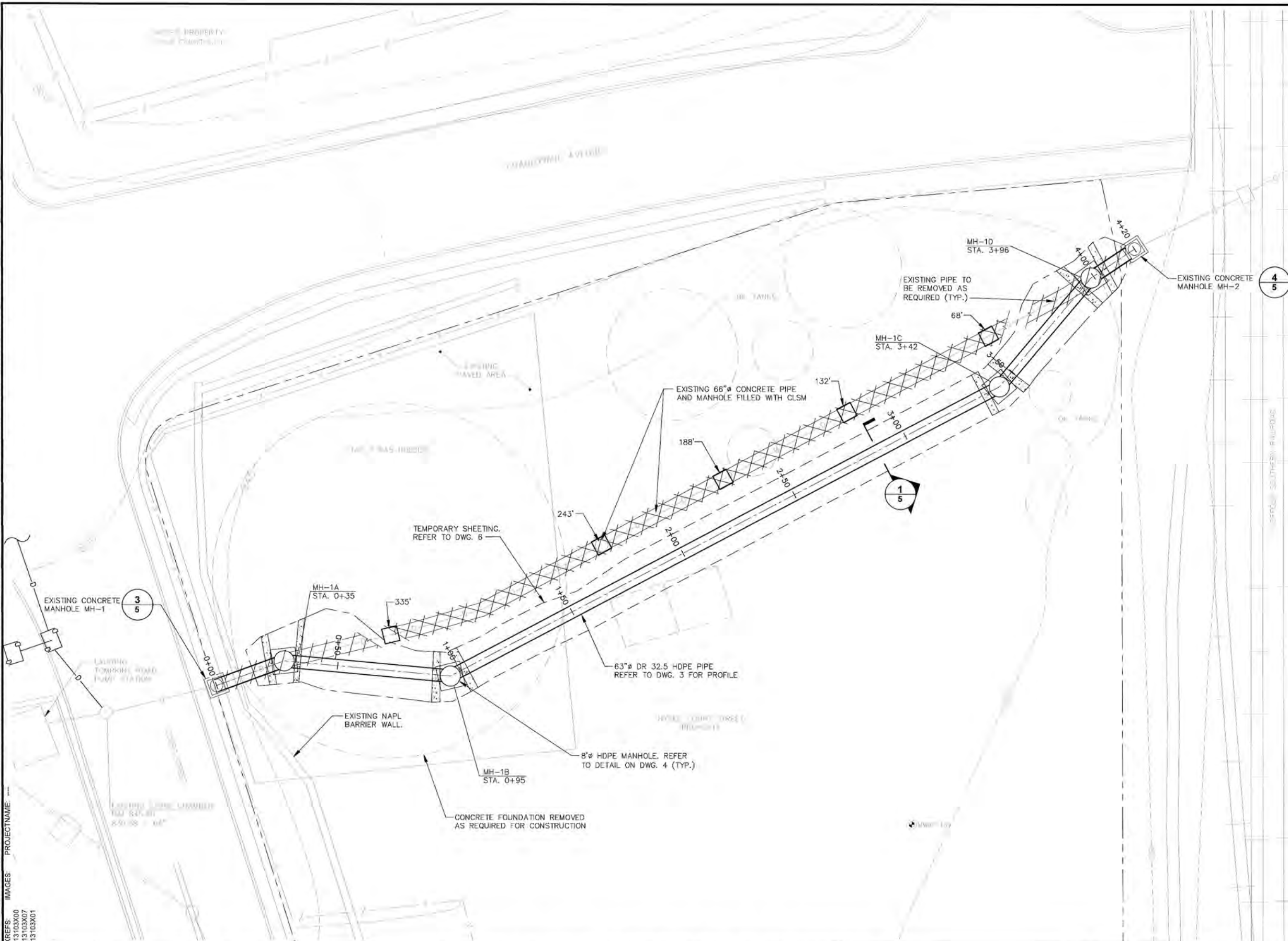
## **Appendix A**

Record Drawings

CITY: SYRACUSE, NY DIV/GROUP: 141/ENV DB: G. STEINBERGER R. BASSETT LD: G. STEINBERGER PIC: K. WHITE PM: M. CARRILLO-SHERIDAN TM: D. CORNELL LYN ON: OFF-REF  
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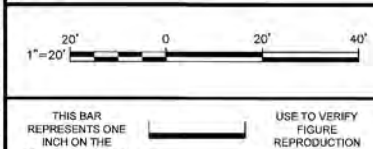
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- LEGEND:**
- LIMITS OF TEMPORARY SHEETING/ IMPORTED FILL (PHASE I)
  - LIMITS OF TEMPORARY SHEETING/ IMPORTED FILL (PHASE II)
  - I HP10X54
  - WOOD LAGGING
  - PRE-EXISTING RCP STORM SEWER ACCESS POINT FOR CLSM BACKFILL (DISTANCES RELATIVE TO MANHOLE MH-2)
  - CONCRETE COLLAR
  - REMOVED PORTIONS OF PRE-EXISTING RCP
  - ABANDONED SECTION OF RCP FILLED WITH CLSM

- NOTES:**
- SHEET PILING CONSISTED OF GRADE 50, AZ-48 STEEL SHEET PILING, INSTALLED TO THE DEPTHS AND LIMITS AS INDICATED ON THE CONTRACT DOCUMENTS.
  - ALL SITE FEATURES AND LOCATIONS ARE APPROXIMATE.
  - LOCATIONS, SIZES, DEPTHS, AND MATERIALS ASSOCIATED WITH SUBSURFACE PIPING OBTAINED FROM NYSEG REPORT ENTITLED "INTERIM REMEDIAL MEASURES FINAL ENGINEERING REPORT" (JULY 2002).

MANHOLE AS-BUILT LOCATIONS		
ID	NORTHING	EASTING
MH-1A	766828.49	1006392.54
MH-1B	766894.42	1006398.59
MH-1C	767111.58	1006284.07
MH-1D	767148.27	1006240.45



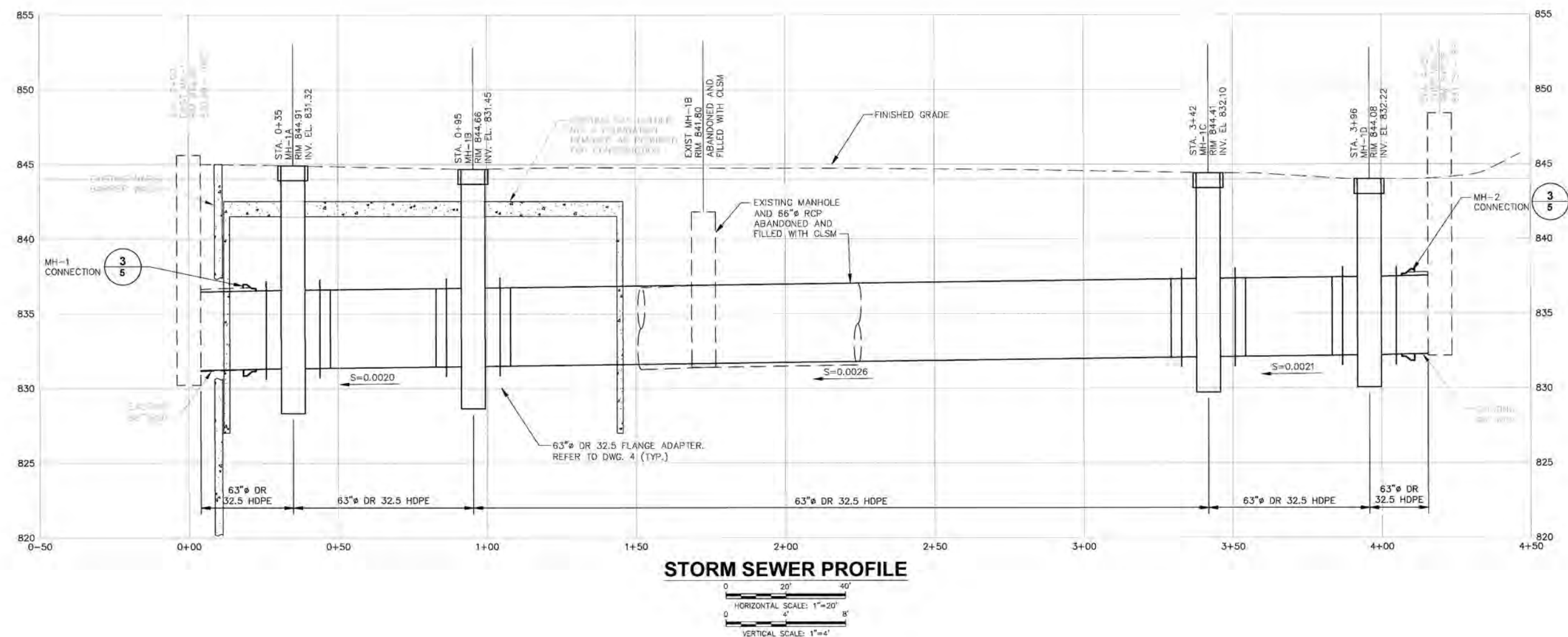
No.	Date	Revisions	By	Ckd




Professional Engineer's Name  
**MARK O. GRAVELDING**  
Professional Engineer's No.  
069985-1  
State  
NY  
Date Signed  
7/12/12  
Project Mgr.  
JDB  
Designed by  
BAF  
Drawn by  
WKL  
Checked by  
CJL



NYSEG • COURT STREET • BINGHAMTON, NEW YORK  
66-INCH STORM SEWER REPLACEMENT  
**STORM SEWER PLAN**  
GENERAL

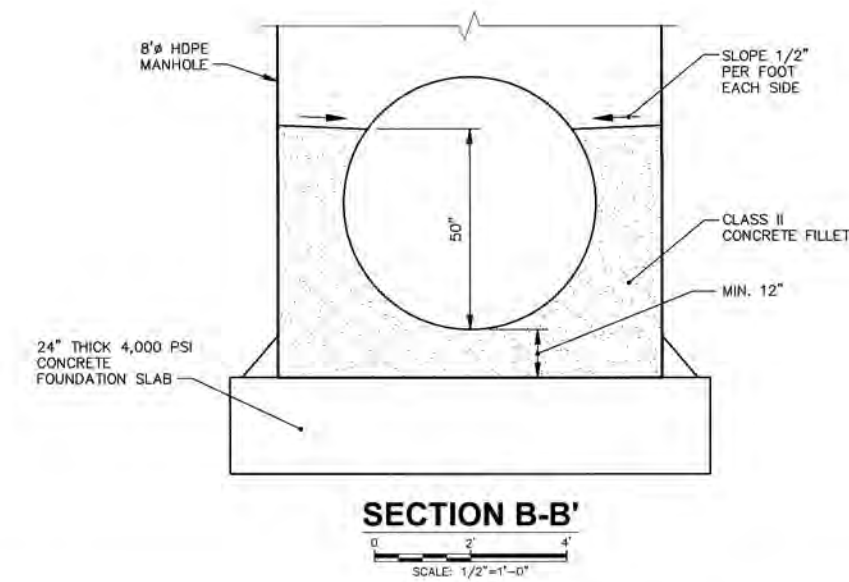
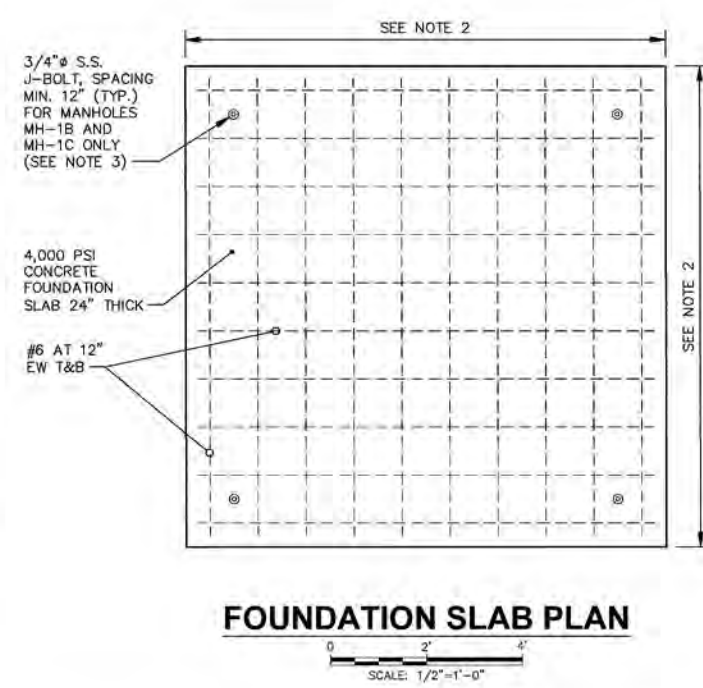
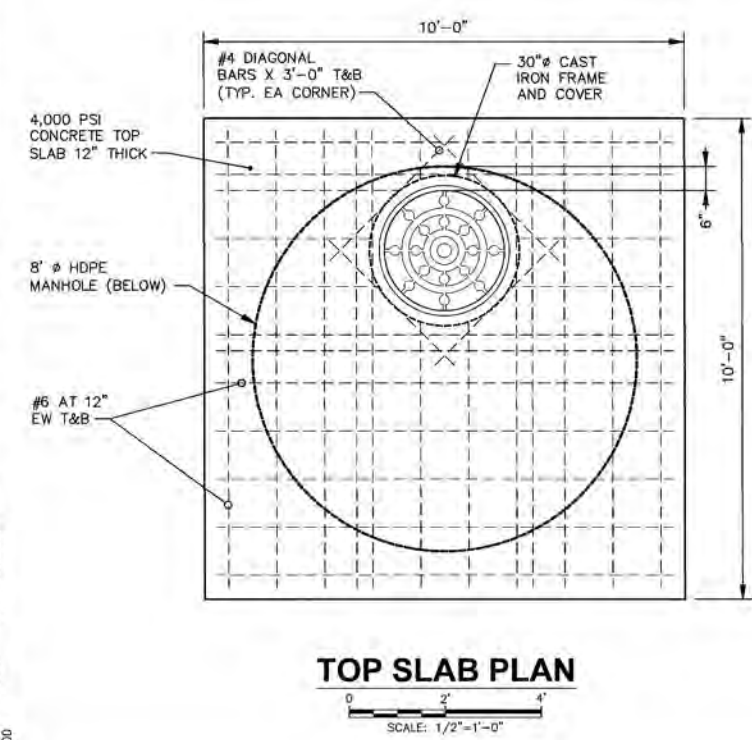
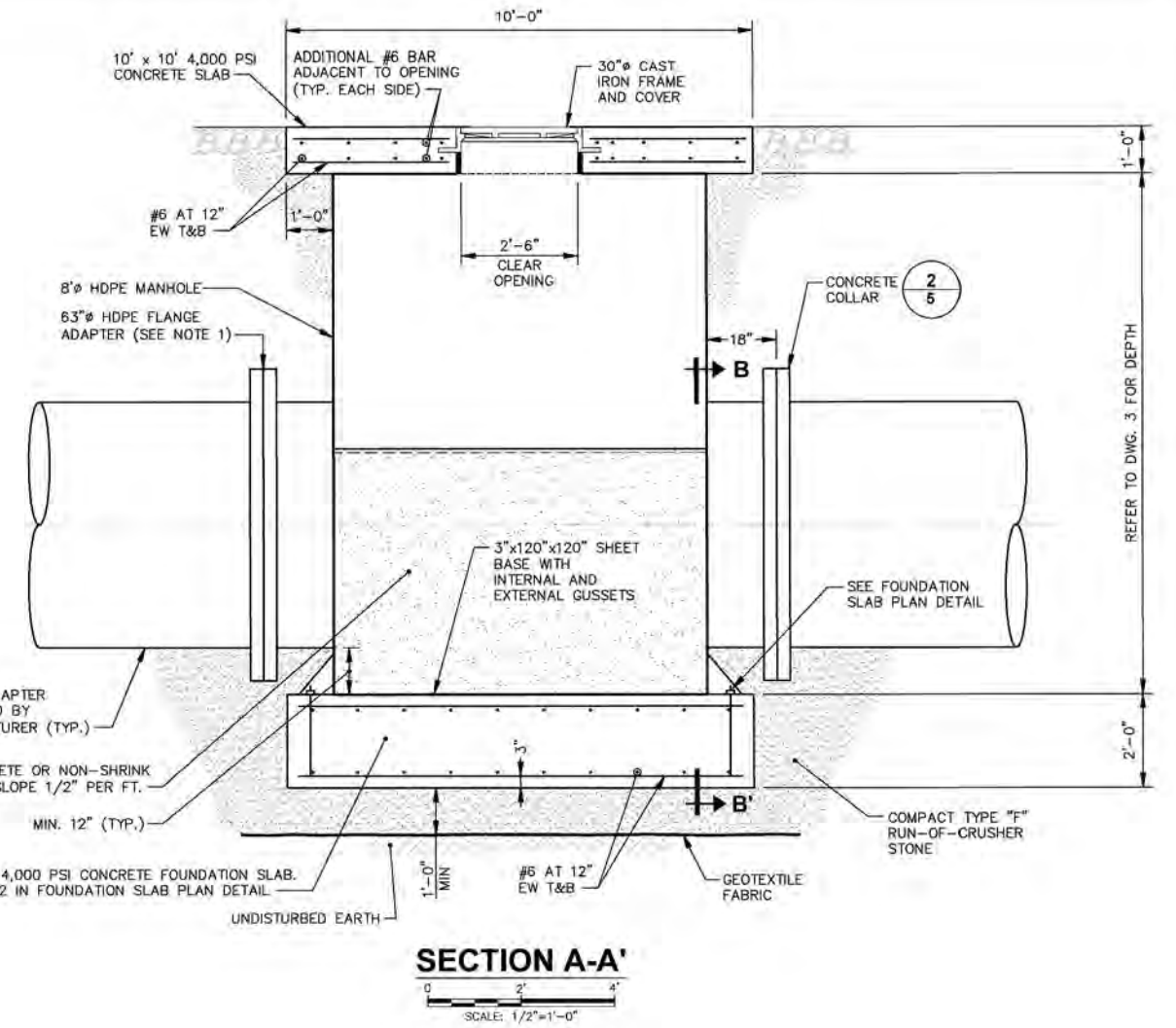
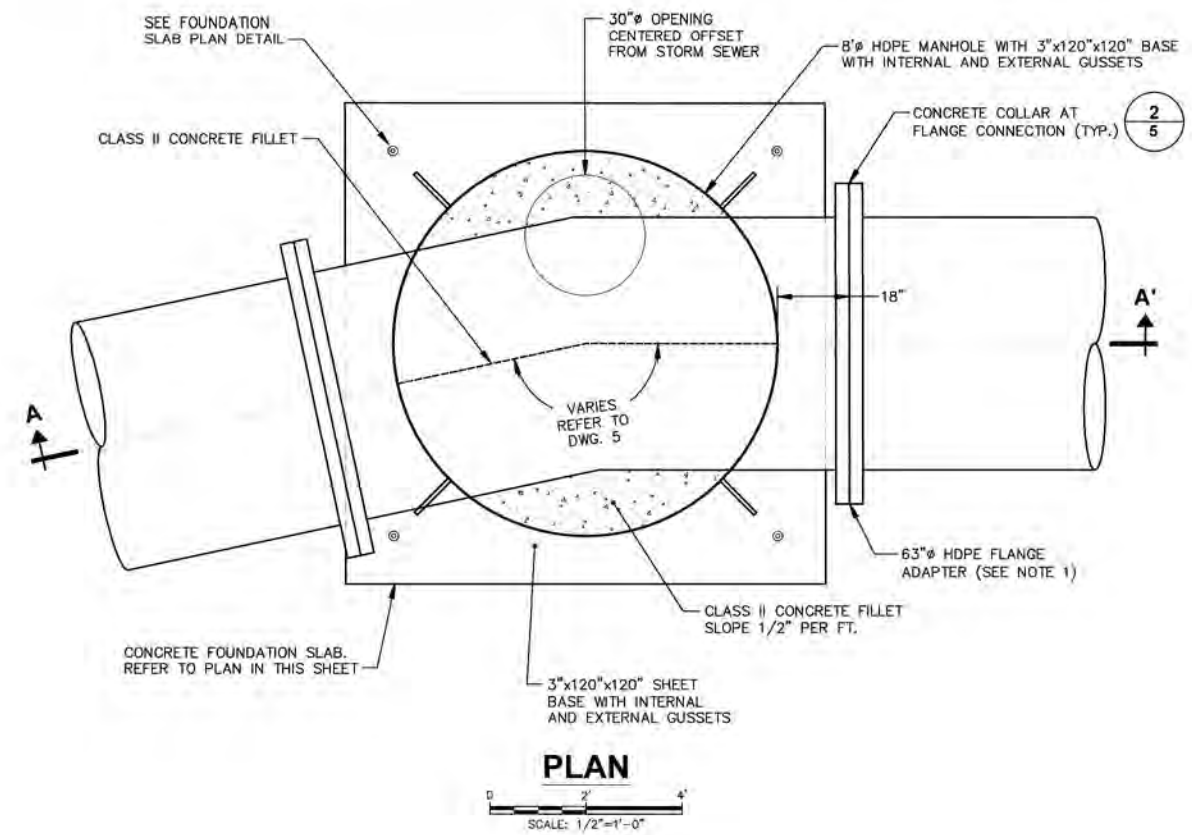
ARCADIS Project No.  
B0013103.0001.00002  
Date  
SEPTEMBER 2012  
ARCADIS  
6723 TOWPATH ROAD  
PO BOX 66  
SYRACUSE, NY 13214  
TEL: 315.446.9120



SCALE AS INDICATED		Professional Engineer's Name <b>MARK O. GRAVELDING</b>						NYSEG • COURT STREET • BINGHAMTON, NEW YORK 66-INCH STORM SEWER REPLACEMENT		ARCADIS Project No. B0013103.0001.00002	
		Professional Engineer's No. 069985-1								Date SEPTEMBER 2012	
THIS BAR REPRESENTS ONE INCH ON THE ORIGINAL DRAWING: 		USE TO VERIFY FIGURE REPRODUCTION SCALE		State: NY Date Signed: 9/12/17 Project Mgr: JDB		No. Date Revisions By Ckd		<b>STORM SEWER PROFILE</b>		ARCADIS 6723 TOWPATH ROAD SYRACUSE, NY 13214 TEL: 315.446.9120	
				Designed by: BAF Drawn by: WKJ Checked by: CJJ		This drawing is the property of the ARCADIS entity identified in the title block and may not be reproduced or altered in whole or in part without the express written permission of ARCADIS.				GENERAL	



CITY: SYRACUSE ANY DIV: GROUP 141 ENV DB: G. STEINBERGER R. BASSETT LD: G. STEINBERGER PIC: K. WHITE PM: M. CARRILLO-SHERIDAN TM: D. CORNELL LVR: ON=OFF=REF= PLOTTED: 9/12/2012 4:31 PM BY: DECLERQ, BRIAN  
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XREFS: 13 103X00 PROJECT NAME: 66-INCH STORM SEWER REPLACEMENT



- NOTES:
1. HDPE FLANGE JOINT BACKING RINGS ON HDPE SIDE OF JOINT CONNECTION WERE SPLIT INTO TWO PIECES IN THE FIELD TO FACILITATE FLANGE CONNECTION.
  2. MANHOLE MH-1B AND MH-1C FOUNDATION SLABS MEASURED 10 FEET BY 10 FEET AND WERE CAST IN PLACE. MANHOLE MH-1A AND MH-1D FOUNDATION SLABS MEASURED 12 FEET BY 12 FEET AND WERE PRE-CAST ON THE GROUND SURFACE BEFORE BEING LOWERED INTO PLACE (SEE RFI #5).
  3. ANCHOR DETAILS FOR MANHOLES MH-1A AND MH-1D PER RFI #5.





## **Appendix B**

Weekly Meeting Minutes

(Compact Disk only)



ARCADIS of New York, Inc.  
2634 Towpath Rd  
Syracuse  
New York 13214 - 0066  
Tel 315.446.9120  
Fax 315.445.9161

**MEMO**

To:

Tracy Blazicek, NYSEG  
Anthony Karziel, NYSDEC  
Steve Beam, AECOM  
Steve Kostage, AECOM  
Ryan Green, AECOM  
George Fisher, AECOM

Kent Wagoner, AECOM  
Mark Gravelding, ARCADIS  
Jason Brien, ARCADIS  
Matt DeGracia, ARCADIS  
Kasey Cornwell, ARCADIS  
Mike Flynn, ARCADIS

From:

Jason Brien

Date:

November 18, 2011

ARCADIS Project No.:

B0013103.0001.00001

Subject:

New York State Electric & Gas Corporation – 66 Inch Storm Sewer Replacement,  
Court Street Former MGP Site  
Project Meeting Minutes # 1 – November 17, 2011

---

This memorandum summarizes items discussed during the November 17, 2011 project coordination meeting for the storm sewer replacement at the New York State Electric & Gas Corporation (NYSEG) Court St. former manufactured gas plant (MGP) site located in Binghamton, New York.

**ATTENDEES**

The following personnel attended the November 17, 2011:

- Tracy Blazicek, NYSEG
- Anthony Karziel, NYSDEC
- Steve Kostage, AECOM (via teleconference)
- Rick Gance, AECOM
- Steve Beam, AECOM
- Kent Wagoner, AECOM
- Ryan Green, AECOM
- George Fischer, AECOM
- Jason Brien, ARCADIS (via teleconference)
- Matt DeGracia, ARCADIS (via teleconference)
- Kasey Cornwell, ARCADIS

Key items of discussion from the meeting are presented below.

#### **Comments / Corrections to Previous Meeting Minutes**

- There were no comments / corrections to the previous meeting minutes

#### **Health and Safety**

- NYSEG provided a health and safety moment regarding focus and the importance of concentrating on the task at hand.
- ARCADIS continues to perform perimeter air monitoring for particulates and VOCs during intrusive activities as per the site CAMP. There have been no exceedances of site action levels to date. AECOM is utilizing a MultiRae PID to monitor VOC levels in the worker breathing zone during excavation; PID is typically placed in the excavator cab with the operator. AECOM is using BioSolve applied via pressure washers and poly-sheeting to minimize odor during pre-trench excavation and offloading of materials, as needed. AECOM will be ready to apply BioSolve foam as an alternative for odor mitigation starting Monday (November 21, 2011)
- AECOM reported that there have been no Health and Safety issues at the site to date.

#### **Completed Construction Activities**

- AECOM mobilization to site and pre-construction preparation activities were completed including: mobilization of site trailers; site electrical, telephone and internet services; decontamination pad construction; and installation of erosion control measures.
- AECOM performed pre-trench excavation and backfilling along the east and west sheeting alignments, up to No. 4 Gas Holder foundation
- AECOM began demolishing the No. 4 Gas Holder foundation.
- Disposal waste streams: non-visually impacted soil and construction and demolition (C&D) debris to Broome County Landfill and visually impacted soil to ESMI for low-temperature thermal desorption (LTTD).
  - Disposal Tonnage (estimates to date):
    - Broome County (C&D debris) - approximately 104 tons
    - Broome County (soil) - approximately 415 tons
    - ESMI (soil) - approximately 105 tons

- AECOM subcontractor Tioga mobilized to site and began installation of sheeting at the north end of trench alignment. Average productivity rate of 8-10 sheeting pairs (approximately 30-40 linear feet) per day.
- Mobilization of TWTS (Temporary Water Treatment System) components by AECOM and LRT initiated.
- AECOM subcontractor HSE on site to conduct noise monitoring during sheetpile installation. Site activities to date have been in compliance with applicable noise limits to date, per HSE.

#### **Upcoming Construction Activity / 2 Week Look Ahead**

- Complete the assembly of the TWTS
- Complete pre-trench activities and No. 4 Gas Holder foundation demolition
- Complete excavation support installation
- Initiate trench excavation
- Continue offsite disposal activities to ESMI and Broome County, as needed
- Thanksgiving Holiday schedule: no activities scheduled for November 24 - 27, 2011. AECOM will perform a thorough site walk through to secure the site in preparation for the extended holiday.

#### **Construction Issues / Discussion Items**

Following the first day of sheet installation, compaction of soils against the west sheet pile wall and surface soil cracking were noted. Compaction was present down to 4' against the sheeting, while cracking was documented approximately 10' away from the sheeting. ARCADIS confirmed and attendees agreed documentation of such events should continue but no further action is needed at this time. AECOM will fill voids with soil to limit the migration of surface water down the sheets and maintain a safe working environment.

- Vibration monitoring and concerns with respect to adjacent building foundations was briefly discussed. However, as discussed during the design, based on the location of the site, vibration monitoring is not required at the site due to the site setting and low risk of concerns from vibrations related to site construction activities. ARCADIS confirmed there are no buildings within a close enough proximity to warrant this type of monitoring.
- A 30" diameter cast iron pipe was encountered during No. 4 Gas Holder foundation demolition. The pipe is located ~ 30' north of manhole MH-1B and appears to traverse northeast to southwest across the pipe trench alignment. Water and visible product were present in the pipe. AECOM will evacuate and containerize the liquid. AECOM will implement the following pipe abandonment procedure: evaluate pipe integrity, terminate the pipe length at the limits of the trench walls, and permanently cap the pipe with flowable fill (or other appropriate plug) to eliminate the pipe's ability to collect, convey, or store stormwater and/or groundwater.



### **Action Items**

- Progress Meetings will be held Tuesday at 10:00 AM. The next meeting is scheduled for Tuesday November 29, 2011.
- Submittals: AECOM is working towards providing the outstanding submittals to ARCADIS. NYSDEC has requested to receive major submittals for review; ARCADIS will provide NYSDEC the submittal register to aid with submittal selection.

Upon receipt of this memorandum, please notify Ms. Kasey Cornwell at 315.663.5515 ([Kasey.cornwell@arcadis-us.com](mailto:Kasey.cornwell@arcadis-us.com)) or Mr. Matt DeGracia at 315.671.9436 ([Mathew.Degracia@arcadis-us.com](mailto:Mathew.Degracia@arcadis-us.com)) within 2 days if you believe that any portion of this summary does not accurately reflect issues discussed/resolved during the November 17, 2011, or if additional items should be recorded in this summary. If modifications are made, a follow-up memorandum will be distributed.



ARCADIS of New York, Inc.  
2634 Towpath Rd  
Syracuse  
New York 13214 - 0066  
Tel 315.446.9120  
Fax 315.445.9161

**MEMO**

To:

Tracy Blazicek, NYSEG  
Eric Knapp, NYSDEC  
Anthony Karziel, NYSDEC  
Steve Beam, AECOM  
Steve Kostage, AECOM  
Ryan Green, AECOM  
George Fisher, AECOM

Mark Gravelding, ARCADIS  
Jason Brien, ARCADIS  
Matt DeGracia, ARCADIS  
Kasey Cornwell, ARCADIS  
Mike Flynn, ARCADIS

From:

Jason Brien

Date:

December 2, 2011

ARCADIS Project No.:

B0013103.0001.00001

Subject:

New York State Electric & Gas Corporation – 66 Inch Storm Sewer Replacement,  
Court Street Former MGP Site  
Project Meeting Minutes # 2 – November 29, 2011

---

This memorandum summarizes items discussed during the November 29, 2011 project coordination meeting for the storm sewer replacement at the New York State Electric & Gas Corporation (NYSEG) Court St. former manufactured gas plant (MGP) site located in Binghamton, New York.

**ATTENDEES**

The following personnel attended the November 29, 2011:

- Tracy Blazicek, NYSEG
- Anthony Karziel, NYSDEC
- Eric Knapp, NYSDEC
- Steve Beam, AECOM
- Kent Wagoner, AECOM
- Ryan Green, AECOM
- George Fischer, AECOM
- Jason Brien, ARCADIS (via teleconference)
- Matt DeGracia, ARCADIS (via teleconference)
- Mike Flynn, ARCADIS (Via teleconference)
- Kasey Cornwell, ARCADIS



Key items of discussion from the meeting are presented below.

#### **Comments / Corrections to Previous Meeting Minutes**

- There were no comments / corrections to the previous meeting minutes

#### **Health and Safety**

- NYSEG provided a health and safety moment regarding changing weather conditions, allowing adequate time for commuting to and from the site as conditions become icy.
- ARCADIS continues to perform perimeter air monitoring for particulates and VOCs during intrusive site activities as per the site CAMP. There have been no exceedances of site action levels to date. AECOM is monitoring the worker breathing zone during excavation via a MultiRae PID for VOCs. The PID is typically placed in the excavator cab with the operator. AECOM is applying the following odor control measures during excavation and material handling, as needed: BioSolve via pressure washers and misters, Rusmar odor suppressant foam and poly-sheeting.
- AECOM reported no Health and Safety issues to date.

#### **Completed Construction Activities**

- Work performed 11/21/11 – 11/23/11, due to observation of Thanksgiving holiday.
- AECOM completed demo of No. 4 Gas Holder foundation and pre-trench activities. The 30" diameter iron pipe was evacuated of liquid, terminated at the trench wall and permanently sealed with a 1-ft thick concrete plug. AECOM began excavation at north end of the pipe trench and are progressing to the south. AECOM is providing an adequate buffer space between their excavation operations and Tioga's sheetpile installation activities. Excavation was performed to approximately 4 ft bgs. The excavated soils were transported offsite to ESMI for disposal.
- Tioga has completed approximately 50 percent of the sheeting installation between manholes MH-1B and MH-1C. Tioga is averaging 10 pairs of sheets driven to design tip elevation (796.0') per day. Tioga has encountered resistance with driving 4 sheet pairs to completion. Tioga will continue to revisit sheets as time permits. If Tioga is unsuccessful driving these sheets to completion, the issue will be reassessed for an alternative solution at that time.
- Disposal waste streams: non-visually impacted soil and construction and demolition (C&D) debris to Broome County Landfill and visually impacted soil to ESMI for low-temperature thermal desorption (LTTD).

- Disposal Tonnage (estimates to date):
  - Broome County Landfill (soil and C&D) - approximately 557 tons
  - ESMI (soil) - approximately 280 tons
- Mobilization of TWTS (Temporary Water Treatment System) components by AECOM and LRT continued.
- AECOM subcontractor HSE on site to conduct noise monitoring during sheetpile installation. Site activities to date have been in compliance (i.e., less than 80 dBA). with applicable noise limits to date, per HSE.

#### **Upcoming Construction Activity / 2 Week Look Ahead**

- Complete the assembly of the TWTS and initiate confirmation sampling
- Installation of pipe trench sump and associated trench dewatering activities
- Complete excavation support installation
- Continue trench excavation
- Continue offsite disposal activities to ESMI and Broome County Landfill, as needed

#### **Construction Issues / Discussion Items**

With approval from NYSEG, non-visually impacted soils were sent to ESMI on 11/28/11 due to coordination and scheduling issues with ESMI to arrange Broome County Landfill trucks. Note – ESMI is responsible for the distribution center that controls trucking to both ESMI and Broome County Landfill. AECOM and ESMI will increase coordination efforts to minimize the number of non-visually impacted loads transported to ESMI for disposal. The project is approaching the ESMI required tonnage mark (300 Tons) that will require additional characterization sampling for disposal. ARCADIS will perform the required soil sampling during the week of 11/28/11.

ARCADIS oversight personnel will be transitioning at the end of next week (12/7 – 12/10/2011), Mike Flynn will be arriving onsite and Kasey Cornwell will be departing.

#### **Action Items**

- NYSDEC and ARCADIS will confirm that staff is aware of appropriate SPDES Permit Equivalent requirements prior to initial sampling of TWTS and notification of discharge.
- ARCADIS and NYSEG will determine if abandonment and subsequent replacement of MW93-6D and PZ01-05 are necessary prior to installation of sheetpiling in that location. This activity is currently scheduled to be performed during Phase II.

- NYSDEC requested that ARCADIS have a backup PID and DUSTRAK, which will allow for continuous CAMP monitoring in the event of equipment malfunction.
- Submittals: AECOM is working towards providing the remaining submittals to ARCADIS.

Upon receipt of this memorandum, please notify Ms. Kasey Cornwell at 315.663.5515 ([Kasey.cornwell@arcadis-us.com](mailto:Kasey.cornwell@arcadis-us.com)) or Mr. Matt DeGracia at 315.671.9436 ([Mathew.Degracia@arcadis-us.com](mailto:Mathew.Degracia@arcadis-us.com)) within 2 days if you believe that any portion of this summary does not accurately reflect issues discussed/resolved during the November 29, 2011, or if additional items should be recorded in this summary. If modifications are made, a follow-up memorandum will be distributed.



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**MEMO**

To:

Tracy Blazicek, NYSEG  
Eric Knapp, NYSDEC  
Anthony Karwiel, NYSDEC  
Steve Beam, AECOM  
Steve Kostage, AECOM  
Ryan Green, AECOM  
George Fisher, AECOM

Mark Gravelding, ARCADIS  
Jason Brien, ARCADIS  
Matt DeGracia, ARCADIS  
Kasey Cornwell, ARCADIS  
Mike Flynn, ARCADIS

From:

Jason Brien

Date:

December 15, 2011

ARCADIS Project No.:

B0013103.0001.00001

Subject:

New York State Electric & Gas Corporation – 66 Inch Storm Sewer Replacement,  
Court Street Former MGP Site  
Project Meeting Minutes # 3 – December 13, 2011

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This memorandum summarizes items discussed during the December 13, 2011 project coordination meeting for the storm sewer replacement at the New York State Electric & Gas Corporation (NYSEG) Court St. former manufactured gas plant (MGP) site located in Binghamton, New York.

**CALL IN NUMBER: 866-453-5550 PIN 4704977#**

**ATTENDEES**

The following personnel attended the December 13, 2011:

- Tracy Blazicek, NYSEG
- Anthony Karwiel, NYSDEC
- Steve Kostage, AECOM
- Steve Beam, AECOM
- Kent Wagoner, AECOM
- Ryan Green, AECOM
- George Fischer, AECOM
- Jason Brien, ARCADIS
- Kasey Cornwell, ARCADIS

- Mike Flynn, ARCADIS (via teleconference)

Key items of discussion from the meeting are presented below.

#### **Comments / Corrections to Previous Meeting Minutes**

- Previous meeting listed the incorrect provider of the H&S Moment, NYSEG was listed as a carryover from the previous meeting, AECOM provided the H&S Moment on 11/29/11.

#### **Health and Safety**

- AECOM provided a health and safety moment regarding being conscious of health and safety during repetitive tasks and taking the time needed to perform tasks safely. Also discussed being aware of barriers onsite (caution tape and construction fencing) and contacting the correct personnel before crossing them.
- ARCADIS continues to perform perimeter air monitoring for particulates and VOCs during intrusive site activities as per the site CAMP. There have been no exceedances of site action levels to date. AECOM is monitoring the worker breathing zone during excavation via a MultiRae PID for VOCs. The PID is typically placed in the excavator cab with the operator. AECOM is applying the following odor control measures during excavation and material handling, as needed: BioSolve via pressure washers and misters, Rusmar odor suppressant foam and poly-sheeting.
- AECOM reported no Health and Safety issues to date.

#### **Completed Construction Activities: 11/29/11 – 12/12/11**

- Tioga completed installation of excavation support sheeting on 12/08/11 and assisted AECOM with addressing groundwater leaks and seeps in the sheetpile wall.
- AECOM began dewatering trench using a primary sump at the north end of the excavation pumping at ~3 gpm. A secondary sump was installed the week of 12/5 at the mid-point of the trench.
- AECOM and LRT completed installation of the Temporary Water Treatment System and began treating on 12/5/11. ARCADIS collected discharge water sample # 1 on 12/5/11 after ~10hrs (22,000 gallons) of water had been treated.

- Disposal waste streams: non-visually impacted soil and construction and demolition (C&D) debris to Broome County Landfill and visually impacted soil to ESMI for low-temperature thermal desorption (LTTD).
  - Disposal Tonnage (estimates to date):
    - Broome County Landfill (soil and C&D) - approximately 644 tons
    - ESMI (soil) - approximately 1728 tons

#### **Upcoming Construction Activity / 2 Week Look Ahead**

- Discharge of the initial batch of treated water generated onsite, treated by the TWTS.
- Complete the excavation of the trench.
- Complete the offsite disposal of impacted soil to ESMI and Broome County.
- Fusion and installation of HDPE Pipe.
- Installation/preparation of manhole bases MH-1B and MH1-C
- Parratt Wolff tentatively scheduled to decommission wells (MW-93-6D and PZ01-05) and potentially grout along the outside of the sheeting to address leaking sheets.

#### **Construction Issues / Discussion Items**

- Preliminary laboratory results for the initial samples collected from the TWTS indicated that the pH was lower than the range required for discharge by the SPDES Equivalent (6.5-8.5). Additional field analysis showed a pH of 7.4 on water taken directly from the trench and ~6.0 on treated water collected from the frac tank. Diluting the treated water with municipal water and/or lowering the discharge flow such that natural mixing would occur at the river were both suggestions offered to raise the pH level. NYSDEC would prefer that the pH be adjusted prior to discharge. AECOM is currently discussing with its subcontractor LRT what options are available to modify the current TWTS. AECOM and LRT are discussing the addition of an injection pump that will inject a pH buffer into the effluent and increase the pH to an acceptable level.
- Schedule changes were discussed including continuing to the next phase of the project without a 3 month break as initially outlined
- Water generation in the excavation has decreased significantly since the initial leaks were observed during the week of 11/28/11.
- ARCADIS and AECOM discussed the logistics of AECOM's plan for bypass pumping during phase two. AECOM is currently monitoring flow rates through the existing sewer in order to properly size bypass pumps. During the bypass pumping AECOM will have a backup pump onsite and available for immediate use should any mechanical issues arise with the first pump.

### **Action Items**

- NYSDEC will evaluate the alternatives for adjusting the pH of the treated water and confirm if any of them are viable options to raise the pH prior to discharge to the river.
- ARCADIS will perform field sampling of the pH inline prior to the water entering the system and following treatment to determine if the low pH is being caused by the TWTS.
- ARCADIS and NYSEG will schedule abandonment of MW93-6D and PZ01-05 prior to installation of sheeting in that location.
- ARCADIS will notify City of Binghamton prior to completing the tie-in of the new sewer
- AECOM will provide a drawing detailing the proposed bedding material to be used under the HDPE pipe
- AECOM will provide an updated project schedule

Upon receipt of this memorandum, please notify Ms. Kasey Cornwell at 315.663.5515 ([Kasey.cornwell@arcadis-us.com](mailto:Kasey.cornwell@arcadis-us.com)) or Mr. Matt DeGracia at 315.671.9436 ([Mathew.Degracia@arcadis-us.com](mailto:Mathew.Degracia@arcadis-us.com)) within 2 days if you believe that any portion of this summary does not accurately reflect issues discussed/resolved during the December 13, 2011, or if additional items should be recorded in this summary. If modifications are made, a follow-up memorandum will be distributed. The next meeting is scheduled for 10AM Tuesday December 20, 2011.



ARCADIS of New York, Inc.  
2634 Towpath Rd  
Syracuse  
New York 13214 - 0066  
Tel 315.446.9120  
Fax 315.445.9161

**MEMO**

To:

Tracy Blazicek, NYSEG  
Eric Knapp, NYSDEC  
Anthony Karziel, NYSDEC  
Steve Beam, AECOM  
Steve Kostage, AECOM  
Ryan Green, AECOM  
George Fisher, AECOM

Mark Gravelding, ARCADIS  
Jason Brien, ARCADIS  
Matt DeGracia, ARCADIS  
Kasey Cornwell, ARCADIS  
Mike Flynn, ARCADIS

From:

Jason Brien

Date:

January 12, 2012

ARCADIS Project No.:

B0013103.0001.00001

Subject:

New York State Electric & Gas Corporation – 66 Inch Storm Sewer Replacement,  
Court Street Former MGP Site  
Project Meeting Minutes # 4 – December 21, 2011

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This memorandum summarizes items discussed during the December 21, 2011 project coordination meeting for the storm sewer replacement at the New York State Electric & Gas Corporation (NYSEG) Court St. former manufactured gas plant (MGP) site located in Binghamton, New York.

**CALL IN NUMBER: 866-453-5550 PIN 4704977#**

**ATTENDEES**

The following personnel attended the December 21, 2011:

- Tracy Blazicek, NYSEG
- Anthony Karziel, NYSDEC (via teleconference)
- Steve Beam, AECOM (via teleconference)
- Ryan Green, AECOM
- George Fischer, AECOM
- Jason Brien, ARCADIS
- Mike Flynn, ARCADIS

Key items of discussion from the meeting are presented below.



### **Comments / Corrections to Previous Meeting Minutes**

- No comments/ corrections to the previous meeting minutes

### **Health and Safety**

- AECOM provided a health and safety moment regarding inclement weather. All parties were reminded to watch walking surfaces during rain and snow events.
- ARCADIS continues to perform perimeter air monitoring for particulates and VOCs during intrusive site activities as per the site CAMP. There have been no exceedances of site action levels to date. AECOM is monitoring the worker breathing zone during excavation via a MultiRae PID for VOCs. The PID is typically placed in the excavator cab with the operator. AECOM is applying the following odor control measures during excavation and material handling, as needed: BioSolve via pressure washers and misters, Rusmar odor suppressant foam and poly-sheeting.
- AECOM reported no Health and Safety issues to date.

### **Completed Construction Activities:12/13/11 – 12/21/11**

- AECOM has completed the majority of the Phase 1 excavation and soil loadout. There is approximately one truckload of soil left for offsite disposal.
- AECOM has discharged “Batch #1” from the TWTS. ARCADIS has collected samples from “Batch # 2”
- Tioga has placed approximately 80% of the pipe bedding material (crusher-run stone) in the trench.
- Disposal waste streams: non-visually impacted soil and construction and demolition (C&D) debris to Broome County Landfill and visually impacted soil to ESMI for low-temperature thermal desorption (LTTD).
  - Disposal Tonnage (estimates to date):
    - Broome County Landfill (soil and C&D) - approximately 980 tons
    - ESMI (soil) - approximately 3010 tons

### **Upcoming Construction Activity / 2 Week Look Ahead**

- Discharge of Batch # 2.
- AECOM plans to have dewatering crews check the site over the upcoming holiday weekends.

- Pour the concrete for the base of MH1-C.
- Complete the subgrade in the trench.
- Prepare the base for MH1-B on Monday next week.
- HDPE welding is scheduled for next week and will take approximately 4 days.
- Parratt Wolff tentatively scheduled for tomorrow to decommission wells (MW-93-6D and PZ01-05) and potentially grout along the outside of the sheeting to address leaking sheets.

#### **Construction Issues / Discussion Items**

- Upcoming holiday schedules were discussed.

#### **Action Item**

- ARCADIS will notify City of Binghamton prior to completing the tie-in of the new sewer
- AECOM will provide a drawing detailing the proposed bedding material to be used under the HDPE pipe
- AECOM will provide an updated project schedule

Upon receipt of this memorandum, please notify Michael Flynn at 413-281-5886 ([Michael.Flynn@arcadis-us.com](mailto:Michael.Flynn@arcadis-us.com)) or Mr. Matt DeGracia at 315.671.9436 ([Mathew.Degracia@arcadis-us.com](mailto:Mathew.Degracia@arcadis-us.com)) within 2 days if you believe that any portion of this summary does not accurately reflect issues discussed/resolved during the December 21, 2011, or if additional items should be recorded in this summary. If modifications are made, a follow-up memorandum will be distributed. The next meeting is scheduled for 10AM Tuesday January 03, 2012.



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**MEMO**

To:

Tracy Blazicek, NYSEG  
Eric Knapp, NYSDEC  
Anthony Karziel, NYSDEC  
Steve Beam, AECOM  
Steve Kostage, AECOM  
Ryan Green, AECOM  
George Fisher, AECOM

Mark Gravelding, ARCADIS  
Jason Brien, ARCADIS  
Matt DeGracia, ARCADIS  
Kasey Cornwell, ARCADIS  
Mike Flynn, ARCADIS

From:

Jason Brien

Date:

January 12, 2012

ARCADIS Project No.:

B0013103.0001.00001

Subject:

New York State Electric & Gas Corporation – 66 Inch Storm Sewer Replacement,  
Court Street Former MGP Site  
Project Meeting Minutes # 5 – January 10, 2012

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This memorandum summarizes items discussed during the January 10, 2012 project coordination meeting for the storm sewer replacement at the New York State Electric & Gas Corporation (NYSEG) Court St. former manufactured gas plant (MGP) site located in Binghamton, New York.

***CALL IN NUMBER: 866-453-5550 PIN 4704977#***

**ATTENDEES**

The following personnel attended the January 10, 2012 meeting:

- Tracy Blazicek, NYSEG
- Anthony Karziel, NYSDEC
- Steve Beam, AECOM
- Ryan Green, AECOM
- George Fischer, AECOM
- Jason Brien, ARCADIS
- Mike Flynn, ARCADIS

Key items of discussion from the meeting are presented below.

### **Comments / Corrections to Previous Meeting Minutes**

- No comments/ corrections to the previous meeting minutes

### **Health and Safety**

- AECOM provided a health and safety moment regarding cold weather. AECOM has reminded onsite personnel about the dangers of cold stress and the importance of seeking shelter inside the trailers when needed.
- ARCADIS continues to perform perimeter air monitoring for particulates and VOCs during intrusive site activities as per the site CAMP. There have been no exceedances of site action levels to date. AECOM is monitoring the worker breathing zone during excavation via a MultiRae PID for VOCs. The PID is typically placed in the excavator cab with the operator. AECOM is applying the following odor control measures during excavation and material handling, as needed: BioSolve via pressure washers and misters, Rusmar odor suppressant foam and poly-sheeting.
- AECOM reported no Health and Safety issues to date.

### **Completed Construction Activities:12/21/11 – 1/03/12**

- Tioga has completed the welding of the HDPE pipe.
- Manholes 1B and 1C have been delivered to the site. MH1-C has been placed on it's base.
- Tioga has poured the lower half of the southern collar for MH1-C including the additional width which will be used as a water-stop for phase 2 work.
- AECOM has located the connection points near MH1 and MH2 where the phase 2 tie-ins will take place.
- AECOM has discharged all batches of treated water up to "Batch #6" from the TWTS. ARCADIS has collected samples from "Batch # 7". Batch # 7 again showed the presence of VOC's in the treated water and will need to be re-treated.
- Disposal waste streams: non-visually impacted soil and construction and demolition (C&D) debris to Broome County Landfill and visually impacted soil to ESMI for low-temperature thermal desorption (LTTD). One load of soil was transported to ESMI today. No other soil has been transported since the last meeting.
  - Disposal Tonnage (estimates to date):

- Broome County Landfill (soil and C&D) - approximately 980 tons
- ESMI (soil) - approximately 3010 tons

#### **Upcoming Construction Activity / 2 Week Look Ahead**

- Re-treatment and discharge of Batch # 7.
- AECOM and LFR will backflush the organoclay and carbon vessels at the TWTS in an effort to determine the cause for the continued VOC's in the treated water.
- Pour the base for MH1-B and the collar on the north side of MH1-B
- Install MH1-B
- Leak test the HDPE (after the arrival of the blind flanges)
- Install the HDPE

#### **Construction Issues / Discussion Items**

- A discussion was held regarding the continued issue with VOC's in the treated water samples. LFR and AECOM will backflush the system in an effort to see if the carbon has been blinded by particulates. NYSDEC requests several additional clean sample results prior to allowing continuous discharge. ARCADIS will begin collecting additional samples of influent water in order to assist with diagnosing the TWTS. AECOM and LFR will develop an SOP to include sampling, treatment plant operation and sampling. The development of the SOP will also assist in troubleshooting the system by streamlining the entire process.
- A discussion was held to inform attendees of recent developments with Phase 2. The increased size of the concrete collars around MH1-C and MH1-B were discussed. AECOM also presented the tentative sequencing plan for Phase 2. Phase 2 work is tentatively planned to start on January 23<sup>rd</sup>. The critical phase (when the existing sewer is bypassed) is tentatively scheduled for two weeks beginning February 13<sup>th</sup>.

#### **Action Items**

- ARCADIS will notify City of Binghamton prior to completing the tie-in of the new sewer
- AECOM will provide details of the proposed materials to be used for the emergency "sluice-way" between (MH1B and MH1) and (MH1-C and MH-2)
- AECOM will provide details of the proposed materials to be used for abandoning the existing sewer and proposed materials to be used as a concrete collar around the connection at MH1 in the event that the Fernco connector cannot be used.
- AECOM will provide an updated project schedule

Upon receipt of this memorandum, please notify Michael Flynn at 413-281-5886 ([Michael.Flynn@arcadis-us.com](mailto:Michael.Flynn@arcadis-us.com)) or Mr. Matt DeGracia at 315.671.9436 ([Mathew.Degracia@arcadis-us.com](mailto:Mathew.Degracia@arcadis-us.com)) within 2 days if you believe that any portion of this summary does not accurately reflect issues discussed/resolved during the January 10, 2012 meeting, or if additional items should be recorded in this summary. If modifications are made, a follow-up memorandum will be distributed. The next meeting is scheduled for 1:30 p.m. Wednesday January 18, 2012.



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**MEMO**

To:

Tracy Blazicek, NYSEG  
Eric Knapp, NYSDEC  
Anthony Karwiel, NYSDEC  
Steve Beam, AECOM  
Steve Kostage, AECOM  
Ryan Green, AECOM  
George Fisher, AECOM

Mark Gravelding, ARCADIS  
Jason Brien, ARCADIS  
Matt DeGracia, ARCADIS  
Kasey Cornwell, ARCADIS  
Mike Flynn, ARCADIS

From:

Jason Brien

Date:

January 20, 2012

ARCADIS Project No.:

B0013103.0001.00001

Subject:

New York State Electric & Gas Corporation – 66 Inch Storm Sewer Replacement,  
Court Street Former MGP Site  
Project Meeting Minutes # 6 – January 18, 2012

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This memorandum summarizes items discussed during the January 18, 2012 project coordination meeting for the storm sewer replacement at the New York State Electric & Gas Corporation (NYSEG) Court St. former manufactured gas plant (MGP) site located in Binghamton, New York.

***CALL IN NUMBER: 866-453-5550 PIN 4704977#***

**ATTENDEES**

The following personnel attended the January 18, 2012:

- Tracy Blazicek, NYSEG
- Eric Knapp, NYSDEC
- Steve Beam, AECOM
- Ryan Green, AECOM
- George Fischer, AECOM
- Jason Brien, ARCADIS (via teleconference)
- Matt DeGracia, ARCADIS (via teleconference)
- Mike Flynn, ARCADIS

Key items of discussion from the meeting are presented below.

#### **Comments / Corrections to Previous Meeting Minutes**

- No comments/ corrections to the previous meeting minutes

#### **Health and Safety**

- AECOM discussed an injury to an AECOM employee onsite. The employee was injured while removing a hose at the temporary water treatment system (TWTS). AECOM's incident investigation revealed that the hose had a small amount of vacuum applied to it during the process of draining the water from inside the hose. This vacuum made hose removal more difficult, causing the employee to apply additional effort in order to remove the hose. Once the hose was released, the hose struck the employee in the mouth causing a laceration and damage to several teeth. The employee was taken to a local clinic where first aid was administered. Additional dental treatment is ongoing. AECOM stated that the incident will be classified as an OSHA recordable but will not be a lost time injury. AECOM and NYSEG have both filed initial reports with their respective Health and Safety departments and will follow up to ensure that all necessary reporting is complete.
- ARCADIS continues to perform perimeter air monitoring for particulates and VOCs during intrusive site activities as per the site CAMP. There have been no exceedances of site action levels to date.
- AECOM is monitoring the worker breathing zone inside the trench. AECOM continues to use a 4-gas meter placed in the trench during work. AECOM has discontinued the use of odor control measures for the immediate future since the trench has been covered with stone and concrete, thereby minimizing any potential odor issues. In the event that additional impacted material is encountered, AECOM will resume odor control.

#### **Completed Construction Activities: 1/10/12 – 1/18/12**

- AECOM and LFR have back washed the vessels at the TWTS in an effort to correct the ongoing VOC issues in the treated water. AECOM back washed the carbon, the organoclay and the zeolite vessels.
- AECOM has treated batch # 8 and re-treated batch # 7 (that failed initially due to the presence of VOC's). ARCADIS has received results for both of these batches and they have both passed. AECOM has started to discharge both batches.
- Tioga has poured the bases and installed both MH1-B and MH1-C.
- AECOM and Tioga have performed the exfiltration (leak) testing on the main length of HDPE piping that will be installed between MH1-C and MH1-B. The HDPE passed the test and was installed in the trench today.



- Disposal waste streams: non-visually impacted soil and construction and demolition (C&D) debris to Broome County Landfill and visually impacted soil to ESMI for low-temperature thermal desorption (LTTD). One load of soil was transported to ESMI today. No other soil has been transported since the last meeting.
  - Disposal Tonnage (estimates to date):
    - Broome County Landfill (soil and C&D) - approximately 1000 tons
    - ESMI (soil) - approximately 3300 tons

#### **Upcoming Construction Activity / 2 Week Look Ahead**

- Continue dewatering the trench and treatment of water at the TWTS in “batch” mode until results prove the system is performing as designed.
- Backfill the trench between MH-1C and MH-1B.
- Pour the concrete collars at MH-1C and MH1B.
- Pour the inverts at MH-1B
- Exploratory excavation to expose the connection point at MH-1.
- Begin the removal of sheetpiling from phase one work.

#### **Construction Issues / Discussion Items**

- A discussion was held regarding the continued issue with VOC's in the treated water samples. AECOM and LFR have back washed the system and are awaiting the results from subsequent batches of water.
- A discussion was held in regards to the flange rings that will be used to secure the HDPE pipe sections. AECOM had planned to cut one of the two mating rings used to secure each flange to flange connection. ARCADIS has requested that AECOM provide a letter from the manufacturer stating that this method of connection has been tested and is an equivalent alternative to a solid ring. AECOM provided a letter initially but the letter did not specifically cover the current application (i.e., modifying a one-piece backing ring into a split backing ring). AECOM will resubmit a more detailed letter from the manufacturer.
- AECOM informed attendees that while attempting to make the initial connection between MH-1C and the HDPE pipe that the two rings used to secure the connection were not the same. The manholes were delivered to the site with a ring installed behind the flange and AECOM had planned to cut the mating ring that will be used on the HDPE pipe flange. After cutting the ring they discovered that the

rings were different configurations. ARCADIS requested that AECOM now purchase a manufactured split ring that will mate with the manhole connection. AECOM has attempted to locate a manufactured split ring but cannot locate a split ring for 63" HDPE. In order to purchase a split ring in this size, the manufacturer would have to special order the ring which would cause several weeks of delay. Since the manufacturer will certify that cutting a one-piece ring will work for this application, AECOM has ordered the correct style one-piece rings and will cut them to fit over the HDPE flanges. ARCADIS will allow the installation upon receipt of the manufacturer's letter.

- A discussion was held regarding the elevations of the manholes and the HDPE pipe. AECOM has provided elevations for MH1-C and MH-2 and it appears that this section of pipe will be relatively flat. ARCADIS expressed concern that the lack of slope may adversely affect the flow through the system. If the flow is significantly different than what was originally discussed with the city, then the new design may need the city's approval. In order to determine flow, ARCADIS requests that AECOM provide all of the elevation data that has been collected to date.
- A discussion was held regarding a leak inside MH-2 that was discovered during a check of invert elevations inside the manhole. NYSEG and ARCADIS are currently discussing options as to how best seal the leak while work is ongoing in the area. The topic will be revisited at some point during the connection of the new pipe in that area. The leak will most likely be addressed with a grout but the exact means and methods have not been determined yet.
- A discussion was held regarding the use of gaskets at the flanged connections between HDPE pipe and the manholes. AECOM had planned to utilize gaskets which were not part of the original design. ARCADIS approves the use of the gaskets but requests that AECOM provide cut sheets from the gasket manufacturer that details the properties of the gaskets.
- AECOM would like to begin exploratory excavation near MH-1 as soon as next week. This excavation would require mobilizing an excavator with a hammer earlier than expected. NYSEG agrees to the additional time for the equipment since any details that may be discovered will be helpful in determining if alternate methods will be necessary for the connection to MH-1.
- AECOM requests that they be allowed to weld the connection between the sheetpiling and the H-pile at the northern and southern ends of the phase two areas. AECOM is anticipating a more water tight connection at these points, if welded. In order to make these connections, several of the sheets will need to be cut. NYSEG agrees to allow AECOM to cut sheets as needed.
- AECOM requests that concrete testing for the emergency "sluiceway" in phase two be removed. AECOM has tested all concrete brought to the site for manhole bases and concrete collars but requests that testing be waived for the sluiceway material. ARCADIS agrees that testing of this concrete is not necessary since the concrete will be covered with compacted pipe bedding material.
- AECOM requests that concrete forms be removed earlier than the 7 day minimum required in the specifications. The specifications list minimum psi strength for the finished concrete and AECOM's testing to date has shown that the concrete has met the finished strength (i.e. 3500 psi) earlier than 7 days. ARCADIS agrees that either the number of days or the minimum psi can be used to determine when the forms may be removed.

- A discussion was held regarding the placement of backfill over the HDPE pipe while waiting for the proper rings to be delivered. AECOM would like to secure MH1-B and MH1-C temporarily so that backfill can continue until the correct rings can be delivered. ARCADIS will allow the backfilling but ARCADIS informs AECOM that the backfill will be placed at AECOM's risk. ARCADIS is concerned that if the manholes are not properly secured that movement might occur while placing backfill. AECOM agrees that if any movement occurs, AECOM will be responsible for re-positioning of the HDPE.
- A discussion was held regarding outstanding submittals and requests. ARCADIS requests that AECOM provide information and details as soon as possible to allow adequate review.

#### **Action Items**

- AECOM will provide all elevation data collected at the site to ARCADIS
- AECOM to provide details on the material that will be used for the CLSM (fill for abandonment of the existing sewer) AECOM will also verify availability.
- AECOM to provide details on the material to be used for the emergency "sluiceway" in phase two areas.
- AECOM to provide details on the slip lining methods and materials.
- AECOM to provide letter from backing ring manufacturer stating that modifying one-piece rings via cutting into two-piece rings is acceptable.
- AECOM to provide cut sheets for gaskets that will be used at the HDPE flange connections.
- AECOM to provide a shop drawing detailing the connection point between the H-piles and the steel sheeting at the ends of the phase two areas.
- AECOM to submit the leak testing procedure and results.
- ARCADIS to verify flow calculations upon receipt of elevation data from AECOM.
- ARCADIS to provide sheetpile alignment for phase two work upon receipt of survey data from AECOM.

Upon receipt of this memorandum, please notify Michael Flynn at 413-281-5886 ([Michael.Flynn@arcadis-us.com](mailto:Michael.Flynn@arcadis-us.com)) or Mr. Matt DeGracia at 315.671.9436 ([Mathew.Degracia@arcadis-us.com](mailto:Mathew.Degracia@arcadis-us.com)) within 2 days if you believe that any portion of this summary does not accurately reflect issues discussed/resolved during the January 10, 2012, or if additional items should be recorded in this summary. If modifications are made, a follow-up memorandum will be distributed. The next meeting is scheduled for 1:30 p.m. Wednesday January 18, 2012.



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**MEMO**

To:

Tracy Blazicek, NYSEG  
Eric Knapp, NYSDEC  
Anthony Karziel, NYSDEC  
Steve Beam, AECOM  
Steve Kostage, AECOM  
Ryan Green, AECOM  
George Fisher, AECOM

Mark Gravelding, ARCADIS  
Jason Brien, ARCADIS  
Matt DeGracia, ARCADIS  
Kasey Cornwell, ARCADIS  
Mike Flynn, ARCADIS

From:

Jason Brien

Date:

January 24, 2012

ARCADIS Project No.:

B0013103.0001.00001

Subject:

New York State Electric & Gas Corporation – 66 Inch Storm Sewer Replacement,  
Court Street Former MGP Site  
Project Meeting Minutes # 7 – January 24, 2012

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This memorandum summarizes items discussed during the January 24, 2012 project coordination meeting for the storm sewer replacement at the New York State Electric & Gas Corporation (NYSEG) Court St. former manufactured gas plant (MGP) site located in Binghamton, New York.

***CALL IN NUMBER: 866-453-5550 PIN 4704977#***

**ATTENDEES**

The following personnel attended the January 24, 2012:

- Tracy Blazicek, NYSEG
- Tony Karziel, NYSDEC
- Steve Beam, AECOM
- Ryan Green, AECOM
- George Fischer, AECOM
- Jason Brien, ARCADIS (via teleconference)
- Mike Flynn, ARCADIS

Key items of discussion from the meeting are presented below.

### **Comments / Corrections to Previous Meeting Minutes**

- No comments/ corrections to the previous meeting minutes

### **Health and Safety**

- AECOM discussed an injury to an AECOM employee onsite. AECOM and NYSEG have both filed initial reports with their respective Health and Safety departments and will follow up to ensure that all necessary reporting is complete.
- ARCADIS continues to perform perimeter air monitoring for particulates and VOCs during intrusive site activities as per the site CAMP. There have been no exceedances of site action levels to date.
- AECOM is monitoring the worker breathing zone inside the trench. AECOM continues to use a 4-gas meter placed in the trench during work. AECOM has discontinued the use of odor control measures for the immediate future since the trench has been covered with stone and concrete, thereby minimizing any potential odor issues. In the event that additional impacted material is encountered, AECOM will resume odor control.

### **Completed Construction Activities:1/19/12 – 1/24/12**

- AECOM has treated batch # 9 of water from the Temporary Water Treatment System (TWTS) ARCADIS has received results for batch #9 and the results were below the permit specifications. AECOM has started to discharge batch # 9. AECOM has begun treating batch # 10 and ARCADIS will sample batch # 10 today. NYSDEC agrees to allow continuous discharge of treated water as long as batch # 10 results show that the VOC issue has been corrected.
- Tioga has poured the inverts for MH1-B.
- Tioga continues to backfill the section of HDPE pipe between MH1-B and MH1-C. Tioga is currently 1' over the top of the pipe with backfill.
- Disposal waste streams: non-visually impacted soil and construction and demolition (C&D) debris to Broome County Landfill and visually impacted soil to ESMI for low-temperature thermal desorption (LTTD). One load of soil was transported to ESMI today. No other soil has been transported since the last meeting.
  - Disposal Tonnage (estimates to date):
    - Broome County Landfill (soil and C&D) - approximately 1000 tons
    - ESMI (soil) - approximately 3300 tons

### **Upcoming Construction Activity / 2 Week Look Ahead**

- Continue dewatering the trench and treatment of water at the TWTS in “batch” mode until results prove the system is performing as designed.
- Install the new backup rings for the connection between MH-1B and MH-1C. The new solid rings were delivered today. Tioga will cut the rings to fit over the HDPE and then complete the final connection between the HDPE and MH-1B and MH-1C.
- Complete the backfill in the trench between MH-1C and MH1B.
- Pour the concrete collars at MH-1C and MH-1B.
- Exploratory excavation to expose the connection point at MH-1.
- Begin the removal of sheetpiling from phase one work.

### **Construction Issues / Discussion Items**

- A discussion was held regarding the continued issue with VOC's in the treated water samples. ARCADIS has received several samples with acceptable results. NYSDEC agrees to allow continuous discharge upon receipt of acceptable results from batch # 10.
- A discussion was held in regards to the flange rings that will be used to secure the HDPE pipe sections. AECOM has supplied a letter from the manufacturer of the solid (one piece) backup rings used to secure the HDPE flange connections. The manufacturer states that it is acceptable to cut a solid ring in order to fit the ring over the existing HDPE flanges. ARCADIS will request a formal submittal from AECOM regarding the backing ring modification and provide a “Reviewed and Noted” response to document this change/modification to the backing rings.
- A discussion was held regarding the elevations of the manholes and the HDPE pipe. AECOM has provided elevations for MH1-C and MH2 and it appears that this section of pipe will be relatively flat. ARCADIS has reviewed the elevations provided by AECOM and will provide a letter to AECOM with the remaining elevations for MH1-A and MH1-D. In addition, ARCADIS requests that AECOM make every effort to raise the elevation of the HDPE at MH2 where the HDPE will be slipped inside the existing RCP.
- AECOM and ARCADIS discussed the details of the sheeting alignment for the phase two areas. AECOM has provided survey data indicating that the actual location of the existing RCP near both MH1 and MH2 is slightly different than shown on the design. AECOM has requested that ARCADIS provide new sheeting alignments for the north and south ends to incorporate this change. ARCADIS requested that AECOM follow the design requirements (i.e., maximum trench width) to adjust the sheeting alignment based on field conditions in order to avoid any delays that may occur if conditions should change based on the existing concrete on the southern end. AECOM agrees to place the sheets at a distance of 7.5' from the center line of the RCP with the alignment to be determined after further excavation is completed to expose the concrete on the southern end.

- ARCADIS request details on the exploratory excavation on the southern end. AECOM plans to remove concrete and debris from the area and dispose of the material offsite. ARCADIS is concerned that by removing this additional material now that AECOM may need additional material to fill the area in order to drive the sheets for phase two. AECOM will remove the concrete and debris from the surface areas and then backfill with soil from the excavation rather than placing clean imported material in the excavation.
- AECOM confirms that the schedule for making the connections to MH1 and MH2 will be on or near February 13<sup>th</sup>. AECOM will provide an updated schedule.
- AECOM informs attendees that the original plan for bypassing flow through the sewer by installing an inflatable plug at MH2 will not work as planned. AECOM is currently discussing alternative approaches due to the size restrictions at MH2 (24" opening). The plug that was initially proposed by AECOM will not fit through the opening while the dewatering lines are in place. AECOM is currently discussing a temporary brick and mortar plug and/or sandbags.
- AECOM requests permission to use an additive to accelerate the curing on the concrete collars so that forms may be removed and backfill of phase one can continue. ARCADIS requests that AECOM provide a submittal with details.
- AECOM informs attendees that the proposed Fernco connector for the southern end has not been ordered yet since the true outside diameter is still unknown. ARCADIS requests that once the conditions on the southern end are better understood that AECOM suggest alternative connection methods. ARCADIS also suggests that some type of water stop be included in the alternative plan.
- AECOM informs attendees that they have performed deflection testing inside of the HDPE pipe by recording measurements along the length of pipe to document "pre-backfill" conditions. AECOM will re-check these same locations after backfill is placed to confirm that no deflection has occurred. AECOM was unable to perform testing with a "sled" since they could not locate one for 63" HDPE. In addition, the HDPE pipe was not perfectly round prior to placement so that testing would be relative to the original condition. ARCADIS states that this method will be acceptable.
- ARCADIS informs attendees that they have spoken with the city of Binghamton engineer, Phil Krey and the city may want a city representative onsite during the connection to the existing sewer.
- ARCADIS requests that AECOM provide details on the grouting methods and materials to be employed during the slip-lining of the HDPE pipe into the existing RCP. Specifically, ARCADIS would like to see the details involving the support of the HDPE pipe during grout placement.
- A discussion was held regarding outstanding submittals and requests. NYSEG requests that AECOM provide information and details as soon as possible to allow adequate review.

## **Action Items**

- AECOM to provide details on the material that will be used for the CLSM (fill for abandonment of the existing sewer) AECOM will also verify availability.
- AECOM to provide details on the concrete accelerant to be used for the concrete collars at MH1-B and MH1-C.
- AECOM to provide details on the slip lining methods and materials.

- AECOM to provide cut sheets for gaskets that will be used at the HDPE flange connections.
- AECOM to submit the leak testing procedure.

Upon receipt of this memorandum, please notify Michael Flynn at 413-281-5886 ([Michael.Flynn@arcadis-us.com](mailto:Michael.Flynn@arcadis-us.com)) or Mr. Matt DeGracia at 315.671.9436 ([Mathew.Degracia@arcadis-us.com](mailto:Mathew.Degracia@arcadis-us.com)) within 2 days if you believe that any portion of this summary does not accurately reflect issues discussed/resolved during the January 10, 2012, or if additional items should be recorded in this summary. If modifications are made, a follow-up memorandum will be distributed. The next meeting is scheduled for 1:30 p.m. Wednesday January 18, 2012.





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**MEMO**

To:

Tracy Blazicek, NYSEG  
Eric Knapp, NYSDEC  
Anthony Karziel, NYSDEC  
Steve Beam, AECOM  
Steve Kostage, AECOM  
Ryan Green, AECOM  
George Fisher, AECOM

Mark Gravelding, ARCADIS  
Jason Brien, ARCADIS  
Matt DeGracia, ARCADIS  
Kasey Cornwell, ARCADIS  
Mike Flynn, ARCADIS

From:

Jason Brien

Date:

February 7, 2012

ARCADIS Project No.:

B0013103.0001.00001

Subject:

New York State Electric & Gas Corporation – 66 Inch Storm Sewer Replacement,  
Court Street Former MGP Site  
Project Meeting Minutes # 8 – February 02, 2012

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This memorandum summarizes items discussed during the February 02, 2012 project coordination meeting for the storm sewer replacement at the New York State Electric & Gas Corporation (NYSEG) Court St. former manufactured gas plant (MGP) site located in Binghamton, New York.

***CALL IN NUMBER: 866-453-5550 PIN 4704977#***

**ATTENDEES**

The following personnel attended the February 02, 2012:

- Tracy Blazicek, NYSEG
- Joe Simone, NYSEG
- Tony Karziel, NYSDEC (via teleconference)
- Eric Knapp, NYSDEC
- Steve Beam, AECOM
- Ryan Green, AECOM
- George Fischer, AECOM
- Jason Brien, ARCADIS
- Mike Flynn, ARCADIS

- Matt Degracia, ARCADIS (via teleconference)

Key items of discussion from the meeting are presented below.

#### **Comments / Corrections to Previous Meeting Minutes**

- No comments/ corrections to the previous meeting minutes

#### **Health and Safety**

- ARCADIS continues to perform perimeter air monitoring for particulates and VOCs during intrusive site activities as per the site CAMP. There have been no exceedances of site action levels to date.
- AECOM is monitoring the worker breathing zone inside the trench. AECOM continues to use a 4-gas meter placed in the trench during work. AECOM has resumed the use of odor control measures including Biosolve application. AECOM has begun pre-trenching the sheeting alignment for the phase two areas.
- AECOM provided a safety moment regarding housekeeping and also discussed subcontractors embracing the site Health and Safety Plan.

#### **Completed Construction Activities:1/25/12 – 2/02/12**

- AECOM is currently treating batch # 14 of water from the Temporary Water Treatment System (TWTS). AECOM has backwashed the carbon vessels in order to “re-seat” the carbon inside the vessel. AECOM believes that the issues with the system have been caused by “channelization” of the carbon which is allowing the water to pass through the carbon with limited contact time between the water and the carbon. AECOM will begin backwashing on a regular schedule of once per week and/or 40,000 to 60,000 gallons. AECOM and LRT will also install a gate valve at the end of the system in order to increase system pressure. The system was designed to operate at 500 gpm and 75 psi. The system is currently only running at approximately 130 gpm and 4-10 psi. LRT believes that the reduced pressure may also be contributing to the channelization issue. ARCADIS has received results for batch #10-2 and batch # 12 and the results were below the permit specifications. ARCADIS notes that batch # 11 was utilized by AECOM to back wash the carbon vessels and then combined with batch # 12. There will not be a re-treat sample from batch # 11. AECOM has started to discharge batch # 12.
- Tioga has completed the backfill of the pipe installed between manholes around MH-1B and MH-1C.
- Tioga has poured the southern concrete collar at MH-1C and the northern concrete collar at MH-1B.

- AECOM has completed pre-trenching the sheeting alignment on the north end for phase two (near MH-2).
- Tioga has begun driving the sheets at the northern alignment.
- AECOM has started pre-trenching on the southern end (near MH-1). Further work to remove existing concrete associated with the holder foundation and concrete pipe chase is continuing.
- Disposal waste streams: non-visually impacted soil and construction and demolition (C&D) debris to Broome County Landfill and visually impacted soil to ESMI for low-temperature thermal desorption (LTTD). No soil has been transported since the last meeting.
  - Disposal Tonnage (estimates to date):
    - Broome County Landfill (soil and C&D) - approximately 1,000 tons
    - ESMI (soil) - approximately 3,300 tons

#### **Upcoming Construction Activity / 2 Week Look Ahead**

- Continue dewatering the trench and treatment of groundwater at the TWTS under “batch” mode until results satisfactorily document the system is performing as designed and meeting the SPDES permit equivalent discharge criteria.
- Continue the removal of the phase one sheets to support the installation of the phase two sheets.
- Initiate excavation in the northern area.
- Test the bypass pumping system that will be used during phase two.

#### **Construction Issues / Discussion Items**

- A discussion was held regarding the continued issue with VOCs detected in the treated water samples. AECOM has backwashed the carbon vessels and will install a gate valve on the system in order to regulate the pressure inside the carbon vessels. ARCADIS has received several samples with acceptable results since the carbon was back-washed. NYSDEC stated that the decision on whether or not they will allow continuous discharge will be based upon acceptable sample results.
- AECOM and ARCADIS discuss the details of the sheeting alignment for the phase two areas. AECOM has requested that the northern and southern sheeting lines (where the sheeting intersects the existing 66” diameter storm sewer) be adjusted to reduce the length of the actual breach. AECOM hopes that by reducing the size of the breach that the amount of water entering the cell during the initial excavation will be reduced. ARCADIS states that minor changes to the alignment will not affect the structural integrity of the sheeting.

- AECOM states that the schedule for making the connections to MH-1 and MH-2 has been moved to February 20<sup>th</sup>. AECOM will provide an updated schedule.
- AECOM has continued investigation of the 66" diameter storm sewer and the concrete "pipe chase" that surrounds the sewer.
- AECOM is continuing to investigate the plugs that will be used for leak testing of the system. AECOM is having difficulty locating a plug that will fit inside of the manholes. AECOM suggests that testing of MH-1A and MH-1D be utilized as a "proof" test of the system. ARCADIS suggests that AECOM continue looking at alternatives in order to leak test the completed sewer system (i.e., all components installed and tied into the existing sewer).
- AECOM is continuing to investigate the Fernco connectors that will be used to connect the HDPE pipe to the existing sewer. Due to a large diameter differential between the two pipes, AECOM would need several intermediate connectors to connect from the 84" outside diameter (OD) of the existing sewer to the 63" OD HDPE pipe. AECOM is still investigating alternatives.  
AECOM requests permission to pre-cast the concrete bases with lifting hooks for MH-1A and MH-1D. Once the excavation is complete these slabs would then be lowered directly into place and set to appropriate grade. ARCADIS requests that AECOM submit a formal request

#### **Action Items**

- AECOM to provide details on the material that will be used for the CLSM (controlled low strength material) (fill for abandonment of the existing sewer) AECOM will also verify availability.
- AECOM to provide details on the slip lining methods and materials.
- AECOM to provide cut sheets for gaskets that have been and will be used at the HDPE flange connections.
- AECOM to submit the leak testing procedure.
- AECOM to submit the details of the proposed sheeting alignment changes in the phase two areas.
- AECOM to submit an alternate plan for bolting the manholes MH-1A and MH-1D to the concrete foundations.

Upon receipt of this memorandum, please notify Michael Flynn at 413-281-5886 ([Michael.Flynn@arcadis-us.com](mailto:Michael.Flynn@arcadis-us.com)) or Mr. Matt DeGracia at 315.671.9436 ([Mathew.Degracia@arcadis-us.com](mailto:Mathew.Degracia@arcadis-us.com)) within 2 days if you believe that any portion of this summary does not accurately reflect issues discussed/resolved during the January 10, 2012, or if additional items should be recorded in this summary. If modifications are made, a follow-up memorandum will be distributed. The next meeting is scheduled for 1:30 p.m. Wednesday January 18, 2012.



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**MEMO**

To:

Tracy Blazicek, NYSEG  
Eric Knapp, NYSDEC  
Anthony Karziel, NYSDEC  
Steve Beam, AECOM  
Steve Kostage, AECOM  
Ryan Green, AECOM  
George Fisher, AECOM

Mark Gravelding, ARCADIS  
Jason Brien, ARCADIS  
Matt DeGracia, ARCADIS  
Kasey Cornwell, ARCADIS  
Mike Flynn, ARCADIS

From:

Jason Brien

Date:

February 13, 2012

ARCADIS Project No.:

B0013103.0001.00001

Subject:

New York State Electric & Gas Corporation – 66 Inch Storm Sewer Replacement,  
Court Street Former MGP Site  
Project Meeting Minutes # 9 – February 07, 2012

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This memorandum summarizes items discussed during the February 07, 2012 project coordination meeting for the storm sewer replacement at the New York State Electric & Gas Corporation (NYSEG) Court St. former manufactured gas plant (MGP) site located in Binghamton, New York.

***CALL IN NUMBER: 866-453-5550 PIN 4704977#***

**ATTENDEES**

The following personnel attended the February 07, 2012:

- Tracy Blazicek, NYSEG
- Tony Karziel, NYSDEC (via teleconference)
- Steve Beam, AECOM
- Ryan Green, AECOM
- Jason Brien, ARCADIS (via teleconference)
- Mike Flynn, ARCADIS

Key items of discussion from the meeting are presented below.

### **Comments / Corrections to Previous Meeting Minutes**

- No comments/ corrections to the previous meeting minutes

### **Health and Safety**

- ARCADIS continues to perform perimeter air monitoring for particulates and VOCs during intrusive site activities as per the site CAMP. There have been no exceedances of site action levels to date.
- AECOM is monitoring the worker breathing zone inside the trench. AECOM continues to use a 4-gas meter placed in the trench during work. AECOM has resumed the use of odor control measures including Biosolve application. AECOM has begun pre-trenching the sheeting alignment for the phase two areas.
- AECOM provided a safety moment regarding increased activity and traffic at the site due to the phase two activities. Tioga will be driving sheets on the southern end pipe alignment while AECOM is excavating and loading trucks on the northern end of the alignment.

### **Completed Construction Activities:2/03/12 – 2/07/12**

- AECOM has discharged batches # 12 and # 13 of water from the Temporary Water Treatment System (TWTS). AECOM is currently back washing the carbon vessels with water from batch # 14 and will discharge this water after it has been re-treated through the system.
- AECOM has completed pre-trenching on both the northern and southern ends of the phase two areas.
- Tioga has completed the installation of the sheeting on the northern phase two area.
- Tioga has begun driving sheets for the southern end of the phase two area.
- Tioga has continued to remove the phase one sheeting.
- Disposal waste streams: non-visually impacted soil and construction and demolition (C&D) debris to Broome County Landfill and visually impacted soil to ESMI for low-temperature thermal desorption (LTTD). No soil has been transported since the last meeting.
  - Disposal Tonnage (estimates to date):
    - Broome County Landfill (soil and C&D) - approximately 1000 tons
    - ESMI (soil) - approximately 3300 tons

### **Upcoming Construction Activity / 2 Week Look Ahead**

- Continue driving sheets on the southern end of the phase two area.
- Begin excavation and loadout of impacted soils on the northern end of the phase two area.
- Install the bypass pumps and associated hoses.
- Test the bypass system.
- Breaking of the existing sewer line is scheduled for February 20<sup>th</sup>.

### **Construction Issues / Discussion Items**

- A discussion was held regarding the continued issue with VOC's in the treated water samples. Since AECOM last performed a backwash on the carbon vessels there have been 3 acceptable sample results. AECOM is currently back washing the vessels again. NYSDEC requests at least one more acceptable result before considering the continuous discharge from the Temporary Water Treatment System. AECOM will treat batch # 15 which will be "raw" water. The "re-treatment" of batch # 14 will not count towards the next acceptable sample.
- AECOM and ARCADIS discuss the details of the leak testing. AECOM has located a source for plugs that will fit the opening of the manholes and are capable of plugging the HDPE pipe.
- AECOM is continuing to investigate the Fernco connectors that will be used to connect the HDPE pipe to the RCP. AECOM has submitted an alternate plan involving concrete collars in place of the fernco connector. ARCADIS is reviewing the alternate plan.
- ARCADIS has not heard back from Phil Krey (city of Binghamton engineer) regarding the connection to the existing sewer. ARCADIS will continue to attempt to speak with Mr. Krey.

### **Action Items**

- AECOM to provide details on the material that will be used for the CLSM (fill for abandonment of the existing sewer) AECOM will also verify availability.
- AECOM to provide details on the slip lining methods and materials.
- AECOM to submit the leak testing procedure.
- AECOM to submit the details of the proposed sheeting alignment changes in the phase two areas.

Upon receipt of this memorandum, please notify Michael Flynn at 413-281-5886 ([Michael.Flynn@arcadis-us.com](mailto:Michael.Flynn@arcadis-us.com)) or Mr. Matt DeGracia at 315.671.9436 ([Mathew.Degracia@arcadis-us.com](mailto:Mathew.Degracia@arcadis-us.com)) within 2 days if you believe that any portion of this summary does not accurately reflect issues discussed/resolved during the February 7, 2012, or if additional items should be recorded in this summary. If modifications are made, a follow-up memorandum will be distributed. The next meeting is scheduled for 10:00 p.m. Tuesday February 14, 2012.



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**MEMO**

To:

Tracy Blazicek, NYSEG  
Eric Knapp, NYSDEC  
Anthony Karziel, NYSDEC  
Steve Beam, AECOM  
Steve Kostage, AECOM  
Ryan Green, AECOM  
George Fisher, AECOM

Mark Gravelding, ARCADIS  
Jason Brien, ARCADIS  
Matt DeGracia, ARCADIS  
Kasey Cornwell, ARCADIS  
Mike Flynn, ARCADIS

From:

Jason Brien

Date:

February 20, 2012

ARCADIS Project No.:

B0013103.0001.00001

Subject:

New York State Electric & Gas Corporation – 66 Inch Storm Sewer Replacement,  
Court Street Former MGP Site  
Project Meeting Minutes # 10 – February 14, 2012

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This memorandum summarizes items discussed during the February 14, 2012 project coordination meeting for the storm sewer replacement at the New York State Electric & Gas Corporation (NYSEG) Court St. former manufactured gas plant (MGP) site located in Binghamton, New York.

***CALL IN NUMBER: 866-453-5550 PIN 4704977#***

**ATTENDEES**

The following personnel attended the February 14, 2012 meeting:

- Tracy Blazicek, NYSEG
- Tony Karziel, NYSDEC (via teleconference)
- Eric Knapp, NYSDEC
- Steve Beam, AECOM
- Jason Brien, ARCADIS
- Matt DeGracia, ARCADIS
- Mike Flynn, ARCADIS

Key items of discussion from the meeting are presented below.



### **Comments / Corrections to Previous Meeting Minutes**

- No comments/ corrections to the previous meeting minutes

### **Health and Safety**

- ARCADIS continues to perform perimeter air monitoring for particulates and VOCs during intrusive site activities as per the site CAMP. There have been no exceedances of site action levels to date.
- AECOM is monitoring the worker breathing zone inside the trench. AECOM continues to use a 4-gas meter placed in the trench during work. AECOM has continued the use of odor control measures including Biosolve application.
- AECOM provided a safety moment regarding maintaining safety focus during the upcoming site work involving phase two. NYSEG shares a safety moment regarding the operation of company owned vehicles and reminds attendees to check the vehicle to be sure that you are familiar with all of the safety features of the vehicle and that the vehicle is properly adjusted to your body, especially the head restraints which are often overlooked.

### **Completed Construction Activities:2/07/12 – 2/14/12**

- AECOM has now collected four consecutive clean batches of treated water from the TWTS. (Batches # 12, #13 , #14 and # 15) AECOM will treat and discharge water continuously but will back wash the carbon vessels on a regular schedule of once per week or 60,000 gallons. NYSDEC will allow AECOM to begin continuous discharge of treated water but requests that ARCADIS collect the confirmation samples at the beginning of each period rather than at the end of each period. NYSDEC has also agreed to allow a modification to the SPDES equivalent discharge permit involving the collection of TSS and Oil and Grease samples. The permit equivalent requires these samples to be collected daily but since the system has shown that it can adequately treat these constituents, NYSDEC will allow these samples to be collected weekly.
- AECOM has completed excavation and offsite disposal of material from the northern portion of the phase two area.
- Tioga will complete the sheeting installation at the southern portion of the phase two area today.
- AECOM will begin excavation on the southern portion today or tomorrow.
- Tioga has continued to remove the phase one sheeting.

- Disposal waste streams: non-visually impacted soil and construction and demolition (C&D) debris to Broome County Landfill and visually impacted soil to ESMI for low-temperature thermal desorption (LTTD). No soil has been transported since the last meeting.
  - Disposal Tonnage (estimates to date):
    - Broome County Landfill (soil and C&D) - approximately 1800 tons
    - ESMI (soil) - approximately 3400 tons

#### **Upcoming Construction Activity / 2 Week Look Ahead**

- Complete sheets on the southern end of the phase two area.
- Begin excavation and loadout of impacted soils on the southern end of the phase two area.
- Install the bypass pumps and associated hoses.
- Test the bypass system.
- Pour the bases for MH-1A and MH-1D
- Breaking of the existing sewer line is scheduled for February 20<sup>th</sup>.

#### **Construction Issues / Discussion Items**

- ARCADIS and AECOM are currently working on the final details of the pre-cast manhole bases. AECOM will submit the final details to ARCADIS
- AECOM is continuing to investigate the Fernco connectors that will be used to connect the HDPE pipe to the RCP. AECOM has submitted an alternate to the Fernco connector and ARCADIS is reviewing the alternate.
- AECOM will submit the slip-lining procedures to ARCADIS.
- AECOM is continuing work on the phase two flow chart which will work through potential issues with the phase two work.
- ARCADIS has not heard back from Phil Krey (city of Binghamton engineer) regarding the connection to the existing sewer. ARCADIS will continue to attempt to speak with Mr. Krey.

#### **Action Items**

- AECOM to provide details on the material that will be used for the CLSM (fill for abandonment of the existing sewer) AECOM will also verify availability.
- AECOM to provide details on the slip lining methods and materials.
- AECOM to submit the leak testing procedure.



Upon receipt of this memorandum, please notify Michael Flynn at 413-281-5886 ([Michael.Flynn@arcadis-us.com](mailto:Michael.Flynn@arcadis-us.com)) or Mr. Matt DeGracia at 315.671.9436 ([Mathew.DeGracia@arcadis-us.com](mailto:Mathew.DeGracia@arcadis-us.com)) within 2 days if you believe that any portion of this summary does not accurately reflect issues discussed/resolved during the February 14, 2012, or if additional items should be recorded in this summary. If modifications are made, a follow-up memorandum will be distributed. The next meeting is scheduled for 10:00 a.m. Tuesday February 21, 2012.



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**MEMO**

To:

Tracy Blazicek, NYSEG  
Eric Knapp, NYSDEC  
Anthony Karziel, NYSDEC  
Steve Beam, AECOM  
Steve Kostage, AECOM  
Ryan Green, AECOM  
George Fisher, AECOM

Mark Gravelding, ARCADIS  
Jason Brien, ARCADIS  
Matt DeGracia, ARCADIS  
Kasey Cornwell, ARCADIS  
Mike Flynn, ARCADIS

From:

Jason Brien

Date:

February 28, 2012

ARCADIS Project No.:

B0013103.0001.00001

Subject:

New York State Electric & Gas Corporation – 66 Inch Storm Sewer Replacement,  
Court Street Former MGP Site  
Project Meeting Minutes # 11 – February 21, 2012

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This memorandum summarizes items discussed during the February 21, 2012 project coordination meeting for the storm sewer replacement at the New York State Electric & Gas Corporation (NYSEG) Court St. former manufactured gas plant (MGP) site located in Binghamton, New York.

***CALL IN NUMBER: 866-453-5550 PIN 4704977#***

**ATTENDEES**

The following personnel attended the February 21, 2012:

- Tracy Blazicek, NYSEG
- Steve Beam, AECOM
- Jason Brien, ARCADIS
- Matt DeGracia, ARCADIS (via teleconference)
- Mike Flynn, ARCADIS

Key items of discussion from the meeting are presented below.

### **Comments / Corrections to Previous Meeting Minutes**

- No comments/ corrections to the previous meeting minutes

### **Health and Safety**

- ARCADIS continues to perform perimeter air monitoring for particulates and VOCs during intrusive site activities as per the site CAMP. There have been no exceedances of site action levels to date.
- AECOM is monitoring the worker breathing zone inside the trench. AECOM continues to use a 4-gas meter placed in the trench during work. AECOM has continued the use of odor control measures including Biosolve application.
- AECOM provided a safety update regarding the worker that was injured last week. The worker injured his ankle climbing down from a truck after checking the liner in the truck. AECOM had a “safety standown” last week after the incident to review safety procedures and to re-focus attention on safety. AECOM has also discontinued any climbing on trucks at the site (all drivers will now use ladders to access truck trailers). AECOM has also reviewed all routine tasks at the site to increase awareness and AECOM has initiated a safety recognition program where employees will be rewarded for safety improvements at the site.

### **Completed Construction Activities:2/14/12 – 2/21/12**

- AECOM has continued treating water at the Temporary Water Treatment System in “batch” mode due to the lack of water currently being treated. As long as the volume of water remains low, AECOM will treat and discharge as needed. AECOM will also continue backwashing the carbon vessels weekly.
- AECOM has completed excavation and offsite disposal of material from the northern portion of the phase two area. Work continues on the southern portion.
- Tioga has completed the installation of the northern phase two sheeting. The remaining sheets on the southern portion will be driven once excavation is completed.
- Tioga has removed the existing RCP from the northern portion and AECOM has begun removing the RCP from the southern portion.
- Tioga has continued to remove the phase one sheeting.
- Tioga has poured the manhole bases for MH1-A and MH1-D

- Disposal waste streams: non-visually impacted soil and construction and demolition (C&D) debris to Broome County Landfill and visually impacted soil to ESMI for low-temperature thermal desorption (LTTD).
  - Disposal Tonnage (estimates to date):
    - Broome County Landfill (soil and C&D) - approximately 2100 tons
    - ESMI (soil) - approximately 4000 tons

#### **Upcoming Construction Activity / 2 Week Look Ahead**

- Complete sheets on the southern end of the phase two area.
- Place the base for MH1-A
- Pour the concrete for the emergency spillway on the southern portion.
- Complete the installation of the railings around the southern portion.
- Remove the remaining phase one sheeting.
- Begin preparing the sub-base on the southern portion.

#### **Construction Issues / Discussion Items**

- ARCADIS is currently reviewing AECOM's grouting plan for the slip line sections.
- AECOM will re-submit the Fernco-alternate plan for review.

#### **Action Items**

- AECOM to submit the leak testing procedure.

Upon receipt of this memorandum, please notify Michael Flynn at 413-281-5886 ([Michael.Flynn@arcadis-us.com](mailto:Michael.Flynn@arcadis-us.com)) or Mr. Matt DeGracia at 315.671.9436 ([Mathew.Degracia@arcadis-us.com](mailto:Mathew.Degracia@arcadis-us.com)) within 2 days if you believe that any portion of this summary does not accurately reflect issues discussed/resolved during the February 21, 2012, or if additional items should be recorded in this summary. If modifications are made, a follow-up memorandum will be distributed. **The next meeting is scheduled for 10:00 a.m. Tuesday February 28, 2012.**



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New York 13214 - 0066  
Tel 315.446.9120  
Fax 315.445.9161

**MEMO**

To:

Tracy Blazicek, NYSEG  
Eric Knapp, NYSDEC  
Anthony Karwiel, NYSDEC  
Steve Beam, AECOM  
Steve Kostage, AECOM  
Ryan Green, AECOM  
George Fisher, AECOM

Mark Gravelding, ARCADIS  
Jason Brien, ARCADIS  
Matt DeGracia, ARCADIS  
Kasey Cornwell, ARCADIS  
Mike Flynn, ARCADIS

From:

Jason Brien

Date:

March 6, 2012

ARCADIS Project No.:

B0013103.0001.00001

Subject:

New York State Electric & Gas Corporation – 66 Inch Storm Sewer Replacement,  
Court Street Former MGP Site  
Project Meeting Minutes # 12 – February 28, 2012

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This memorandum summarizes items discussed during the February 28, 2012 project coordination meeting for the storm sewer replacement at the New York State Electric & Gas Corporation (NYSEG) Court St. former manufactured gas plant (MGP) site located in Binghamton, New York.

***CALL IN NUMBER: 866-453-5550 PIN 4704977#***

**ATTENDEES**

The following personnel attended the February 28, 2012 meeting:

- Tracy Blazicek, NYSEG
- Steve Beam, AECOM
- Jason Brien, ARCADIS
- Matt DeGracia, ARCADIS (via teleconference)
- Mike Flynn, ARCADIS

Key items of discussion from the meeting are presented below.

**Comments / Corrections to Previous Meeting Minutes**

- No comments/corrections to the previous meeting minutes

#### **Health and Safety**

- ARCADIS continues to perform perimeter air monitoring for particulates and VOCs during intrusive site activities as per the site CAMP. There have been no exceedances of site action levels to date.
- AECOM is monitoring the worker breathing zone inside the trench. AECOM continues to use a 4-gas meter placed in the trench during work.
- AECOM provided a safety moment regarding maintaining the focus on safety as the project starts to wind down.

#### **Completed Construction Activities 2/21/12 – 2/28/12:**

- AECOM has continued treating water at the Temporary Water Treatment System in “continuous” discharge mode. AECOM continues to pump water from the southern end of the phase two area (where substantial amounts of water were encountered during the installation of MH-1A) AECOM continues to run the system in 24 hour mode with overnight and weekend staffing. AECOM continues to backwash the carbon vessels twice a week (Tuesday and Thursday). ARCADIS continues to collect discharge samples once per week.
- ARCADIS collected AE-batch # 16 last week and all results met the discharge criteria in the SPDES equivalent discharge permit. ARCADIS collected AE-batch # 17 today.
- AECOM has completed dewatering the entire excavation area that was flooded during a storm event on Friday February 24, 2011.
- AECOM has completed excavation and offsite disposal of material from the southern portion of the phase two area.
- Tioga has completed the installation of all of the phase two sheeting.
- Tioga has poured both of the emergency spillways.
- Tioga has installed the bases for MH-1A and MH-1D.
- Tioga has installed MH-1D and slip-lined the HDPE between MH-1D and existing MH-2.
- Tioga is currently pouring the inverts inside MH-1D.



- Disposal waste streams: non-visually impacted soil and construction and demolition (C&D) debris to Broome County Landfill and visually impacted soil to ESMI for low-temperature thermal desorption (LTTD).
  - Disposal Tonnage (estimates to date):
    - Broome County Landfill (soil and C&D) - approximately 2,500 tons
    - ESMI (soil) - approximately 4,700 tons

#### **Upcoming Construction Activity / 2 Week Look Ahead**

- Form and pour the concrete collars at MH-1D today.
- Clean and prepare MH-1 for slip-lining.
- Install MH-1A and slip-line the HDPE into MH-1.
- Grout the slip-lined sections of HDPE.
- Perform leak testing of the HDPE.
- Remove the remaining phase one sheeting.

#### **Construction Issues / Discussion Items**

- AECOM will re-submit the Fernco-alternate plan for review.

#### **Action Items**

- AECOM to submit the leak testing procedure.

Upon receipt of this memorandum, please notify Michael Flynn at 413-281-5886 ([Michael.Flynn@arcadis-us.com](mailto:Michael.Flynn@arcadis-us.com)) or Mr. Matt DeGracia at 315.671.9436 ([Mathew.Degracia@arcadis-us.com](mailto:Mathew.Degracia@arcadis-us.com)) within 2 days if you believe that any portion of this summary does not accurately reflect issues discussed/resolved during the February 28, 2012, or if additional items should be recorded in this summary. If modifications are made, a follow-up memorandum will be distributed. The next meeting is scheduled for 10:00 a.m. Tuesday March 6, 2012.



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**MEMO**

To:

Tracy Blazicek, NYSEG  
Eric Knapp, NYSDEC  
Anthony Karziel, NYSDEC  
Steve Beam, AECOM  
Steve Kostage, AECOM  
Ryan Green, AECOM  
George Fisher, AECOM

Mark Gravelding, ARCADIS  
Jason Brien, ARCADIS  
Matt DeGracia, ARCADIS  
Kasey Cornwell, ARCADIS  
Mike Flynn, ARCADIS

From:

Jason Brien

Date:

March 12, 2012

ARCADIS Project No.:

B0013103.0001.00001

Subject:

New York State Electric & Gas Corporation – 66 Inch Storm Sewer Replacement,  
Court Street Former MGP Site  
Project Meeting Minutes # 13 – March 6, 2012

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This memorandum summarizes items discussed during the March 6, 2012 project coordination meeting for the storm sewer replacement at the New York State Electric & Gas Corporation (NYSEG) Court St. former manufactured gas plant (MGP) site located in Binghamton, New York.

***CALL IN NUMBER: 866-453-5550 PIN 4704977#***

**ATTENDEES**

The following personnel attended the March 6, 2012:

- Tracy Blazicek, NYSEG
- Steve Beam, AECOM
- Jason Brien, ARCADIS (via teleconference)
- Matt DeGracia, ARCADIS (via teleconference)
- Mike Flynn, ARCADIS

Key items of discussion from the meeting are presented below.

### **Comments / Corrections to Previous Meeting Minutes**

- No comments/ corrections to the previous meeting minutes

### **Health and Safety**

- ARCADIS continues to perform perimeter air monitoring for particulates and VOCs during intrusive site activities as per the site CAMP. There have been no exceedances of site action levels to date.
- AECOM is monitoring the worker breathing zone inside the trench. AECOM continues to use a 4-gas meter placed in the trench during work.
- AECOM provided a safety moment regarding maintaining the focus on safety as the project starts to wind down.

### **Completed Construction Activities: 2/28/12 – 3/06/12**

- AECOM continued treating water at the Temporary Water Treatment System (TWTS) in “continuous” discharge mode. AECOM continued to pump water from the southern end of the Phase Two area to maintain a dry condition at MH-1A. AECOM continued to operate the TWTS in 24 hour mode with overnight and weekend staffing. AECOM backwashed the carbon vessels twice during this time period.
- ARCADIS collected AE-batch # 17 last week and all results met the discharge criteria specified in the SPDES equivalent discharge permit. ARCADIS will collect AE-batch # 18 tomorrow.
- AECOM continues to perform bypass pumping until the leak test has been completed.
- Tioga poured the inverts inside manholes MH-1A and MH-1D.
- Tioga poured the concrete collars at manholes MH-1A and MH-1D.
- Tioga installed MH-1A and slip-lined the HDPE pipe between MH-1 and MH-1A.
- Tioga grouted the slip-line portion of pipe at MH-2 and attempted to grout the slip-line portion of pipe at MH-1. The grouting of MH-1 was discontinued after grout began leaking from a section of the RCP near the MH-1 pipe chase. Tioga was unable to repair the leaking section due to the presence of miscellaneous debris (e.g., soil, grout) between the existing RCP and the walls of the pipe chase. Tioga will remove the debris to facilitate repair of the leaking RCP section prior to re-grouting the slip-line joint at MH-1.
- Tioga has begun placing backfill between MH-1A and MH-1B.

- Disposal waste streams: non-visually impacted soil and construction and demolition (C&D) debris to Broome County Landfill and visually impacted soil to ESMI for low-temperature thermal desorption (LTTD).
  - Disposal Tonnage (estimates to date):
    - Broome County Landfill (soil and C&D) - approximately 2,500 tons
    - ESMI (soil) - approximately 4,700 tons

#### **Upcoming Construction Activity / 2 Week Look Ahead**

- Tioga will perform leak testing on the HDPE pipe and manholes today. AECOM will discontinue bypass pumping once the leak testing is complete.
- Tioga will continue backfilling between MH-1A and MH-1B. Tioga will then backfill between MH-1C and MH-1D.
- AECOM has scheduled the installation of the Fernco alternate for March 14, 2012.
- Tioga will begin removing sheetpiling next week.
- AECOM is planning to demobilize on the week of March 30, 2012.

#### **Construction Issues / Discussion Items**

- ARCADIS requests that AECOM begin assembling all of the necessary documentation for the Final Engineering Certification Report (FECR). ARCADIS will forward a list of items needed for the report to AECOM.
- A discussion was held regarding the TWTS. AECOM cannot discontinue dewatering operations at the southern end (near MH-1A) until the Fernco alternate has been installed, to prevent groundwater infiltration into the work area.

#### **Action Items**

- AECOM to submit items for the FECR.

Upon receipt of this memorandum, please notify Michael Flynn at 413-281-5886 ([Michael.Flynn@arcadis-us.com](mailto:Michael.Flynn@arcadis-us.com)) or Mr. Matt DeGracia at 315.671.9436 ([Mathew.Degracia@arcadis-us.com](mailto:Mathew.Degracia@arcadis-us.com)) within 2 days if you believe that any portion of this summary does not accurately reflect issues discussed/resolved during the March 06, 2012, or if additional items should be recorded in this summary. If modifications are made, a follow-up memorandum will be distributed. The next meeting is scheduled for 10:00 a.m. Wednesday March 14, 2012.



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**MEMO**

To:

Tracy Blazicek, NYSEG  
Eric Knapp, NYSDEC  
Anthony Karziel, NYSDEC  
Steve Beam, AECOM  
Steve Kostage, AECOM  
Ryan Green, AECOM  
George Fisher, AECOM

Mark Gravelding, ARCADIS  
Jason Brien, ARCADIS  
Matt DeGracia, ARCADIS  
Kasey Cornwell, ARCADIS  
Mike Flynn, ARCADIS

From:

Jason Brien

Date:

March 19, 2012

ARCADIS Project No.:

B0013103.0001.00001

Subject:

New York State Electric & Gas Corporation – 66 Inch Storm Sewer Replacement,  
Court Street Former MGP Site  
Project Meeting Minutes # 14 – March 14, 2012

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This memorandum summarizes items discussed during the March 14, 2012 project coordination meeting for the storm sewer replacement at the New York State Electric & Gas Corporation (NYSEG) Court St. former manufactured gas plant (MGP) site located in Binghamton, New York.

***CALL IN NUMBER: 866-453-5550 PIN 4704977#***

**ATTENDEES**

The following personnel attended the March 14, 2012:

- Tracy Blazicek, NYSEG
- Tony Karziel, NYSDEC (via teleconference)
- Eric Knapp, NYSDEC
- Steve Beam, AECOM
- Jason Brien, ARCADIS
- Matt DeGracia, ARCADIS (via teleconference)
- Mike Flynn, ARCADIS

Key items of discussion from the meeting are presented below.

### **Comments / Corrections to Previous Meeting Minutes**

- No comments/ corrections to the previous meeting minutes

### **Health and Safety**

- ARCADIS continues to perform perimeter air monitoring for particulates and VOCs during intrusive site activities as per the site CAMP. There have been no exceedances of site action levels to date.
- AECOM is monitoring the worker breathing zone inside the trench. AECOM continues to use a 4-gas meter placed in the trench during work.
- AECOM provided a safety moment regarding safety at home. NYSDEC provided additional comments regarding the use of safety glasses when working at home.

### **Completed Construction Activities: 3/06/12 – 3/14/12**

- AECOM continued treating water at the Temporary Water Treatment System (TWTS) under “continuous” discharge mode. AECOM pumped water from the southern end of the Phase Two area (where substantial amounts of water were encountered during the installation of MH-1A). AECOM operated the system in 24 hour mode with overnight and weekend staffing.
- ARCADIS collected and submitted treated groundwater sample “AE-batch # 18” for laboratory analysis. All results were in compliance with the specified discharge criteria of the SPDES equivalent discharge permit. ARCADIS will collect AE-batch # 19 tomorrow. Note that this will be the last weekly sample from the TWTS as AECOM will be backfilling the area near MH-1A this week and taking the system offline.
- AECOM backwashed the carbon vessels twice during the week of 3/5/12.
- AECOM has performed the in-situ leak testing of the HDPE pipe and manholes.
- AECOM has discontinued bypass pumping.
- Tioga backfilled the excavated trench between manholes MH-1A and MH-1B and between manholes MH-1C and MH-1D including the areas between the concrete collars at each manhole.
- Tioga has abandoned the bypassed portion of the pre-existing RCP storm sewer pipe by backfilling the pipe with CLSM material.

- Chenango Contracting has begun fabricating and installing the “Fernco-alternate” connectors at the north and south slip-lined sections (i.e., where the HDPE pipe has been slip-lined into the existing RCP).
- Tioga has begun pulling the Phase Two sheeting.
- Disposal waste streams: visually non-impacted soil and construction and demolition (C&D) debris to Broome County Landfill and visually impacted soil to ESMI for low-temperature thermal desorption (LTTD) summaries are presented below:
  - Disposal Tonnage (estimates to date):
    - Broome County Landfill (soil and C&D) - approximately 2500 tons
    - ESMI (soil) - approximately 4700 tons

#### **Upcoming Construction Activity / 2 Week Look Ahead**

- Chenango Contracting will complete the installation of the Fernco alternate connectors tomorrow.
- AECOM and Tioga will pour non-shrink grout inside the Fernco alternate connectors.
- AECOM and TIOGA will pour CLSM around the outside of the Fernco alternate connectors.
- Tioga will complete the abandonment of the existing RCP sewer pipe.
- Tioga will complete the grout in the southern slip-line section near MH1. (this was discontinued originally due to leaks from the RCP sections). Slip lining and grouting of the annulus between the RCP and HPDE pipe was previously completed near manhole MH-2.
- Tioga will continue pulling sheets.
- AECOM will decontaminate the TWTS.
- Tioga will pour the tops for the manholes.
- AECOM is anticipating site demobilization during the week of March 26, 2012.

#### **Construction Issues / Discussion Items**

- ARCADIS requests that AECOM begin assembling all of the necessary documentation to support the Engineering Certification Report (ECR). ARCADIS will forward to AECOM a list of items necessary to complete the report.
- A discussion was held regarding the grouting sequence at the Fernco alternate connectors. AECOM will place the non-shrink grout into the connectors while simultaneously placing the CLSM around the outside of the Fernco alternate to allow for pressure equalization during the filling process. The grouting of the slip-lined section at the south end will take place after the CLSM has been poured in

the pipe chase. Tioga has repaired the leaking sections of RCP (at the south end) and the leak inside MH-2 (at the north end) with hydrophilic cement.

### **Action Items**

- AECOM to submit items for the ECR.

Upon receipt of this memorandum, please notify Michael Flynn at 413-281-5886 ([Michael.Flynn@arcadis-us.com](mailto:Michael.Flynn@arcadis-us.com)) or Mr. Matt DeGracia at 315.671.9436 ([Mathew.Degracia@arcadis-us.com](mailto:Mathew.Degracia@arcadis-us.com)) within 2 days if you believe that any portion of this summary does not accurately reflect issues discussed/resolved during the March 14, 2012, or if additional items should be recorded in this summary. If modifications are made, a follow-up memorandum will be distributed.

As the majority of site work is now complete, this will be the final weekly progress meeting.





## **Appendix C**

Daily Progress Reports

(Compact Disk only)

**DAILY PROGRESS REPORT 001: 10/31/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This weekly progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for October 31, 2011 as observed by Kasey Cornwell of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

On October 31, 2011 the Court Street project kickoff meeting was held at 9am. In attendance were representatives from: NYSEG, ARCADIS, AECOM, and NYSDEC. Project schedule and roles and responsibilities were discussed.

Following the meeting AECOM remained onsite to continue mobilization activities. These tasks included; mobilization of connex box and loader, construction of a temporary stone pad for office trailers, stockpiling of HDPE pipe, preparation for installation of electrical subpanels and removal of miscellaneous NYSEG (soil piles and other debris) from within the work zone. Note: existing material stockpiles remain on the NYSEG property.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis (when intrusive activities are taking place) using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 25 – 45° F

Humidity: NA

Cloud cover: None

Rainfall: 0.00"

Wind Speed Average and Direction: 3 mph/NW, Wind Speed Max: 5 mph

CAMP:

No intrusive activities conducted onsite, therefore no CAMP stations deployed.

CAMP Calibration: NA

**C. Remarks**

-none

ESMI/Non-Haz Disposed Offsite (daily) (tons): **0/0**  
ESMI/Non-Haz Disposed Offsite (total to date) (tons): **0/0**

#### **D. UPCOMING SITE ACTIVITIES**

AECOM will continue pre-construction activities, including installation of silt fence/erosion control, preparation of contractor entrance and decontamination pad, site survey of existing site features and trench alignment and mobilization of site trailers and sanitary facilities. ARCADIS will deploy CAMP stations prior to installation of silt fence/erosion control measures.

#### **E. DAILY SITE PHOTOGRAPHS**



Constructing stabilized construction entrance

**DAILY PROGRESS REPORT 002: 11/1/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for November 1, 2011 as observed by Kasey Cornwell of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

On November 1, 2011, AECOM constructed site trailer pad and completed the stabilized construction entrance. AECOM coordinated with MODSPACE to install one of two trailers scheduled for use on site (second site trailer scheduled for delivery 11/3/11) and directed the placement of sanitary facilities. AECOM initiated installation of silt fencing/erosion control around perimeter of work area, specifically northwest, southern, and northern corners. NYSEG employees onsite to clean up debris along the western edge of site.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis (when intrusive activities are taking place) using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 30 – 50° F

Humidity: NA

Cloud cover: None

Rainfall: 0.00"

Wind Speed Average and Direction: 4 mph/NW, Wind Speed Max: 6 mph

**CAMP:**

Upwind (UP) and Downwind #1 (DW1) CAMP stations deployed prior to intrusive activities taking place.

No exceedances or equipment issues to report.

CAMP Calibration: Zero Calibration check completed for Dust Trak units for each station, no issues noted.

PID units not calibrated on 11/1/11, initial calibration completed by rental company prior delivery (10/31/11).

**C. Remarks**

-none

ESMI/Non-Haz Disposed Offsite (daily) (tons): **0/0**  
ESMI/Non-Haz Disposed Offsite (total to date) (tons): **0/0**

#### **D. UPCOMING SITE ACTIVITIES**

AECOM will continue pre-construction activities, including completion of silt fence/erosion control measures, preparation of decontamination pad, coordination with JP Rogers electrician to facilitate site electrical hookups, survey of existing site features and trench alignment and mobilization of remaining site trailer.

#### **E. DAILY SITE PHOTOGRAPHS**



**Stabilized Construction Entrance**





**Relocating and stockpiling HDPE pipe**

**DAILY PROGRESS REPORT 003: 11/2/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for November 2, 2011 as observed by Kasey Cornwell of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

On November 2, 2011 AECOM completed installation of silt fencing/erosion control, with the exception of work perimeter bordered by low concrete wall, where fencing was determined unnecessary (as approved by NYSEG) and initiated construction of decontamination pad. AECOM performed trenching from electrical subpanel at southeast corner of work perimeter to site trailer pad and initiated construction of decontamination pad (see "Remarks").

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis (when intrusive activities are taking place) using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 33 – 55° F

Humidity: NA

Cloud cover: None

Rainfall: 0.00"

Wind Speed Average and Direction: 2 mph/NW and N, Wind Speed Max: 6 mph

CAMP:

Upwind (UP) and Downwind #1 (DW1) CAMP stations deployed prior to intrusive activities taking place. CAMP station positions changed based on wind direction. No exceedances or equipment issues to report.

CAMP Calibration: Zero Calibration check completed for Dust Trak units for each station, no issues noted. PID units calibrated, no issues noted.

**C. Remarks**

AECOM questioned design of decontamination pad, concerns related to height of underlining sand berm. ARCADIS approved lowering height of berm from 18" to 12".

ESMI/Non-Haz Disposed Offsite (daily) (tons): **0/0**  
ESMI/Non-Haz Disposed Offsite (total to date) (tons): **0/0**

#### **D. UPCOMING SITE ACTIVITIES**

AECOM will continue pre-construction activities, preparation of decontamination pad, coordination with JP Rogers electrician to facilitate site electrical hookups, survey of existing site features and trench alignment and mobilization of remaining site trailer.

#### **E. DAILY SITE PHOTOGRAPHS**



**Trench for electrical subpanel power**





**Electrical subpanel**

**DAILY PROGRESS REPORT 004: 11/3/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for November 3, 2011 as observed by Kasey Cornwell of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

On November 3, 2011 AECOM completed construction of decontamination pad in accordance with specifications and continued mobilization activities including overseeing delivery and placement of second site trailer. Keystone Associates onsite to survey site features and sheetpile layout points (see remarks).

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis (when intrusive activities are taking place) using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 35 – 58° F

Humidity: NA

Cloud cover: None

Rainfall: 0.00"

Wind Speed Average and Direction: 2 mph/NW and N, Wind Speed Max: 7 mph

**CAMP:**

Upwind (UP), Downwind #1 (DW1) and Downwind #2 CAMP stations deployed prior to intrusive activities taking place. CAMP station positions changed based on wind direction. No exceedances to report. DW1 PID – battery died and was down for ~3 hrs while unit was recharged enough to re-connect. DW 2 PID did not data log during duration of days activities. ARCADIS will resolve equipment issues on 11/4/11 and switch out any faulty components.

CAMP Calibration: Zero Calibration check completed for Dust Trak units for each station, no issues noted. PID units calibrated, with no issues noted.

**C. Remarks**

Keystone Associates noted discrepancy in locations of Manholes MW-1C and MW-1D, it was noted that they were using North American Vertical Datum 1988 (NAVD 88) (vertical datum) and North American

Datum 1983 New York State Central Zone (NAD 83) (horizontal datum), ARCADIS requested they switch to National Geodetic Vertical Datum 1929 (NGVD 29) (vertical datum) as described in the Design document. Keystone Associates also noted that MH-1 and MH-2 were 1.7' closer then described on drawings provided in Design document (Keystone Associated surveyed these features using NAD 83 ). AECOM voiced concerns in the integrity of the replacement sewer path and sheet pile alignment. ARCADIS reviewed the as-surveyed information and responded to the apparent discrepancy in a November 3, 2011 e-mail that provided a resolution to the issue..

ESMI/Non-Haz Disposed Offsite (daily) (tons): **0/0**

ESMI/Non-Haz Disposed Offsite (total to date) (tons): **0/0**

#### **D. UPCOMING SITE ACTIVITIES**

AECOM will provide one employee to oversee Keystone Associates on 11/4/11 while they complete the survey of sheet pile alignment.

#### **E. DAILY SITE PHOTOGRAPH**



#### **Construction Decontamination Pad base**



**Decontamination Pad liner system (non-woven-geotextile – HDPE liner – non-woven geotextile)**

**DAILY PROGRESS REPORT 005: 11/4/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for November 4, 2011 as observed by Kasey Cornwell of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

On November 4, 2011, Keystone Associates performed survey layout in accordance with the Contract Documents to support pre-trenching activities.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 30° F to 45°F

Humidity: NA

Cloud cover: Partial Clouds

Rainfall: 0.00"

Wind Speed Average and Direction: 2 mph SE, Wind Speed Max: 6 mph

CAMP:

CAMP stations not deployed no intrusive activities on this day.

CAMP Calibration: NA

**C. Remarks**

-none

ESMI/Non-Haz Disposed Offsite (daily) (tons): **0/0**

ESMI/Non-Haz Disposed Offsite (total to date) (tons): **0/0**

**D. UPCOMING SITE ACTIVITIES**

1. Initiate pre-trenching activities between manholes MH-1B and MH-1C.
2. Begin demolition activities at No. 4 Gas Holder, asphalt and concrete removal.



3. Offsite disposal of demolition debris from No. 4 Gas Holder

**E. WEEKLY SITE PHOTOGRAPHS**



Keystone Associates performing survey

**DAILY PROGRESS REPORT 006: 11/7/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for November 7, 2011 as observed by Kasey Cornwell of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

On November 7, 2011 AECOM began pre-trenching along the alignment of sheeting from proposed manhole MH-1C south to the edge of asphalt slab over No.4 Gas Holder foundation. AECOM performed pre-trenching of the west sheeting alignment first, marking out and documenting any subsurface features encountered. AECOM pre-trenched to a depth of 6' below ground surface (bgs) along the extent of the east sheeting alignment. Staining and odors were typically observed at 4' bgs and below, however shallower in some locations. At approximately 77' south of MW-1C, AECOM pre-trenched to 7' bgs and encountered the water table. AECOM followed the same procedure for the east sheeting alignment pre-trench. The northern edge of the No.4 Gas Holder foundation was encountered at 2.5' bgs and 15' north of the asphalt slab.

AECOM placed trenched materials adjacent to the sheeting alignments within the proposed pipe trench footprint. The trenches were backfilled with the excavated material immediately following completion. During pre-trenching activities, mixing of impacted and non-impacted soils was minimized to the extent practicable. Impacted/stained materials were placed back into the pre-trench followed by the visually clean soils. See "REMARKS" section and AECOM Daily Report for a list of subsurface structures encountered.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 45° F to 60°F

Humidity: NA

Cloud cover: Partial Clouds

Rainfall: 0.00"

Wind Speed Average and Direction: 2 mph SE, Wind Speed Max: 6 mph

**CAMP:**

One Upwind (UP) CAMP station and two downwind (DW 1 and DW 2) CAMP Stations deployed prior to intrusive activities taking place. No exceedances were noted at any location.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

**C. Remarks**

Pre-trench observations: Two concrete footings (measuring approximately 2.5' square by 1' thick) extending beyond the limits of the pre-trench excavation on west sheeting alignment at depth of approximately 3.5' bgs and on the east at 5' bgs

ESMI/Broome County Landfill Disposed Offsite (daily tons): **0/0**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **0/0**

**D. UPCOMING SITE ACTIVITIES**

1. Complete pre-trenching activities between manholes MH-1B and MH-1C.
2. Begin demolition activities at No. 4 Gas Holder, asphalt and concrete removal.
3. Offsite disposal of demolition debris from No. 4 Gas Holder
4. Tioga Construction mobilization to site



**E. WEEKLY SITE PHOTOGRAPHS**



AECOM performing pre-trenching along the east sheeting alignment



Pre-trenches backfilled

**DAILY PROGRESS REPORT 007: 11/8/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for November 8, 2011 as observed by Kasey Cornwell of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

AECOM demolished and removed the No.4 Gas Holder asphalt slab overlying the east and west pre-trench sheeting alignment limits. Asphalt was staged for non-hazardous offsite disposal. AECOM completed pre-trenching along both sheeting alignments, extending approximately 15' north of MH-1C. Trenches were backfilled upon completion using excavated material. No subsurface features were encountered.

AECOM consolidated the existing soil stockpile of material generated and placed on site by NYSEG's natural gas facilities department. The stockpile is located within the immediate vicinity of the active work area.

NYSEG provided approval to remove an existing soil stockpile from site, as necessary.

AECOM performed miscellaneous erosion control measures on site.

AECOM subcontractor Tioga Construction mobilized a front end loader (CAT IT38G) and fork attachment.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 47° F to 60°F

Humidity: NA

Cloud cover: Partial Clouds

Rainfall: 0.00"

Wind Speed Average and Direction: 2 mph E switched to NE, Wind Speed Max: 6 mph

CAMP: One Upwind (UP) CAMP station and two downwind (DW 1 and DW 2) CAMP Stations deployed prior to intrusive activities taking place. Wind direction changed in afternoon, to N/NE CAMP stations were adjusted accordingly. No exceedances were noted at any location.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

### **C. Remarks**

Broome County Landfill has not received DEC Permits for trucks transporting materials for disposal. AECOM is coordinating with ESMI to ensure proper paperwork is provided.

Per AECOM conversation with ESMI reinforced concrete will not be accepted for low-temperature thermal desorption (LTTD), and non-reinforced concrete for LTTD treatment at their facility must be 5-8" in diameter or smaller.

Non-visually impacted soils will be stockpiled within the pre-trenched areas until Broome County has received DEC permit documents granting permission for disposal..

ESMI/Broome County Landfill Disposed Offsite (daily tons): **0/0**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **0/0**

### **D. UPCOMING SITE ACTIVITIES**

1. Excavate soil over No. 4 Gas Holder and remove from site.
2. Begin demolition activities at No. 4 Gas and concrete removal.
3. Offsite disposal of demolition debris from No. 4 Gas Holder
4. Remove portions of NYSEG stockpiled soil as needed to conduct pipe installation activities
5. Transportation of visually and non-visually impacted soil for off-site disposal
6. Continued mobilization of Tioga Construction to site in preparation for sheeting installation.
7. Electric, phone and internet hook-up to site trailers



**E. WEEKLY SITE PHOTOGRAPHS**



Saw cutting asphalt slab over No. 4 Gas Holder foundation



Asphalt demolition



Trench alignment following asphalt demolition



Pre-trenching at north end of site





West trench alignment stake adjacent to monitoring wells MW93-6S (left), MW93-6D (right), and piezometer PZ01-05 (background)

**DAILY PROGRESS REPORT 008: 11/9/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for November 9, 2011 as observed by Kasey Cornwell of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

AECOM demolished concrete footers encountered during the pre-trenching of the east and west sheeting alignments, as noted in DPR 006, as well as demolition of No.4 Gas Holder. Visually non-impacted concrete was staged with asphalt (see DPR 007). Impacted concrete (reinforced and non-reinforced) was left within the trench and covered with poly to minimize odors.

AECOM continued soil excavation activities along the sheet piling alignment, including the area over the No. 4 Gas Holder. Materials were segregated based on visual observation of staining. Visually impacted materials were staged within the trench footprint, treated with BioSolve odor control agent and covered with poly prior to transportation for off-site treatment and disposal at ESMI. Materials determined to be non-hazardous (i.e., no visual impacts) were staged within poly-lined areas of the trench excavation. No visually impacted materials or obvious odors were noted in the soils excavated from on top of the No. 4 Gas Holder.

AECOM subcontractor, Tioga Construction mobilized excavator (Kobelco SK350) to site.

Verizon onsite to install phone and internet.

Following completion of site activities, AECOM secured the site, and secured access to open excavations by installing construction fencing.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 45° F to 66°F

Humidity: NA

Cloud cover: Partial Clouds

Rainfall: 0.00"



Wind Speed Average and Direction: 2 mph NE switched to SE, Wind Speed Max: 12 mph (Gusts)

CAMP: One Upwind (UP) CAMP station and two downwind (DW 1 and DW 2) CAMP Stations deployed prior to intrusive activities taking place. Wind direction changed in afternoon, to SE CAMP stations were adjusted accordingly. No exceedances were noted for 15 minute average at any location.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

**C. Remarks**

AECOM intends to begin trench excavation down to 4' in parallel when Tioga begins installation of sheeting. Excavation will be performed ahead of Tioga or at the opposite end of the alignment.

ESMI/Broome County Landfill Disposed Offsite (daily tons): **70/0**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **70/0**

**D. UPCOMING SITE ACTIVITIES**

1. Continue excavation over No.4 Gas Holder.
2. Continue concrete demolition activities at No. 4 Gas Holder.
3. Offsite disposal of demolition debris from No. 4 Gas Holder to Broome County Landfill.
4. Remove portions of NYSEG stockpiled soil, as needed.
5. Continued mobilization of Tioga Construction to site in preparation for sheeting installation.
6. Electric hook-up to site trailers

**E. WEEKLY SITE PHOTOGRAPHS**



Offloading soil for Broome County and ESMI



North edge of No. 4 Gas Holder foundation demolition



Lined excavation areas backfilled with non-visually impacted material

**DAILY PROGRESS REPORT 009: 11/10/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for November 10, 2011 as observed by Kasey Cornwell of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

AECOM consolidated materials for offsite disposal to Broome County Landfill. LONGHORN trucking transported three loads of non-visually impacted materials. Broome County Landfill disposal material consisted of trenched soil and one load of construction and demolition material (concrete and asphalt). (See Remarks for specifics)

AECOM continued demolition of No.4 Gas Holder foundation. Approximately 15' of foundation was successfully removed along the trench alignment. Trench excavation was performed down to 5' below the foundation. None of the soils excavated from on top of the holder foundation down to 6 feet below ground surface in the area of the holder pre-trenching activities contain significant staining or noticeable odor. Water was encountered over the Holder foundation at ~6' bgs, water saturated soils had a strong coal tar odor and dark gray to black color. Free water displayed visible sheens. The No. 4 Gas Holder foundation measured ~8" thick with ~1-1.5' thick walls. AECOM encountered a secondary floor within the foundation at ~6.5' bgs.

AECOM secured the open excavation area with orange construction fencing and parking both excavators and loader around the perimeter.

NYSEG connected electric service, electric and internet operational in both site trailers.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 51° F to 43°F (temperature decreased through day)

Humidity: 82%

Cloud cover: Overcast

Rainfall: 0.25"

Wind Speed Average and Direction: 4 mph NW Wind Speed Max: 10 mph (Gusts)

CAMP: CAMP stations not deployed, steady rain throughout day.  
Calibration: Dust Trak and PID units for each station calibrated at start of day.

**C. Remarks**

ESMI/Broome County Landfill Disposed Offsite (daily tons): **0/108**  
ESMI/Broome County Landfill Disposed Offsite (total to date tons): **70/108**

**D. UPCOMING SITE ACTIVITIES**

1. HSE onsite with AECOM Friday to establish background for noise monitoring, no other activities taking place on Friday.
2. Continue excavation over No.4 Gas Holder.
3. Continue concrete demolition activities at No. 4 Gas Holder.
4. Offsite disposal of demolition debris from No. 4 Gas Holder to Broome County Landfill/ESMI.
5. Remove portions of NYSEG stockpiled soil, as needed.
6. Continued mobilization of Tioga Construction to site in preparation for sheeting installation.
7. Installation of sheeting



## **E. WEEKLY SITE PHOTOGRAPHS**



No. 4 Gas Holder foundation demolition



No. 4 Gas Holder foundation debris



Pre-trench alignment



Secured No. 4 Gas Holder excavation area

**DAILY PROGRESS REPORT 010: 11/14/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for November 14, 2011 as observed by Kasey Cornwell of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

AECOM continued demolition of No. 4 Gas Holder foundation. AECOM removed approximately 20 square feet (SF) of the foundation wall and 30 SF of the secondary floor within the pipe trench alignment.

AECOM consolidated materials for offsite disposal. Longhorn trucking transported seven loads of non-visually impacted material to Broome County Landfill and one load visually impacted material to ESML.

AECOM applied BioSolve via pressure washers and poly sheeting odor control measures to minimize odor of impacted materials. AECOM secured the excavation by placing orange construction fencing and parking both excavators and loader around the perimeter of the open area.

AECOM's subcontractor Tioga mobilized a Clark crane (UMA-990 TC) and other materials to site.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 50° F to 55°F

Humidity: 85%

Cloud cover: Overcast

Rainfall: 0.00"

Wind Speed Average and Direction: 2 mph NE Wind Speed Max: 4 mph

CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. No exceedances. PID Datalog/battery issues at UP and DW 1, meters only datalogged VOCs for five and four hours respectively. Equipment issues were most likely due to PIDs not being charged in deep discharge over the weekend.

Calibration: Dust Trak and PID units for each station calibrated at start of day.



**C. Remarks**

ESMI/Broome County Landfill Disposed Offsite (daily tons): **35/266**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **105/374**

**D. UPCOMING SITE ACTIVITIES**

1. AECOM's subcontractor Tioga to begin sheeting installation.
2. Continue excavation over No.4 Gas Holder.
3. Continue concrete demolition activities at No. 4 Gas Holder.
4. Offsite disposal of demolition debris from No. 4 Gas Holder to Broome County Landfill/ESMI.

**E. WEEKLY SITE PHOTOGRAPHS**



Offloading material for disposal to Broome County Landfill



No. 4 Gas Holder foundation demolition

**DAILY PROGRESS REPORT 011: 11/15/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for November 15, 2011 as observed by Kasey Cornwell of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

AECOM continued demolition of the No. 4 Gas Holder foundation. At approximately 1.5' bgs and ~ 30' north of manhole MH-1B, AECOM encountered a 30" diameter cast iron pipe with no cover (appears to be packed with soil and debris). AECOM also encountered a 3" diameter steel pipe at ~6' bgs, running perpendicular to the east sheeting alignment. The pipe was damaged during excavation and contains visible coal tar product. AECOM will further investigate once the trench is safe to enter.

AECOM's subcontractor Tioga began installation of western sheet pile wall (14 sheets – 7 pairs). Sheets were individually driven to a depth of ~25'; the remaining embedment was achieved by driving the sheets in pairs. Before threading sheet pairs, Tioga applied sealant (Swell Seal) along 20' of the female interlock channel, beginning ~5' below the top of the sheet.

AECOM's subcontractor HSE was onsite conducting noise monitoring. All readings collected during sheet pile installation were within compliance (i.e., less than 80 dBA).

Non-visually impacted soil from the No. 4 Gas Holder foundation was loaded by AECOM and transported by Longhorn trucking to Broome County Landfill for disposal. (See below for approximate tonnage)

AECOM applied BioSolve via pressure washers and poly sheeting to minimize odor from impacted materials. AECOM secured the excavation by placing orange construction fencing and parking both excavators and loader around the perimeter of the open area.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

AECOM's subcontractor HSE was onsite conducting noise monitoring.

Temperature: 45° F to 55°F

Humidity: 85%

Cloud cover: Overcast

Rainfall: 0.02"

Wind Speed Average and Direction: 2 mph NW Wind Speed Max: 4 mph

CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. No exceedances.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

**C. Remarks**

ESMI/Broome County Landfill Disposed Offsite (daily tons): **0/114**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **105/488**

**D. UPCOMING SITE ACTIVITIES**

1. AECOM subcontractor Tioga to continue sheet pile installation.
2. AECOM to continue excavation over No.4 Gas Holder.
3. Continue concrete demolition activities at No. 4 Gas Holder.
4. Offsite disposal of demolition debris from No. 4 Gas Holder to Broome County Landfill/ESMI.
5. AECOM subcontractor LRT onsite to facilitate delivery of TWTS (Temporary Water Treatment System) components to site.

**E. WEEKLY SITE PHOTOGRAPHS**



Installing sheets along west sheeting alignment





Performing excavation along north portion of pipe trench alignment



No. 4 Gas Holder foundation demolition, 30" diameter vertical iron pipe encountered

**DAILY PROGRESS REPORT 012: 11/16/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for November 16, 2011 as observed by Kasey Cornwell of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

AECOM continued demolition of No.4 Gas Holder foundation. AECOM uncovered a lateral run of the 30" diameter cast iron pipe. The top of the pipe was encountered approximately 6' feet bgs and the pipe traverses the trench alignment northeast to southwest (see DPR #11). The 90° transition between the vertical and lateral pipe run, was encased with a concrete collar. Water and coal tar were visible in the pipe. AECOM will evacuate and containerize the liquid to the extent possible. AECOM will implement the following pipe abandonment procedure: evaluate pipe integrity, terminate the pipe length at the limits of the trench walls, and permanently cap the pipe with flowable fill (or other appropriate plug) to eliminate the pipe's ability to collect, convey, or store stormwater and/or groundwater.

AECOM's subcontractor Tioga continued installation of sheet pile wall (19 sheets – 8 pairs, 3 singles at working ends only driven to 25' bgs) along both the east and west alignments. Single sheets were driven to ~25' before the next sheet was threaded on, and the pair was driven together. Before threading, Tioga placed sealant (Swell Seal) along 20' of the female interlock, beginning ~5' below the top of the sheet.

Compaction/densification of soil against west sheet wall was noted. Compaction was minimal (~6"), however, some areas exhibited as much as ~4' immediately adjacent to the sheet wall. Cracking was also noted adjacent to the exterior of the west sheet wall, cracking ran parallel with the sheeting and was offset a distance of ~2 to 10' from wall. Consistent with prior NYSEG approval, AECOM used existing stock piled soil to fill voids, minimizing migration of surface water down sheets and maintaining a safe working environment around the sheeting.

AECOM's subcontractor HSE was onsite conducting noise monitoring. All readings collecting during sheet pile installation were within compliance (i.e., less than 80 dBA).

No materials were transported from site for off-site disposal at ESMI or Broome County.

AECOM applied BioSolve via pressure washers and poly sheeting odor control measures to minimize odor of impacted materials. AECOM secured the excavation by placing orange construction fencing and parking both excavators and loader around the perimeter of the open area.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 50° F to 55°F

Humidity: 90%

Cloud cover: Overcast

Rainfall: 0.01"

Wind Speed Average and Direction: 2 mph SW switched to NE Wind Speed Max: 8 mph (Gusts)

CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. No exceedances. Station location shifted to account for change in wind direction. CAMP pulled at 1615 due to steady rain, sheeting installation continued until 1715.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

### **C. Remarks**

ESMI/Broome County Landfill Disposed Offsite (daily tons): **0/0**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **105/488**

### **D. UPCOMING SITE ACTIVITIES**

1. AECOM subcontractor Tioga to continue sheeting installation
2. Continue excavation over No.4 Gas Holder.
3. Continue concrete demolition activities at No. 4 Gas Holder.
4. Offsite disposal of demolition debris from No. 4 Gas Holder to Broome County Landfill/ESMI.
5. Continued mobilization of TWTS by LRT and AECOM

### **E. WEEKLY SITE PHOTOGRAPHS**





Soil compaction and cracking along west sheeting alignment



No. 4 Gas Hold foundation demolition and pipe trench excavation



30" diameter cast iron pipe, embedded in concrete with visible coal tar product present

**DAILY PROGRESS REPORT 013: 11/17/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for November 17, 2011 as observed by Kasey Cornwell of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

AECOM continued demolition of No. 4 Gas Holder foundation. A 5'X15' section of concrete was removed from both the Gas Holder foundation and secondary floor. In addition, the concrete collar surrounding the 90° transition of the 30" diameter cast iron pipe was also removed.

AECOM's subcontractor Tioga continued installation of sheet pile wall (21 sheets – 10 pairs and a single) along east and west alignments. Single sheets were driven to ~25' before next sheet was threaded on, and the pair was driven together. Before threading, Tioga placed sealant (Swell Seal) along 20' of the female interlock of the joint, beginning ~5' below the top of the sheet.

Tioga encountered refusal during installation of a single sheet at ~8' bgs. Sheet was removed and Tioga excavated to 8' bgs to clear refusal. No significant obstructions were encountered. Excavation was backfilled and Tioga resumed driving sheets, with no further refusal issues.

AECOM's subcontractor HSE was onsite conducting noise monitoring. All readings collecting during sheet pile installation were within compliance (i.e., less than 80 dBA).

C&D debris from No. 4 Gas Holder foundation demolition transported for off-site disposal at Broome County Landfill, see below for approximate tonnage disposed.

NYSEG onsite to provide electric service for the Temporary Water Treatment System (TWTS).

AECOM applied BioSolve via pressure washers and poly sheeting odor control measures to minimize odor of impacted materials. AECOM secured the excavation by placing orange construction fencing and parking both excavators and loader around the perimeter of the open area.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 45° F to 55°F

Humidity: 78%

Cloud cover: Overcast - Sunny

Rainfall: 0.01"

Wind Speed Average and Direction: 2 mph NE Wind Speed Max: 4 mph (Gusts)

CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. No exceedances. Station location shifted to account for change in wind direction.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

### **C. Remarks**

NYSDEC onsite for ~3 hrs

ESMI/Broome County Landfill Disposed Offsite (daily tons): **0/69**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **105/557**

### **D. UPCOMING SITE ACTIVITIES**

1. AECOM's subcontractor Tioga to continue sheeting installation
2. Continue excavation over No.4 Gas Holder.
3. Continue concrete demolition activities at No. 4 Gas Holder.
4. Abandonment of 30" diameter cast iron pipe embedded in the No. 4 Gas Holder foundation.
5. Offsite disposal of demolition debris from No. 4 Gas Holder to Broome County Landfill/ESMI.
6. Continued mobilization of TWTS by LRT and AECOM



#### E. WEEKLY SITE PHOTOGRAPHS



Compaction and cracking along the west sheeting alignment



Mobilization of TWTS components and media





30" diameter cast iron pipe, exposed 90 degree section

**DAILY PROGRESS REPORT 014: 11/18/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for November 18, 2011 as observed by Kasey Cornwell of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

AECOM continued demolition of No.4 Gas Holder foundation. Approximately 20'x4' of the secondary foundation and 15'x4' of the No. 4 Gas Holder foundation were demolished. Non-visually impacted concrete was staged for disposal.

AECOM's subcontractor Tioga continued installation of sheet pile wall (24 sheets – 6 pairs to completion and 6 pairs to ~25 bgs, set to drive 11/21) along both the east and west alignments. Single sheets were driven to ~25' before the next sheet was threaded on, and the pair was driven together. Before threading, Tioga placed sealant (Swell Seal) along 20' of the female interlock, beginning ~5' below the top of the sheet. Tioga was down from 1030 – 1120 switching out a new hammer equipped with remote control operation.

AECOM's subcontractor HSE was onsite conducting noise monitoring. All readings collecting during sheet pile installation were within compliance (i.e., less than 80 dBA).

No materials transported for off-site disposal at ESMI or Broome County.

AECOM applied BioSolve via pressure washers and poly sheeting odor control measures to minimize odor of impacted materials. AECOM secured the excavation by placing orange construction fencing and parking both excavators and loader around the perimeter of the open area.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 45° F to 55°F

Humidity: 78%

Cloud cover: Overcast - Sunny

Rainfall: 0.01"

Wind Speed Average and Direction: 2 mph NE Wind Speed Max: 4 mph (Gusts)

CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. No exceedances. Station location shifted to account for change in wind direction.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

**C. Remarks**

ESMI/Broome County Landfill Disposed Offsite (daily tons): **0/0**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **105/557**

**D. UPCOMING SITE ACTIVITIES**

1. AECOM's subcontractor Tioga to continue sheeting installation
2. Continue excavation over No.4 Gas Holder.
3. Continue concrete demolition activities at No. 4 Gas Holder.
4. Abandonment of 30" diameter cast iron pipe embedded in the No. 4 Gas Holder foundation.
5. Offsite disposal of demolition debris from No. 4 Gas Holder to Broome County Landfill/ESMI.
6. Continued mobilization of TWTS by LRT and AECOM



**E. WEEKLY SITE PHOTOGRAPHS**



Continued No. 4 Gas Holder foundation demolition and pipe trench excavation



East and west sheeting alignments

**DAILY PROGRESS REPORT 015: 11/21/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for November 21, 2011 as observed by Kasey Cornwell of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

AECOM continued demolition of the No.4 Gas Holder foundation. Approximately 25 yards of concrete were removed from the foundation.

AECOM's subcontractor Tioga continued installation of sheet pile wall (24 sheets – 12 pairs driven to completion, 4 singles only partially driven) along both the east and west alignments. The problematic sheets have not achieved the design tip elevation. Tioga is applying additional driving time with positive results. Single sheets were driven to ~25' before next sheet was threaded on, and the pair was driven together. Before threading, Tioga placed sealant (Swell Seal) along 20' of the female interlock, beginning ~5' below the top of the sheet.

AECOM's subcontractor HSE was onsite conducting noise monitoring. All readings collecting during sheet pile installation were within compliance (i.e., less than 80 dBA).

No materials transported for off-site disposal at ESMI or Broome County Landfill.

AECOM applied BioSolve via pressure washers, BioWorld misters and poly sheeting odor control measures to minimize odor of impacted materials. AECOM secured the excavation area by installing orange construction fencing and parking both excavators and loader around the perimeter of the open area.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 35° F to 55°F

Humidity: 59%

Cloud cover: Overcast

Rainfall: none

Wind Speed Average and Direction: 3 mph NW Wind Speed Max: 6 mph (Gusts)

CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. No exceedances. Station location shifted to account for change in wind direction. CAMP pulled at 1615.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

**C. Remarks**

NYSDEC onsite 0800 – 1200

ESMI/Broome County Landfill Disposed Offsite (daily tons): **0/0**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **105/557**

**D. UPCOMING SITE ACTIVITIES**

1. AECOM's subcontractor Tioga to continue sheeting installation
2. Continue concrete demolition activities at No. 4 Gas Holder.
3. Continued mobilization of TWTS by LRT and AECOM

**E. WEEKLY SITE PHOTOGRAPHS**



Excavation over the No. 4 Gas Holder foundation facing southwest.



Sheeting installation along east alignment, facing northwest.





Application of BioSolve odor control agent, facing south.

**DAILY PROGRESS REPORT 016: 11/22/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for November 22, 2011 as observed by Kasey Cornwell of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

AECOM continued demolition of No.4 Gas Holder foundation.

AECOM's subcontractor Tioga continued installation of sheet pile wall (22 sheets – 11 pairs to completion, remaining sheets set to 25 bgs) along both the east and west alignments. Single sheets were driven to ~25' before next sheet was threaded on, and the pair was driven together. AECOM encounter some difficulties in attaining the design tip elevation. Before threading, Tioga placed sealant (Swell Seal) along 20' of the female interlock, beginning ~5' below the top of the sheet.

AECOM removed liquids from the 30" diameter cast iron pipe and transferred the material to a Frac tank associated. AECOM cut the pipe at the just beyond the sheet wall limits prior to sealing the pipe with a 1-ft thick concrete plug backed by sand bags. Following installation of the pipe plug, AECOM backfilled the area excavated to access the pipe. AECOM removed the cut section of the 30" pipe and processed it for removal as C&D debris to Broome County Landfill.

AECOM's subcontractor HSE was onsite conducting noise monitoring. All readings collecting during sheet pile installation were within compliance (i.e., less than 80 dBA).

No materials were transported for off-site treatment/disposal at ESMI or Broome County Landfill.

AECOM applied BioSolve via pressure washers, BioWorld misters and poly sheeting odor control measures to minimize odor of impacted materials. AECOM secured the excavation using orange construction fencing and parking both excavators and loader around the perimeter of the open area.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 28° F

Humidity: 86%

Cloud cover: Sun

Rainfall: none

Wind Speed Average and Direction: 2 mph NE Wind Speed Max: 5 mph (Gusts)

CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. No exceedances. Station location shifted to account for change in wind direction. CAMP pulled at 1615.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

### **C. Remarks**

ESMI/Broome County Landfill Disposed Offsite (daily tons): **0/0**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **105/557**

### **D. UPCOMING SITE ACTIVITIES**

1. AECOM's subcontractor Tioga to continue sheeting installation
2. Continue concrete demolition activities at No. 4 Gas Holder.
3. Continued mobilization of TWTS by LRT and AECOM

### **E. WEEKLY SITE PHOTOGRAPHS**





Installation of sheets along east alignment.



30" diameter pipe and side wall location. Initial opening in pipe was enlarged (as shown in figure) in order to remove liquid to frac tank using pump prior to continued demo and removal.

**DAILY PROGRESS REPORT 017: 11/23/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for November 23, 2011 as observed by Kasey Cornwell of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

AECOM backfilled the No. 4 Gas Holder foundation area with non-visually impacted materials. A poly liner was placed over the exposed excavation surface prior to placing the temporary fill materials.

AECOM's subcontractor Tioga continued installation of the sheet pile wall (20 sheets – 10 pairs driven to completion) along both the east and west alignments. Single sheets were driven to ~25' before next sheet was threaded on, and the pair was driven together. Before threading, Tioga placed sealant (Swell Seal) along 20' of the female interlock, beginning ~5' below the top of the sheet. AECOM placed fill materials long both sheeting alignments to address the soil compaction and cracking issues, as well as within the pipe trench alignment.

AECOM's subcontractor HSE was onsite conducting noise monitoring. All readings collecting during sheet pile installation were within compliance (i.e., less than 80 dBA).

No materials transported for off-site disposal at ESMI or Broome County Landfill.

AECOM applied BioSolve via pressure washers and BioWorld misters, and poly sheeting odor control measures to minimize odor of impacted materials. AECOM secured the excavation by placing orange construction fencing and parking both excavators and loader around the perimeter of the open area.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 35° F

Humidity: 91%

Cloud cover: Overcast, rain

Rainfall: 0.01"

Wind Speed Average and Direction: 3 mph N Wind Speed Max: 9 mph (Gusts)

CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. No exceedances. Station location shifted to account for change in wind direction. CAMP pulled at 0930 due to steady rain, reinstated at 1115 until 1650.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

### **C. Remarks**

ESMI/Broome County Landfill Disposed Offsite (daily tons): **0/0**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **105/557**

### **D. UPCOMING SITE ACTIVITIES**

1. AECOM's subcontractor Tioga to continue sheeting installation
2. Resume concrete demolition activities at No. 4 Gas Holder.
3. Continued mobilization of TWTS by LRT and AECOM

### **E. WEEKLY SITE PHOTOGRAPHS**



Area of problematic sheets along the west sheeting alignment. Photo was taking from the west looking left at the exterior of the sheet wall.





Backfilling and rough grading pipe trench alignment (facing south).



Temporarily backfilling the No. 4 Gas Hold foundation (facing north)

**DAILY PROGRESS REPORT 018: 11/28/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for November 28, 2011 as observed by Kasey Cornwell of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

AECOM began excavation of the top 4-6' of materials in the trench at the north end of the site. Five truckloads of material were transported to ESMI. Soil was not visually impacted with coal tar, but was processed as ESMI material due to issues with the trucking agreement between AECOM and ESMI. NYSEG approved transportation of the waste materials typically accepted by Broome County to ESMI in order to maintain schedule.

AECOM encountered a concrete footing ~30' south of MH-1C, located in the same vicinity as shown on Drawing 5, during excavation at the north end of the site.

AECOM's subcontractor Tioga installed 9 pairs of sheets to completion, and set 2 pairs to ~25' for the following day. No refusal issues were encountered. Before threading, Tioga placed sealant (Swell Seal) along 20' of the female interlock, beginning ~5' below the top of the sheet.

AECOM's subcontractor HSE was onsite conducting noise monitoring. All readings collected during sheet pile installation were within compliance (i.e., less than 80 dBA).

AECOM applied BioSolve via pressure washers, BioWorld misters and poly sheeting odor control measures were utilized to minimize odors. AECOM secured the excavation using orange construction fencing and parking both excavators and loader around the perimeter of the open area.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 42- 58° F

Humidity: 75 %

Cloud cover: Overcast

Rainfall: 0.01"

Wind Speed Average and Direction: 6 mph SE

CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. An instantaneous exceedance occurred at the start of the day, however no exceedances of average readings occurred. Station location shifted to account for change in wind direction.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

### **C. Remarks**

ESMI/Broome County Landfill Disposed Offsite (daily tons): **175/0**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **280/557**

### **D. UPCOMING SITE ACTIVITIES**

1. AECOM's subcontractor Tioga to continue sheeting installation
2. AECOM to continue excavation of trench and load out of materials to ESMO or Broome County as needed
3. Continued mobilization of TWTS by LRT and AECOM

### **E. DAILY SITE PHOTOGRAPHS**



Performing trench excavation (facing south)





Concrete footing removed from the Manhole MH-1C vicinity. Refer to Drawing 9 for details.



Application of Rusmar foam (facing south)

**DAILY PROGRESS REPORT 019: 11/29/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for November 29, 2011 as observed by Kasey Cornwell of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

AECOM coordinated load-out remaining concrete and asphalt debris from demolition of the No. 4 Gas Holder foundation. AECOM resized some of the larger pieces within the confines of the trench. All C&D debris were sent to Broome County of this date.

AECOM moved portions of the existing soil pile at the north end of the site and readjusted the silt fence to create more room for site traffic.

AECOM's subcontractor LRT was onsite to continue installation and construction of the temporary water treatment facility. Carbon vessels were filled with water and centrifugal pumps were delivered to the site and tent construction started.

AECOM's subcontractor Tioga continued installation of sheet pile wall (26 sheets—13 pairs to completion) with no refusal issues. Before threading, Tioga placed sealant (Swell Seal) along 20' of the female interlock, beginning ~5' below the top of the sheet.

AECOM's subcontractor HSE was onsite conducting noise monitoring. All readings collecting during sheet pile installation were within compliance (i.e., less than 80 dBA).

Second Project Coordination meeting held on site with NYSEG, NYSDEC, AECOM and ARCADIS in attendance.

AECOM applied BioSolve via pressure washers, BioWorld misters and poly sheeting odor control measures to minimize odor of impacted materials. AECOM secured the excavation using orange construction fencing and parking both excavators and loader around the perimeter of the open area.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.



Temperature: 46-60° F

Humidity: 75 %

Cloud cover: Overcast

Rainfall: 0.58"

Wind Speed Average and Direction: 5 mph SE Gusts of 8 mph

CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. An instantaneous exceedance occurred at the start of the day, however no exceedances of average readings occurred. Station location shifted to account for change in wind direction. CAMP stations shutdown periodically due to rain.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

### **C. Remarks**

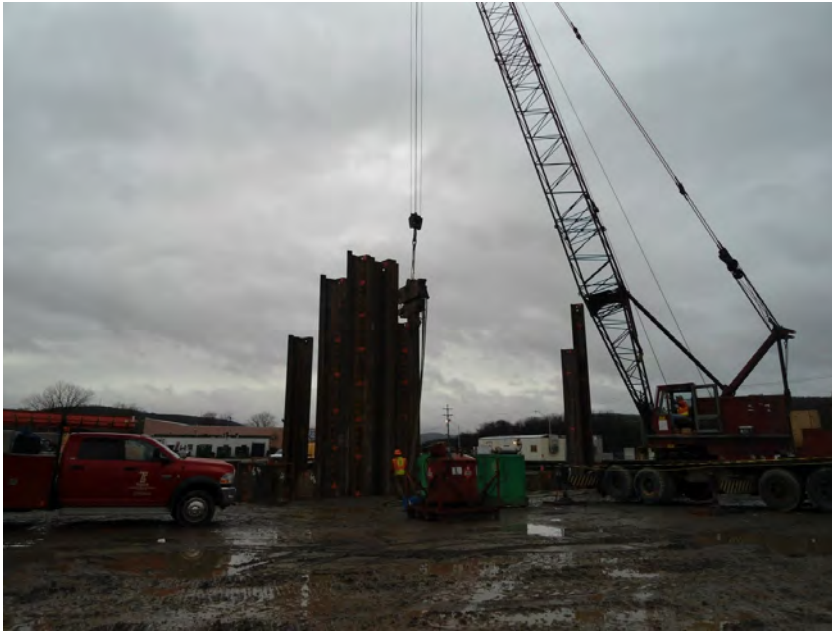
ESMI/Broome County Landfill Disposed Offsite (daily tons): **0/87**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **280/644**

### **D. UPCOMING SITE ACTIVITIES**

1. AECOM's subcontractor Tioga to continue sheeting installation and fabrication of corner sheets for ends of sheeting alignment
2. AECOM to continue excavation of trench and load out of materials to ESMI or Broome County as needed
3. Continued mobilization of TWTS by LRT and AECOM
4. Soil characterization samples will be collected to meet ESMI requirements and continue disposal at this facility
5. Initial TWTS effluent sampling, prior to discharge in accordance with SPDES equivalent permit.
6. Continued load out of ESMI and Broome County materials, as needed.

**E. DAILY SITE PHOTOGRAPHS**



Installing sheets along the west alignment. Photo taken from west side of site facing east.



Fabricating corner sheets to be used at north and south ends of the sheet alignment. (facing north)

**DAILY PROGRESS REPORT 020: 11/30/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for November 30, 2011 as observed by Kasey Cornwell of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

AECOM gravity drained saturated soils via stockpiling within the confines of the trench. Cement Kiln Dust (CKD) was delivered to the site and blended with saturated soil to reduce free liquid and facilitate transport from the site.

AECOM installed a dewatering sump in the north end of the trench, approximately 45' south of the north end of the alignment. The sump was installed 1' below the extent of excavation grade. Sump installation consisted of 18" corrugated HDPE pipe surrounded with washed crushed stone, the pipe was secured to western wall of trench.

AECOM's subcontractor LRT continued installation and construction of temporary water treatment facility. Approximately 8,000 gallons of water were collected from the sump and transferred to the influent weir tank 1 for treatment.

AECOM's subcontractor Tioga successfully installed sheet pile (26 sheets—13 pairs to grade and 4 sheets—2 pairs to set to ~25' for following day). No refusal issues. Tioga continued welding corners for ends of sheet alignment. Before threading, Tioga placed sealant (Swell Seal) along 20' of the female interlock, beginning ~5' below the top of the sheet.

AECOM's subcontractor HSE was onsite conducting noise monitoring. All readings collecting during sheet pile installation were within compliance (i.e., less than 80 dBA).

AECOM applied BioSolve via pressure washers, BioWorld misters and poly sheeting odor control measures to minimize odor of impacted materials. AECOM secured the excavation using orange construction fencing and parking both excavators and loader around the perimeter of the open area.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 29 - 48° F

Humidity: 90 %

Cloud cover: Overcast

Rainfall: 0.06"

Wind Speed Average and Direction: 8 mph NW Gusts of 14 mph

CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. Station location shifted to account for change in wind direction. CAMP stations shutdown periodically due to rain.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

### **C. Remarks**

ESMI/Broome County Landfill Disposed Offsite (daily tons): **0/87**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **280/644**

### **D. UPCOMING SITE ACTIVITIES**

1. AECOM's subcontractor Tioga to continue sheeting installation and fabrication of corner sheets for ends of sheeting alignment
2. AECOM to continue excavation of trench and load out of materials to ESMI or Broome County as needed
3. Continued mobilization of TWTS by LRT and AECOM
4. Soil characterization samples will be collected to meet ESMI requirements and continue disposal at this facility
5. Initial TWTS effluent sampling, prior to discharge in accordance with SPDES equivalent permit.

**E. DAILY SITE PHOTOGRAPHS**



Installation of sump at leaking sheet along west alignment (facing southwest)



Maintenance of sump at northwest side of trench. Photo taken looking over west sheet alignment.



Tioga installing sheets along the east sheeting alignment (facing northeast)



**DAILY PROGRESS REPORT 021: 12/01/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for December 01, 2011 as observed by Kasey Cornwell of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

AECOM collected approximately 8,000 gallons of water from the trench sump and transferred to influent weir tank 1 treatment. An electrician was onsite to assist with LRT and AECOM to connect the temporary water treatment system (TWTS) pump and TWTS heaters. AECOM applied one bag of cement kiln dust (CKD) to stabilize material located at north end of the excavation in preparation for off-site transportation.

AECOM used NYSEG stockpiled soil from the north end of the site to partially backfill the excavation associated with No. 4 Gas Holder foundation demolition to ~4' BGS in order to create a safe working environment to install sheetpiling in that area.

AECOM's subcontractor Tioga successfully installed sheet piles (7 sheets and two corners to grade and 4 sheets set to ~25' for following day). No refusal issues. Tioga continued welding corners for ends of sheet alignment. Before threading, Tioga placed sealant (Swell Seal) along 20' of the female interlock, beginning ~5' below the top of the sheet. Tioga continued welding corners for ends of sheet alignment.

AECOM's subcontractor HSE was onsite conducting noise monitoring. All readings collecting during sheet pile installation were within compliance (i.e., less than 80 dBA).

No materials were transported for off-site treatment/disposal at ESMI or Broome County Landfill.

BioSolve (applied via pressure washers and BioWorld misters) and poly sheeting odor control measures were used to minimize odor of impacted materials. AECOM secured the excavation using orange construction fencing and caution tape.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 27 - 44° F

Humidity: 70 %

Cloud cover: Overcast

Rainfall: 0.00"

Wind Speed Average and Direction: 6 mph NW Gusts of 12 mph

CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. An instantaneous exceedance occurred at the start of the day, however no exceedances of average readings occurred. Station location shifted to account for change in wind direction.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

### **C. Remarks**

ARCADIS collected waste characterization soil sample following initial 300 tons of soil removed to ESMI. Sample collected to validate continued disposal of materials by ESMI.

ESMI/Broome County Landfill Disposed Offsite (daily tons): **0/0**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **280/644**

### **D. UPCOMING SITE ACTIVITIES**

1. AECOM's subcontractor Tioga to continue sheeting installation and fabrication of corner sheets for ends of sheeting alignment
2. AECOM to continue excavation of trench and load out of materials to ESMI or Broome County as needed
3. Continued mobilization of TWTS by LRT and AECOM
4. Initial TWTS effluent sampling, prior to discharge in accordance with SPDES equivalent permit.



**E. DAILY SITE PHOTOGRAPHS**



View of pipe trench alignment from the No. 4 Gas Holder (facing north).



Enclosed structure frame for TWTS (facing west).



4" pipe conduit located along east alignment in northern half of trench. Determined to be debris pipe after AECOM verified there wasn't pipe in the same vicinity along the west alignment (facing east).

**DAILY PROGRESS REPORT 02: 12/02/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for December 02, 2011 as observed by Kasey Cornwell of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

AECOM pumped approximately 5,000 gallons of water from the trench sump and to influent weir tank 1. An electrician was onsite to assist with LRT and AECOM to connect the temporary water treatment system (TWTS) pump and TWTS heaters. AECOM applied one bag of cement kiln dust (CKD) to stabilize material located at north end of the excavation in preparation for offsite transportation offsite tomorrow.

AECOM's subcontractor Tioga successfully installed sheet pile (14 sheets to grade and 8 sheets set to ~25' for following day). No refusal issues. Tioga continued welding corners for ends of sheet alignment. Before threading, Tioga placed sealant (Swell Seal) along 20' of the female interlock, beginning ~5' below the top of the sheet. Tioga continued welding corners for ends of sheet alignment.

AECOM's subcontractor HSE was onsite conducting noise monitoring. All readings collecting during sheet pile installation were within compliance (i.e., less than 80 dBA).

BioSolve (applied via pressure washers and BioWorld misters) and poly sheeting odor control measures were used to minimize odor of impacted materials. AECOM secured the excavation using orange construction fencing and caution tape.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 29 - 40° F

Humidity: 81 %

Cloud cover: Overcast

Rainfall: 0.02"

Wind Speed Average and Direction: 7 mph W Gusts of 14 mph

CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. An instantaneous exceedance occurred at the start of the day, however no exceedances of average readings occurred. Station locations were shifted to account for change in wind direction.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

### **C. Remarks**

ARCADIS collected waste characterization soil sample following initial 300 tons of soil transported for off-site thermal treatment at ESMI. Sample was collected to allow additional volume to be transported to ESMI for treatment/disposal. Five trucks were loaded with visually impacted material for disposal at ESMI (See below for removal volumes).

ESMI/Broome County Landfill Disposed Offsite (daily tons): **175/0**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **455/644**

### **D. UPCOMING SITE ACTIVITIES**

1. AECOM's subcontractor Tioga to continue sheeting installation and fabrication of corner sheets for ends of sheeting alignment
2. AECOM to continue excavation of trench and load out of materials to ESMI or Broome County as needed
3. Continued setup of TWTS by LRT and AECOM
4. Initial TWTS effluent sampling, prior to discharge in accordance with SPDES equivalent permit.



## E. DAILY SITE PHOTOGRAPHS



Performing trench excavation and dewatering with CKD (facing north)



North western corner of sheet pile. Corner piece fabricated onsite by Tioga. Photo taken from above sheet corner at northwest corner of the sheet alignment.



Installing the sheets along the west alignment (facing northwest).

**DAILY PROGRESS REPORT 23: 12/05/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for December 05, 2011 as observed by Kasey Cornwell of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

- AECOM pumped ~6,000 gallons from the sump to the influent weir tank in preparation for treatment.
- Tioga installed 26 sheets to completion and 8 sheets were to ~ 25' in the southern half of the sheeting alignment, they successfully installed.
- Tioga completed fabrication of corner sheets
- AECOM placed secondary containment under two influent weir tanks and two effluent frac tanks.
- ARCADIS noted no secondary containment was placed for the treatment system vessels (e.g., carbon, zeolite, resin). Leaks were noted in treatment system train at the carbon and resin chambers, as well as at the pump anti-siphon port. LRT and AECOM shutdown system and began trouble shooting following samples collection. Secondary containment around remaining treatment system components to be installed on 12/6/11.
- ARCADIS collected, AECOM Water Batch #1 (120511) and shipped to Test America for analysis in accordance with the SPDES Equivalent Permit.
- No noise exceedances of applicable monitoring levels.
- AECOM used BioSolve applied with pressure washers and misters to minimize odors during excavation and loading, and applied odor suppressant foam over the open exaction at the end of the day.
- AECOM used CKD (Cement Kiln Dust) as needed to stabilize saturated material prior to load out and subsequent transport offsite.
- 5 trucks transported material offsite to ESMI for thermal treatment and disposal (See below for removal volumes).

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 47° F

Humidity: 69 %

Cloud cover: Overcast

Rainfall: 0.0"



Wind Speed Average and Direction: 7 mph S Gusts of 14 mph

CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. No exceedances. Station location shifted to account for change in wind direction.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

**C. Remarks**

ESMI/Broome County Landfill Disposed Offsite (daily tons): **190/0**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **645/644**

**D. UPCOMING SITE ACTIVITIES**

1. AECOM's subcontractor Tioga to continue sheeting installation
2. AECOM to continue excavation of trench and load out of materials to ESMI or Broome County as needed
3. Continued installation of secondary containment under TWTS by LRT and AECOM
4. Initial discharge of water treated by TWTS pending results which fall within the limits set by the SPDES Equivalent Permit.

**E. DAILY SITE PHOTOGRAPHS**



Temporary Water Treatment System components shown after initial system start up, prior to secondary containment being place and completion of tent. Photo facing west.



Trench excavation and load-out of material to ESMI at north end of site. Grey CKD can be seen in the excavation, shown prior to mixing in the middle and lower right side of this photo. Photo taken from the north end of the excavation facing south.

**DAILY PROGRESS REPORT 24: 12/06/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for December 06, 2011 as observed by Kasey Cornwell of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

- AECOM pumped ~5,000 gallons to the influent weir tank in preparation for treatment.
- Tioga installed sheets at the southern half of the sheeting alignment, they successfully installed 18 sheets to completion and 2 sheets were set to ~ 25'.
- Tioga completed fabrication of corner sheets
- AECOM placed NYSEG stock piled material around north end of site to create a safer work environment to address soil cracking from sheetpile installation and grade the area adjacent to the No. 4 Gas Holder foundation.
- AECOM installed a tent over and secondary containment under the TWTS pump and media chambers.
- AECOM and LRT continued troubleshooting leaking components on the TWTS.
- No noise exceedances of applicable monitoring levels.
- AECOM used BioSolve applied with pressure washers and misters to control odors during excavation and loading, and applied odor suppressant foam over open exaction at the end of the day.
- 5 trucks transported material to ESMI for disposal (See below for removal volumes).

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 45° F

Humidity: 89 %

Cloud cover: Overcast

Rainfall: 0.28"

Wind Speed Average and Direction: 6 mph NW Gusts of 14 mph

CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. No exceedances. Station location shifted to account for change in wind direction.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

**C. Remarks**

ESMI/Broome County Landfill Disposed Offsite (daily tons): **190/0**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **835/644**

**D. UPCOMING SITE ACTIVITIES**

1. AECOM's subcontractor Tioga to continue sheeting installation
2. AECOM to continue excavation of trench and load out of materials to ESMI or Broome County as needed
3. Initial discharge of water treated by TWTS pending results which fall within the limits set by the SPDES Equivalent Permit.

**E. DAILY SITE PHOTOGRAPHS**



Excavation at the north end of the site facing south, odor suppressant foam can be seen on the material staged for load-out.





Tioga assisted AECOM in moving components of TWTS to facilitate placement of secondary containment. Photo facing west at south end of site.



Secondary containment in place under TWTS components. Photo taken at south end of site facing west.

**DAILY PROGRESS REPORT 24: 12/07/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for December 07, 2011 as observed by Kasey Cornwell of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

- AECOM pumped ~5,000 gallons to the influent weir tank 1 in preparation for treatment.
- Tioga installed sheets at the southern half of the sheeting alignment, they successfully installed 23 sheets to completion and 3 sheets and one corner were set to ~ 25' at the north end of the site.
- ARCADIS collected 2 waste characterization soil samples for analysis by Test America, to facilitate approval for additional waste treatment/disposal at ESMI
- AECOM placed NYSEG stock piled material around north end of site to create a safer work environment to address soil cracking from sheetpile installation and grade the area adjacent to the No. 4 Gas Holder foundation.
- AECOM and LRT finished installing the tent over TWTS.
- AECOM and LRT continued troubleshooting leaking components on the TWTS.
- No noise exceedances of applicable monitoring levels.
- AECOM used BioSolve applied with pressure washers and misters to minimize odors during excavation and loading, and applied odor suppressant foam over the exposed soil within the open excavation at the end of the day.
- 8 trucks transported material to ESMI for thermal treatment (via LTTD) and disposal (See below for removal volumes).

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 34° F

Humidity: 93 %

Cloud cover: Overcast

Rainfall: 0.70"

Wind Speed Average and Direction: 8 mph NW Gusts of 20 mph

CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. No exceedances. Steady rain all day, PIDs were deployed with moisture filters, however dust tracks were not due to rain. Station location shifted to account for change in wind direction.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

### **C. Remarks**

ESMI/Broome County Landfill Disposed Offsite (daily tons): **298/0**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **1133/644**

### **D. UPCOMING SITE ACTIVITIES**

1. AECOM's subcontractor Tioga to continue sheeting installation
2. AECOM to continue excavation of trench and load out of materials to ESMI or Broome County as needed
3. Initial discharge of water treated by TWTS pending results which fall within the limits set by the SPDES Equivalent Permit.

### **E. DAILY SITE PHOTOGRAPHS**



Sheeting installation at southern end of site. Photo facing west.





Installation of protective tent covering components of TWTS. Photo facing west.

**DAILY PROGRESS REPORT 26: 12/08/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for December 08, 2011 as observed by Kasey Cornwell and Mike Flynn of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

- AECOM continued trench excavation and loadout of soil to ESMI. AECOM is currently excavating between sheets # 50 -60.
- AECOM's subcontractor LRT continued weatherization of the TWTS today. AECOM and LRT also repaired a leaking valve on one of the frac tanks and consolidated two partial tanks of treated water into one tank.
- AECOM and Tioga worked to seal leaking sheet seams at south end of site. AECOM is evaluating options to slow or stop leaks in sheets.
- AECOM's subcontractor Tioga continued installation of sheet pile wall on the southern end. Tioga completes the southern end and all of the phase one sheets are in place by day's end. 14 sheets driven to completion.
- AECOM's subcontractor HSE was onsite conducting noise monitoring. All readings collecting during sheet pile installation were within compliance (i.e., less than 80 dBA).
- 8 truckloads of material were transported to ESMI today.
- No materials transported for off-site disposal at Broome County.
- AECOM pumped ~6,000 gallons to the Influent Weir Tank 1 and treated ~12,000 gallons.
- 8 trucks transported material to ESMI for disposal (See below for removal volumes).
- AECOM applied BioSolve via pressure washers and poly sheeting odor control measures to minimize odor of impacted materials. AECOM secured the excavation by placing orange construction fencing and parking both excavators and loader around the perimeter of the open area

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 30° F

Humidity: 79%

Cloud cover: Overcast

Rainfall: 0.10"

Wind Speed Average and Direction: 10 mph W Gusts of 20 mph

CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. No exceedances. Station location shifted to account for change in wind direction.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

#### **C. Remarks**

ESMI/Broome County Landfill Disposed Offsite (daily tons): **280/0**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **1413/644**

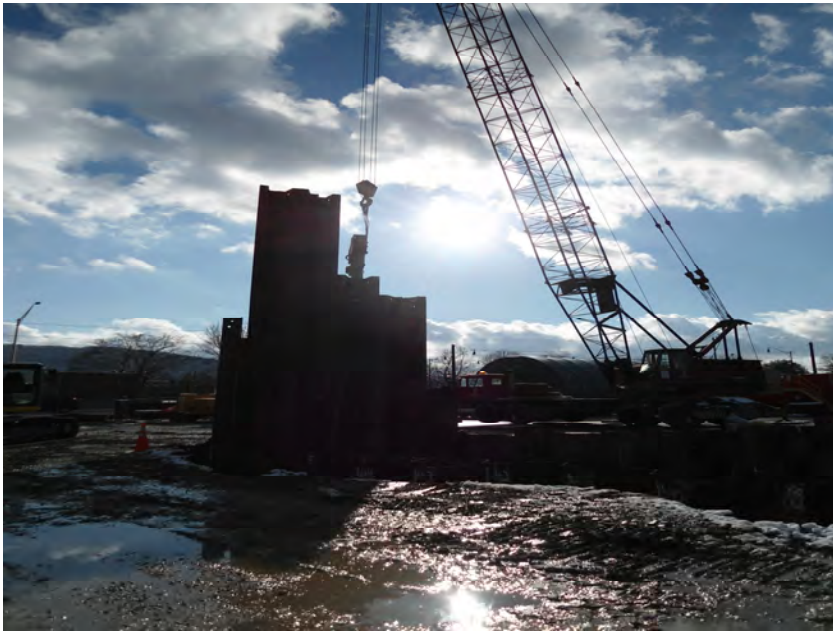
#### **D. UPCOMING SITE ACTIVITIES**

1. AECOM and Tioga to evaluate methods for slowing or stopping leaks in sheets at south end of excavation.
2. AECOM to continue excavation of trench and load out of materials to ESMI or Broome County as needed
3. Initial discharge of water treated by TWTS pending results which fall within the limits set by the SPDES Equivalent Permit.

**E. DAILY SITE PHOTOGRAPHS**



Survey to confirm excavated depths at north end of trench. Photo facing into trench from north end.



Final sheets being installed at south end of trench alignment. Photo facing south west.



Tioga installing sheets at southern end of site. Photo facing south west.

**DAILY PROGRESS REPORT 27: 12/09/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for December 09, 2011 as observed by Kasey Cornwell and Mike Flynn of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

- AECOM continued trench excavation and load out of soil to ESMI. AECOM is currently excavating between sheets # 60 -70.
- AECOM's subcontractor LRT completed the weatherization of the TWTS today. LRT also checked the system for leaks.
- AECOM mobilized a 5<sup>th</sup> frac tank to the site today. The additional tank was not part of the original plan and will only be used in the event that approval for discharge of treated water is not received. AECOM and ARCADIS also agree to use this tank for the storage of clean (treated) water so that it can be cleaned and demobilized as soon as possible.
- AECOM's subcontractor Tioga attempted to repair the leaking sheets on the eastern wall today. Tioga places additional "Swell Seal" and hydraulic cement in the area where the sheets are leaking with only limited success.
- AECOM and Tioga also excavate 2' below the trench elevation to install sumps where the sheets continue to leak. In addition to the leak on the east, there is one other moderate leak on the western wall.
- AECOM continued to add material from the onsite stockpile of borrow material (NYSEG stockpile) to fill the voids on the outside of the sheeting.
- AECOM's subcontractor HSE was onsite conducting noise monitoring. All readings collecting during sheet pile installation were within compliance (i.e., less than 80 dBA).
- No materials transported for off-site disposal at Broome County.
- AECOM applied BioSolve via pressure washers and poly sheeting odor control measures to minimize odor of impacted materials. AECOM secured the excavation by placing orange construction fencing and parking both excavators and loader around the perimeter of the open area.

- AECOM pumped ~7,000 gallons from sump to influent weir tank 1 in preparation for treatment. ~5,000 of water were treated and stored onsite pending approval for discharge.

## **B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 32° F

Humidity: 81%

Cloud cover: Overcast

Rainfall: 0.00"

Wind Speed Average and Direction: 6 mph SW Gusts of 13 mph

CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. No exceedances. Station location shifted to account for change in wind direction.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

## **C. Remarks**

ESMI/Broome County Landfill Disposed Offsite (daily tons): **315/0**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **1728/644**

## **D. UPCOMING SITE ACTIVITIES**

1. AECOM and Tioga to evaluate methods for slowing or stopping leaks in sheets at south end of excavation.
2. AECOM to continue excavation of trench and load out of materials to ESMI or Broome County as needed
3. Initial discharge of water treated by TWTS pending results which fall within the limits set by the SPDES Equivalent Permit.

## **E. DAILY SITE PHOTOGRAPHS**





View of AECOM attempting to repair leaking sheets. Photo taken from the western sheet wall facing east into excavation



View of excavation showing water from leaks. Photo taken from north end of excavation facing down and south.

**DAILY PROGRESS REPORT 28: 12/12/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for December 12, 2011 as observed by Kasey Cornwell and Mike Flynn of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRE.**

- AECOM continued to add material from the onsite stockpile of borrow material (NYSEG stockpile) to fill the voids on the outside of the sheeting, at the south end of the excavation.
- AECOM began excavating base for MH-1C; soil was staged and covered awaiting removal from site.
- No materials transported for off-site disposal at Broome County.
- AECOM pumped ~16,000 gallons from sumps to influent weir tank 1 in preparation for treatment. ~1,520 gallons of water were treated and stored onsite pending approval for discharge.
- ARCADIS collected soil samples #4-6 to characterize material to be transported to ESMI for disposal.
- ARCADIS Collected "AECOM Water Batch #1-2" to evaluate detections/exceedances noted above SPDES Discharge Permit limits in previous sample. An extra pH sample was collected for field analysis and ARCADIS determined that the pH following treatment was 5.58.
- AECOM applied BioSolve via pressure washers and poly sheeting odor control measures to minimize odor of impacted materials. AECOM secured the excavation by placing orange construction fencing and parking both excavators and loader around the perimeter of the open area.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 29° F

Humidity: 54%

Cloud cover: Overcast

Rainfall: 0.00"

Wind Speed Average and Direction: 5 mph SW Gusts of 9 mph

CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. No exceedances. Station location shifted to account for change in wind direction.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

**C. Remarks**

ESMI/Broome County Landfill Disposed Offsite (daily tons): **0/0**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **1728/644**

**D. UPCOMING SITE ACTIVITIES**

1. AECOM to continue excavation for MH-1C slab and prepare area for concrete pouring.
2. AECOM to continue excavation of trench and load out of materials to ESMI or Broome County as needed
3. Initial discharge of water treated by TWTS pending results which fall within the limits set by the SPDES Equivalent Permit.

**E. DAILY SITE PHOTOGRAPHS**



View of trench looking south, following initial dewatering efforts at start of day.



View of AECOM moving stockpiled materials at North end of the site for use in voids and depressions towards to the southern end of the sheet walls. Photo taken from the west, facing east.

**DAILY PROGRESS REPORT 28: 12/13/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for December 13, 2011 as observed by Kasey Cornwell and Mike Flynn of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

- AECOM continued excavating base for MH-1C; soil was staged and covered awaiting removal from site.
- AECOM subcontractor Tioga constructed rebar forms for manhole bases.
- 10 truckloads of material transported to ESMI.
- AECOM pumped ~4000 gallons from sumps to influent weir tank 1 in preparation for treatment. No water treated.
- LRT and AECOM worked to build elevated walkways, install lighting, valve plugs and make other changes to TWTS to increase safety and functionality.
- ARCADIS collected groundwater samples for field pH comparison. Sample collected following treatment was 6.08 and sample collected from within the confines of the trench was 7.40.
- AECOM applied BioSolve via pressure washers and poly sheeting odor control measures to minimize odor of impacted materials. AECOM secured the excavation by placing orange construction fencing and parking both excavators and loader around the perimeter of the open area.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 32° F

Humidity: 69%

Cloud cover: Overcast

Rainfall: 0.00"



Wind Speed Average and Direction: 3 mph NW Gusts of 9 mph  
CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. No exceedances. Station location shifted to account for change in wind direction.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

**C. Remarks**

ESMI/Broome County Landfill Disposed Offsite (daily tons): **350/0**  
ESMI/Broome County Landfill Disposed Offsite (total to date tons): **2078/644**

**D. UPCOMING SITE ACTIVITIES**

1. AECOM to continue excavation of MH-1C and construction of rebar base.
2. AECOM to continue excavation of trench and load out of materials to ESMI or Broome County as needed
3. Initial discharge of water treated by TWTS pending results which fall within the limits set by the SPDES Equivalent Permit

**E. DAILY SITE PHOTOGRAPHS**



Trench excavation and load out of materials to ESMI. Photo taken from south facing north.



Photo shows trench excavation and AECOM performing dewatering activities in base of trench, at northern end. Photo taken facing north.



**DAILY PROGRESS REPORT 30: 12/14/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for December 14, 2011 as observed by Kasey Cornwell and Mike Flynn of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

- AECOM subcontractor Tioga continued constructing rebar forms for manhole bases.
- 10 truckloads of material transported to ESMI.
- ARCADIS collected influent and effluent pH samples for field testing. The influent was 8.0 and the effluent was 6.5.
- AECOM pumped ~3500 gallons from sumps to influent weir tank 1 in preparation for treatment. ~15000 gallons of water were treated.
- LRT and AECOM worked to build elevated walkways, install lightening, valve plugs and make other changes to TWTS in increase safety and functionality.
- LRT and AECOM worked to address leaks in secondary containment under frac tanks and connecting pipes.
- AECOM continued excavation of trench in vicinity of #4 Gas holder foundation, ~ 10 additional yards of concrete was removed from within the trench alignment and staged at the surface for off-site transportation to Broome County Landfill.
- AECOM applied BioSolve via pressure washers and also utilized poly sheeting to minimize odor of impacted materials. AECOM secured the excavation by placing orange construction fencing and parking both excavators and loader around the perimeter of the open

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.  
38° F

Humidity: 75%

Cloud cover: Overcast

Rainfall: 0.01"

Wind Speed Average and Direction: 6 mph SW Gusts of 16mph

CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. No exceedances. Station location shifted to account for change in wind direction.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

### **C. Remarks**

ESMI/Broome County Landfill Disposed Offsite (daily tons): **350/0**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **2428/644**

### **D. UPCOMING SITE ACTIVITIES**

1. AECOM and ARCADIS will continue to monitor field pH readings, and evaluate the LRT pH Dosing System.
2. LRT and AECOM to install pH dosing system, to automatically dose system with pH fixing agent when readings fall out of range outlined in the SPDES Equivalent Permit.
3. AECOM to continue excavation of trench and load out of materials to ESMI or Broome County as needed
4. Initial discharge of water treated by TWTS pending results which fall within the limits set by the SPDES Equivalent Permit.

**E. DAILY SITE PHOTOGRAPHS**



Leaks in secondary containment under Frac Tank. Photo taken at south west corner of site near TWTS.



View of trench during dewatering and excavation activities. Photo taken from northern end of site facing south.

**DAILY PROGRESS REPORT 031: 12/15/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for December 15, 2011 as observed by E. Michael Flynn of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

AECOM continued excavation of impacted soil from the cell and loadout of soil to ESMI. AECOM is currently excavating the southern end of the trench. AECOM loads 7 trucks with soil for ESMI.

AECOM continues to remove concrete from the holder floor as excavation continues. AECOM uses the "hoe-ram" to break the concrete for offsite disposal at the Broome County Landfill. AECOM loads 3 trucks with C+D (concrete) for the Broome County Landfill.

AECOM continues to dewater the trench to the Weir tanks at the TWTS. Holding capacity at the tanks continue to be an issue.

ARCADIS receives results from batch #1-2 (the second sample of batch #1). The sample indicates the presence of 1,2 dichloroethene (VOC) in the treated water. Since the sample was collected directly from the frac tank it is believed that the VOC's may have been in the tank when it was delivered to the site. Additional treatment and re-sampling will be required.

7 truckloads of material were transported to ESMI today. A total of 75 loads (approximately 2625 tons) have been transported to ESMI to date.

3 truckloads of C+D (concrete) were transported for off-site disposal at Broome County. A total of 23 loads (805 tons) have been transported offsite to date.

AECOM applied BioSolve via pressure washers and also used poly sheeting to minimize odor of impacted materials. AECOM secured the excavation by placing orange construction fencing and parking both excavators and loader around the perimeter of the open area.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 35° F to 45°F

Humidity: 78%

Cloud cover: Partly cloudy

Rainfall: 0

Wind Speed Average and Direction: 2 mph NE Wind Speed Max: 4 mph (Gusts)

CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. No exceedances.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

**C. Remarks**

ESMI/Broome County Landfill Disposed Offsite (daily tons): **197/161**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **2625/805**

**D. UPCOMING SITE ACTIVITIES**

1. Continue excavation of cell.
2. Begin preparing the subbase for the sewer line.

**E. DAILY SITE PHOTOGRAPHS**



**View of excavation on the southern end of the trench.**



**View of concrete from holder floor.**



**DAILY PROGRESS REPORT 032: 12/16/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for December 16, 2011 as observed by E. Michael Flynn of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

AECOM continued excavation of impacted soil from the cell and loadout of soil to ESMI. AECOM is currently excavating the southern end of the trench. AECOM loads 3 trucks with soil for ESMI.

AECOM continues to dewater the trench to the weir tanks at the TWTS. Holding capacity at the tanks continue to be an issue. AECOM re-treats batch 1 again and ARCADIS re-samples the batch for VOC's.

ARCADIS collects additional samples from the TWTS. Additional samples are collected and submitted for analysis for VOC's from the influent, from between the weir tanks and the TWTS, from between the TWTS and the frac tanks, and from batch # 1 (called batch #1-3).

3 truckloads of material were transported to ESMI today. A total of 78 loads (approximately 2730 tons) have been transported to ESMI to date.

No additional loads of C+D (concrete) were transported for offsite disposal at Broome County. A total of 23 loads (805 tons) have been transported offsite to date.

AECOM applied BioSolve via pressure washers and poly sheeting odor control measures to minimize odor of impacted materials. AECOM secured the excavation by placing orange construction fencing and parking both excavators and loader around the perimeter of the open area.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 30° F to 35°F

Humidity: 78%

Cloud cover: Partly cloudy

Rainfall: 0.00"

Wind Speed Average and Direction: 2 mph NE Wind Speed Max: 10 mph (Gusts)



CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. No exceedances.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

**C. Remarks**

ESMI/Broome County Landfill Disposed Offsite (daily tons): **105/0**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **2730/805**

**D. UPCOMING SITE ACTIVITIES**

1. Continue excavation of cell.
2. Begin preparing the subbase for the sewer line.

**E. DAILY SITE PHOTOGRAPHS**



**View of truck loading.**



**View of Biosolve application.**

**DAILY PROGRESS REPORT 33: 12/19/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for December 19, 2011 as observed by Kasey Cornwell and Mike Flynn of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

- AECOM subcontractor Tioga continued constructing rebar forms for manhole bases.
- 5 truckloads of material transported to ESMI, 4 trucks sent to Broome County.
- LRT and AECOM adjusted first batch of water pH from 6.3 to 7.2, by dosing directly into that batch. By adding sodium hydroxide solution. The solution was added directly to the water in the frac tank via a small injection pump and the water was re-circulated in the tank until the pH was adjusted to 7.2
- AECOM pumped ~4500 gallons from sumps to influent weir tank 1 in preparation for treatment.
- Keystone associates onsite to survey sheet alignment, MH-1C excavation, base of trench and MH-1B alignment.
- AECOM placed KOBELCO 5331 in trench to clean up "slop" from base and along side of sheet walls prior to placing any stone.
- AECOM placed and compacted 1' of Type "F" stone in MH-1C base and along the bottom of the trench from ~1' south of MH-1C to ~100' south. Prior to placing the Type "F" stone, AECOM placed #1 and #2 stone to level out areas near sumps and along the base of the trench.
- AECOM applied BioSolve via pressure washers and poly sheeting odor control measures to minimize odor of impacted materials. AECOM secured the excavation by placing orange construction fencing and parking both excavators and loader around the perimeter of the open excavation.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses

were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 33° F

Humidity: 68%

Cloud cover: Overcast

Rainfall: 0.00"

Wind Speed Average and Direction: 10 mph SW Gusts of 20 mph

CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. No exceedances. Station location shifted to account for change in wind direction.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

### **C. Remarks**

ESMI/Broome County Landfill Disposed Offsite (daily tons): **175/140**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **2905/945**

### **D. UPCOMING SITE ACTIVITIES**

1. AECOM to install and pour concrete base for MH-1C
2. AECOM to continue installing pipe-bedding material at base of trench
3. AECOM to continue excavation of trench and load out of materials to ESMI or Broome County as needed
4. Initial discharge of water treated by TWTS pending approval from DEC

**E. DAILY SITE PHOTOGRAPHS**



Tioga placing geo-textile over #1 and #2 stone excavation for MH-1C. Photo taken at north end of site from east side of sheet wall.





Tioga and AECOM placing geo-textile fabric over MH1-C excavation. Photo taken from north end of site facing south.



Keystone associates surveying corners of MH-1C alignment. "F" type stone placed over geo-textile fabric and compaction completed. Photo taken from north end of site.

**DAILY PROGRESS REPORT 034: 12/20/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for December 20, 2011 as observed by E. Michael Flynn of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

AECOM continued excavation of impacted soil from the cell and loadout of soil to ESMI. AECOM continues work on the southern end of the trench.

AECOM's subcontractor LRT installed a pH adjustment pump which will add a solution of sodium hydroxide to increase pH prior to discharge. The initial samples of treated water from the system have had pH values below the acceptable limits of the discharge permit.

AECOM's subcontractor Tioga continued the placement of the crushed stone for the pipe bedding layer. Atlantic Testing Laboratories was onsite to test the compaction of the stone. Initial readings were below 95% compaction, Tioga recompact the stone as necessary to meet 95% compaction. After several rounds, Tioga determined the appropriate number of passes with the compactor and results were at or above 95%.

Tioga completes the stone installation and begins preparing the subbase for manhole MH-1C.

AECOM discharges "Batch # 1" from the TWTS today after analytical results are received from the laboratory that meet the SPDES discharge permit equivalent limits. AECOM treats another batch and ARCADIS collects Batch # 2.

3 truckloads of material were transported to ESMI today.

No materials transported for off-site disposal at Broome County.

AECOM applied BioSolve via pressure washers and poly sheeting odor control measures to minimize odor of impacted materials. AECOM secured the excavation by placing orange construction fencing and parking both excavators and loader around the perimeter of the open area.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses



were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 30° F to 35°F

Humidity: 78%

Cloud cover: Clear

Rainfall: 0.00"

Wind Speed Average and Direction: 2 mph NE Wind Speed Max: 4 mph (Gusts)

CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. No exceedances.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

**C. Remarks**

ESMI/Broome County Landfill Disposed Offsite (daily tons): **105/0**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **3010/945**

**D. UPCOMING SITE ACTIVITIES**

1. Complete trench excavation.
2. Complete the subbase for the sewer line.
3. Pour the base for MH-1C
4. Begin HDPE welding.

**E. DAILY SITE PHOTOGRAPHS**



**View of Tioga cleaning the floor of the trench and AECOM loading trucks (from above)**



**View of compaction testing on the crushed stone.**

**DAILY PROGRESS REPORT 035: 12/21/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for December 21, 2011 as observed by E. Michael Flynn of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

AECOM continued excavation of impacted soil from the cell and loadout of soil to ESMI. AECOM also continues breaking up the concrete from the holder and loading out the material to the Broome County Landfill.

AECOM's subcontractor, Tioga prepared the stone base for manhole MH-1C today and began placing the concrete forms today in preparation for pouring the concrete tomorrow.

AECOM continues dewatering the trench to the onsite weir tanks. AECOM continues treating water through the TWTS in "batch" mode. Continuous discharge of treated water is pending the receipt of sample results that meet the SPDES discharge permit equivalent limits.

1 truckload of material was transported to ESMI today.

5 truckloads of soil/ concrete were transported for offsite disposal at Broome County.

AECOM applied BioSolve via pressure washers and poly sheeting odor control measures to minimize odor of impacted materials. AECOM secured the excavation by placing orange construction fencing and parking both excavators and loader around the perimeter of the open area.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 30° F to 35°F

Humidity: 60%

Cloud cover: Clear

Rainfall: 0.00"

Wind Speed Average and Direction: 2 mph W Wind Speed Max: 4 mph (Gusts)

CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. No exceedances.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

**A. Remarks**

ESMI/Broome County Landfill Disposed Offsite (daily tons): **35/175**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **3045/1120**

The weekly site progress meeting was held at the site today. Please see the meeting minutes for details of the meeting.

**B. UPCOMING SITE ACTIVITIES**

1. Complete excavation of cell.
2. Pour the base for MH-1C
3. Begin HDPE welding.

**C. DAILY SITE PHOTOGRAPHS**



**View of AECOM installing dewatering sumps below the crushed stone layer.**



**View of concrete forms for MH-1C.**

**DAILY PROGRESS REPORT 36: 12/22/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for December 22, 2011 as observed by Kasey Cornwell and Mike Flynn of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

- AECOM continued excavation of footer area for MH-1B.
- 1 truckload of material transported to ESMI, 1 truck sent to Broome County.
- AECOM and Tioga poured concrete base for MH-1C, ATL onsite to collect cylinders (4) for compressive strength testing. Tioga also performs air entrainment and slump testing. All results were within project specifications and perform slump test.
- AECOM continued decontaminating equipment including loader, hammer and DOOSAN excavator.
- AECOM pumped ~5500 gallons from sumps to influent weir tank 1 in preparation for treatment. ~9249 gallons were treated and stored in one of the frac tanks. frac tank # 1
- Parrat-Wolff was onsite with ARCADIS to decommission PZ01-05 and MW93-60D.
- AECOM applied BioSolve via pressure washers and poly sheeting odor control measures to minimize odor of impacted materials. AECOM secured the excavation by placing orange construction fencing and parking both excavators and loader around the perimeter of the open excavation.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 44° F

Humidity: 88%

Cloud cover: Overcast



Rainfall: 0.19"

Wind Speed Average and Direction: 5 mph SW Gusts of 21 mph

CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. No exceedances. Station location shifted to account for change in wind direction.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

### **C. Remarks**

ESMI/Broome County Landfill Disposed Offsite (daily tons): **35/35**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **3080/1155**

### **D. UPCOMING SITE ACTIVITIES**

1. Completion and installation of base for MH-1B.
2. Welding and placing of HDPE pipe.
3. AECOM to continue excavation of trench and load out of materials to ESMI or Broome County if needed
4. Possible continuous discharge to start next week (Tuesday).

### **DAILY SITE PHOTOGRAPHS**



View of trench, Tioga compacting stone overlying geo-textile fabric. Photo taken from southern end of site, facing north.





Parratt Wolff and ARCADIS decommissioning wells at north end of the site. Photo taken at north end, facing northwest.



AECOM and Tioga placing concrete in form for MH-1C. Photo taken from northwest side of site facing north.

**DAILY PROGRESS REPORT 37: 12/23/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for December 23, 2011 as observed by Kasey Cornwell and Mike Flynn of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

- Parratt-Wolff decontaminated augers and abandonment equipment until visually clean prior to removal from site.
- AECOM performed housekeeping activities before 3-day weekend. Tasks included winterizing TWTS, prep areas for digging to locate existing pipe (scheduled for next week), secured trench area and maintained silt fencing. Winterizing measures included wrapping exposed hoses with insulation
- AECOM placed crusher run stone in the voids created on the outside of the sheetpile alignment to minimize infiltration of surface water into the excavation. around exterior of sheet walls in order to minimize water flow.
- AECOM finished decontaminating the loader.
- AECOM pumped ~8500 gallons from sumps to influent weir tank 1 in preparation for treatment. ~45,000 gallons (Batch 2 and 3 were both treated/retreated to accommodate pH adjustment, accounts for higher treatment volume) were treated and stored in frac tanks number 1 and 2.
- ARCADIS collected "Influent-122311", "AE BATCH2-2\_122311" and "AE BATCH3\_122311". Field volumes were collected for pH analysis from Weir Tank 1 – 7.13, AE BATCH2-2\_122311 – 6.21, and AEBATCH 3\_122311 – 6.45.
- AECOM applied BioSolve via pressure washers and poly sheeting odor control measures to minimize odor of impacted materials. AECOM secured the excavation by placing orange construction fencing and parking both excavators and loader around the perimeter of the open excavation.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses

were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violations of safety procedures were observed or recorded.

Temperature: 30° F

Humidity: 84%

Cloud cover: Overcast

Rainfall: 0.41"

Wind Speed Average and Direction: 8 mph NW Gusts of 16 mph

CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. No exceedances. Station location was shifted to account for change in wind direction.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

### **C. Remarks**

ESMI/Broome County Landfill Disposed Offsite (daily tons): **0/0**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **3080/1155**

### **D. UPCOMING SITE ACTIVITIES**

1. Completion and installation of base for MH-1B.
2. Welding and installation of HDPE pipe.
3. AECOM to continue excavation of trench and load out of materials to ESMI or Broome County if needed
4. Possible continuous discharge to start next week (Tuesday).
5. Test Pit/Excavation in order to locate existing storm sewer.

#### **E. DAILY SITE PHOTOGRAPHS**



View of two weir tanks and four frac tanks. Fourth tank is shown perpendicular to other tanks and was brought onsite to store treated water if necessary over the 3-day weekend. Photo taken at southern end of the site facing north.



View of south end of sheet wall. Photo taken at south end of site facing south.

**DAILY PROGRESS REPORT 39: 12/27/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for December 27, 2011 as observed by Matt Hysell of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

AECOM collected approximately 6,500 gallons of water from the trench sump and transferred to influent weir tank for treatment. AECOM's temporary water treatment system subcontractor, LRT mobilized an additional frac tank to the site to provide additional storage capacity for treated groundwater extracted from the trench.

AECOM's subcontractor Vari-Tech LLC (Vari-Tech) successfully butt-fused the south flange and an approximately 54-foot section of HDPE pipe. After moving and preparing a second 54-section of HDPE, Vari-Tech constructed a temporary shelter to prevent rain from accumulating on the HDPE pipe and fusing machinery surfaces. Additional fusing was postponed until the following day to allow the pipe and machinery to dry.

AECOM excavated two test pits to evaluate the location and alignment of the existing storm sewer. The first test pit was excavated adjacent to the northwest corner of the trench to identify the location of the northern portion of the existing storm sewer. The location of the existing storm sewer was located and surveyed. A second test pit was excavated adjacent to the southwest corner of the trench to identify the location of the southern portion of the existing storm sewer. The former No. 4 Gas Holder foundation was identified at approximately 3 feet below ground surface (bgs). A concrete structure aligned in a north/south direction was identified at approximately 6 feet bgs. The sides of the structure were also uncovered to approximately 9 feet bgs. The structure followed the approximate alignment of the existing storm sewer identified on the design drawings. The alignment of the concrete structure and approximate center of pipe were marked and surveyed on the ground surface immediately adjacent to the excavation.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violations of safety procedures were observed or recorded.

Temperature: 27 - 43° F

Humidity: 80 %

Cloud cover: Cloudy

Rainfall: 0.3"

Wind Speed Average and Direction: 12 mph SSE Gusts of 28 mph  
CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. An instantaneous exceedance for VOCs occurred at the start of the day, however no exceedances of 15 minute average readings occurred. Station location shifted to account for change in wind direction.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

### **C. Remarks**

ARCADIS collected two samples from the temporary groundwater treatment system (TWTS) including: (1) an influent sample (INFLUENT 122711) from the dewatering line for analysis of volatile organic compounds (VOCs); and (2) a sample (AE-BATCH4-122711) from the fourth batch of treated groundwater for VOCs, semi-volatile organic compounds (SVOCs) and biphenyl, polycyclic aromatic hydrocarbons (PAHs), metals, cyanide, oil and grease, total suspended solids, and pH.

No trucks were loaded for disposal (See below for removal volumes).

ESM/Broome County Landfill Disposed Offsite (daily tons): **0/0**

ESM/Broome County Landfill Disposed Offsite (total to date tons): **3080/1155**

### **D. UPCOMING SITE ACTIVITIES**

1. Continued operation of TWTS by LRT and AECOM
2. Continued TWTS effluent batch sampling, prior to discharge in accordance with SPDES equivalent permit
3. AECOM's subcontractor Vari-Tech to continue fusing HDPE pipe sections.
4. AECOM will further evaluate the existing storm sewer location by performing a confined space entry and/or subcontracting a private utility locating company.



E. DAILY SITE PHOTOGRAPHS



Vari-Tech setting up the south flange and an approximately 54-foot pipe section for surface ‘trimming’ (facing west).





Test pit to locate the existing storm sewer. The test pit was located adjacent to the southwest corner of the trench north of the existing manhole along Court Street. (facing north).



A completed butt fusion of the south flange and an approximately 54-foot section of HDPE (facing west).

**DAILY PROGRESS REPORT 39: 12/28/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for December 28, 2011 as observed by Matt Hysell of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

AECOM collected approximately 6,500 gallons of water from the trench sump and transferred to Influent Weir Tank 1 for treatment. AECOM also treated approximately 10,968 gallons via the temporary water treatment system (TWTS).

AECOM's subcontractor Vari-Tech LLC (Vari-Tech) successfully trimmed and butt-fused two approximately 54-foot sections of HDPE pipe to the existing south flange and an approximately 54-foot HDPE section fused on December 27, 2011. The temporary shelter constructed by Vari-Tech the previous day was dismantled and a sturdier shelter was constructed to prevent precipitation from accumulating on the HDPE pipe and fusing machinery surfaces.

AECOM performed a non-permit required confined space entry of the south manhole to evaluate the location and alignment of the existing storm sewer. AECOM identified the approximate alignment of the existing storm sewer and distance to the pipe bend.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 15 - 39° F

Humidity: 75 %

Cloud cover: Overcast

Rainfall: 0.01"

Wind Speed Average and Direction: 15 mph WNW Gusts of 33 mph

CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. No exceedances of instantaneous or average readings occurred.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

### **C. Remarks**

ARCADIS collected field pH measurements (using a pH meter) from the influent weir tank 2 and two effluent frac tanks holding batches of treated groundwater extracted from the trench (Batch 2-2 and Batch 3).

No trucks were loaded for disposal (See below for removal volumes).

ESMI/Broome County Landfill Disposed Offsite (daily tons): **0/0**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **3080/1155**

### **D. UPCOMING SITE ACTIVITIES**

1. Continued operation of TWTS by LRT and AECOM
2. Continued TWTS effluent batch sampling, prior to discharge in accordance with SPDES equivalent permit
3. AECOM will discharge treated groundwater Batches 2-2 and 3, in accordance with approval from Anthony Karziel (NYSDEC) in email correspondence to Jason Brien (ARCADIS) on December 28, 2011.
4. AECOM's subcontractor Vari-Tech to continue fusing HDPE pipe sections.
5. AECOM will further evaluate the existing storm sewer location by performing a confined space entry and subcontracting a private utility locating company.
6. AECOM will subcontract an electrician to wire tank heaters for the TWTS.

**E. DAILY SITE PHOTOGRAPHS**



Vari-Tech butt-fusing a section of HDPE and constructing a temporary structure (facing south)





A successful butt-fusion of HDPE sections two and three (facing west).



Alignment of the additional frac tank delivered to the site on 12/27/11 (facing south).



**DAILY PROGRESS REPORT 40: 12/29/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for December 29, 2011 as observed by Matt Hysell of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

AECOM collected approximately 6,500 gallons of water from the trench sump and transferred to influent weir tanks for treatment. AECOM discharged approximately 40,000 gallons of treated groundwater simultaneously from two frac tanks to the onsite manhole located along Court Street. The discharged groundwater represented treated groundwater from Batches 2-2 and 3.

AECOM's subcontractor Vari-Tech LLC (Vari-Tech) successfully butt-fused a fourth approximately 54-foot section of HDPE pipe to the south flange and 3 sections of approximately 54-foot HDPE pipe fused Tuesday (12/27/11) and Wednesday (12/28/11). Vari-Tech also fused 2 separate sets of a single portion of approximately 54-foot HDPE with a flange.

AECOM's subcontractor Tioga Construction cleared the footer for the northern manhole to evaluate the alignment for pipe collars to be constructed per the HDPE manhole and HDPE pipe specifications. Tioga Construction indicated that the northern manhole footer will need to be extended and the size of the southern manhole footer will need to be larger when it is constructed.

AECOM's subcontractor JP Rogers Electric installed wiring and required appurtenances necessary to operate a total of four tank heaters (two in each weir tank) for the TWTS.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 10 - 27° F

Humidity: 69 %

Cloud cover: Partly cloudy

Rainfall: 0.02"

Wind Speed Average and Direction: 7 mph SW Gusts of 22 mph

CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. No exceedances of instantaneous or average readings occurred.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

**C. Remarks**

No trucks were loaded for disposal (See below for removal volumes).

ESMI/Broome County Landfill Disposed Offsite (daily tons): **0/0**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **3080/1155**

**D. UPCOMING SITE ACTIVITIES**

1. Continued operation of TWTS by LRT and AECOM.
2. Continued TWTS effluent batch sampling, prior to discharge in accordance with SPDES equivalent permit.
3. AECOM will discharge treated groundwater Batch 4, pending approval from Anthony Karziel (NYSDEC) based on analytical results transmitted in email correspondence from Jason Brien (ARCADIS) on December 29, 2011.
4. AECOM's subcontractor Vari-Tech to continue fusing HDPE pipe sections.
5. AECOM will further evaluate the existing storm sewer location by performing a confined space entry and subcontracting a private utility locating company.

**E. DAILY SITE PHOTOGRAPHS**



HDPE pipe trimmings generated during butt-fusing of the fourth section of pipe (facing south).



Discharge line of treated groundwater Batches 2-2 and 3. The backfilled test pit excavated 12/27/11 is shown in the secured area (facing southwest).





The footer cleared by Tioga Construction for the northern manhole (facing southeast).

**DAILY PROGRESS REPORT 41: 12/30/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for December 30, 2011 as observed by Matt Hysell of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

AECOM collected approximately 6,500 gallons of water from the trench sump and transferred to influent weir tanks for treatment. AECOM discharged approximately 40,000 gallons of treated groundwater simultaneously from two frac tanks to the onsite manhole located along Court Street. The discharged groundwater represented treated groundwater from Batch 4.

AECOM's subcontractor Syracuse Utilities identified the approximate alignment of the existing storm sewer and distance to the pipe bend using subsurface tracing equipment. AECOM performed a non-permit required confined space entry of the south manhole with the subsurface tracing probe to transmit the location and alignment of the existing storm sewer to Syracuse Utilities on the surface.

AECOM's subcontractor Vari-Tech LLC (Vari-Tech) successfully butt-fused the north flange and an approximately 54-foot section of HDPE (fused on 12/29/11) with the south flange and four approximately 54-foot sections of HDPE pipe fused between December 27 and 30, 2011. Vari-Tech also successfully butt-fused a second flange to the section of approximately 54-foot HDPE pipe and flange fused the previous day (12/29/11).

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 27 - 42° F

Humidity: 77 %

Cloud cover: Cloudy

Rainfall: Trace

Wind Speed Average and Direction: 7 mph S Gusts of 22 mph

CAMP: CAMP Stations UP, DW 1 and DW 2 deployed.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

### **C. Remarks**

ARCADIS collected a sample (AE-BATCH5-125011) from the temporary groundwater treatment system (TWTS) from the fifth batch of treated groundwater for VOCs, semi-volatile organic compounds (SVOCs) and biphenyl, polycyclic aromatic hydrocarbons (PAHs), metals, cyanide, oil and grease, total suspended solids, and pH.

No trucks were loaded for disposal (See below for removal volumes).

ESMI/Broome County Landfill Disposed Offsite (daily tons): **0/0**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **3080/1155**

### **D. UPCOMING SITE ACTIVITIES**

1. Continued operation of TWTS by LRT and AECOM
2. Continued TWTS effluent batch sampling, prior to discharge in accordance with SPDES equivalent permit
3. AECOM's subcontractor Vari-Tech to continue fusing HDPE pipe sections.
4. AECOM's subcontractor Tioga Construction forecasting to place the HDPE pipe and manholes in the trench.



**E. DAILY SITE PHOTOGRAPHS**



A completed butt-fused section of HDPE piping (facing southwest).



A butt-fused section of HDPE and a flange. The excess material HDPE extruded (bead) during fusion was removed as the pipe cooled (facing west).



Butt-fusing a section HDPE piping and flange with a second flange (facing north).

**DAILY PROGRESS REPORT 42: 1/3/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for January 03, 2012 as observed by E. Michael Flynn of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

AECOM has completed the majority of the trench excavation. No additional excavation or offsite disposal was performed today.

AECOM continues to dewater the trench to the weir tanks at the TWTS. Holding capacity of the tanks continues to be an issue. ARCADIS is currently awaiting the results from "Batch # 5". ARCADIS also collected "Batch # 6" today. AECOM continues treating water through the TWTS, generating "Batch # 7"

AECOM's subcontractors Tioga and Vari-Tech continue welding the final sections of HDPE pipe. Vari-Tech welded the final section today.

AECOM's subcontractor Keystone Associates verified the length of the HDPE sections required to connect to existing manholes MH-1 and MH-2.

AECOM secured the excavation by placing orange construction fencing and parking both excavators and loader around the perimeter of the open area.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 18° F to 20°F

Cloud cover: Clear

Rainfall: 0.00"

Wind Speed Average and Direction: 5 mph NNW

CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. No exceedances.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

**C. REMARKS**

ESMI/Broome County Landfill Disposed Offsite (daily tons): **0/0**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **3080/1155**

**D. UPCOMING SITE ACTIVITIES**

1. Pour the base for MH-1B
2. Install MH1-B and MH-1C
3. Install the HDPE pipe



**E. DAILY SITE PHOTOGRAPHS**



**View of short sections of HDPE.**



**View of Vari-Tech welding a flange on the HDPE.**

**DAILY PROGRESS REPORT 43: 1/4/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for January 04, 2012 as observed by E. Michael Flynn of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

AECOM has completed the majority of the trench excavation. No additional excavation or offsite disposal was performed today.

AECOM continues to dewater the trench to the weir tanks at the TWTS. Holding capacity of the tanks continues to be an issue. ARCADIS received the results from "Batch # 5". All results are non-detect and AECOM discharged the batch.

AECOM's subcontractor Tioga demobilized the HDPE welding machine today and began assembling the re-bar "cages" that will be used for the manhole bases. Tioga assembled the cages on the ground surface and will lower them into position once the bases are ready to be poured.

AECOM secured the excavation by placing orange construction fencing and parking both excavators and loader around the perimeter of the open area.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 10° F to 25°F

Cloud cover: Clear

Rainfall: 0.00"

Wind Speed Average and Direction: 5 mph NNW

CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. No exceedances.

Calibration: Dust Trak and PID units for each station calibrated at start of day.



**C. REMARKS**

ESMI/Broome County Landfill Disposed Offsite (daily tons): **0/0**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **3080/1155**

**D. UPCOMING SITE ACTIVITIES**

1. Pour the base for MH-1B
2. Install MH1-B and MH-1C
3. Install the HDPE pipe

**C. DAILY SITE PHOTOGRAPHS**



**View of the main section of HDPE pipe.**



**View of the HDPE welder being demobilized.**

**DAILY PROGRESS REPORT 44: 1/5/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for January 05, 2012 as observed by E. Michael Flynn of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

AECOM has completed the majority of the trench excavation. No additional excavation or offsite disposal was performed today.

AECOM continues to dewater the trench to the weir tanks at the TWTS. Holding capacity of the tanks continues to be an issue. ARCADIS received the results from "Batch # 6". Volatiles were again present in the effluent. AECOM continues to troubleshoot the system with the vendor LFR.

AECOM demobilized one frac tank that was utilized for storing treated water at the site.

AECOM performed limited housekeeping around the site.

AECOM's subcontractor Tioga is not onsite, awaiting delivery of manholes and the blind flanges for testing the HDPE pipe.

AECOM secured the excavation by placing orange construction fencing and parking both excavators and loader around the perimeter of the open area.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 30° F to 35°F

Cloud cover: Clear

Rainfall: 0.00"

Wind Speed Average and Direction: 5 mph NNW

CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. No exceedances.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

**C. REMARKS**

ESMI/Broome County Landfill Disposed Offsite (daily tons): **0/0**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **3080/1155**

**D. UPCOMING SITE ACTIVITIES**

1. Pour the base for MH-1B
2. Install MH1-B and MH-1C
3. Install the HDPE pipe

**E. DAILY SITE PHOTOGRAPH**



**View of the frac tank being demobilized.**

**DAILY PROGRESS REPORT 45: 1/6/11****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for January 06, 2012 as observed by E. Michael Flynn of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

AECOM has completed the majority of the trench excavation. No additional excavation or offsite disposal is performed today.

AECOM continued to dewater the trench to the weir tanks at the TWTS. Holding capacity of the tanks continues to be an issue. AECOM re-treated "Batch # 6" and ARCADIS collected VOC samples from AE Batch 6-2-010612 (collected from the re-treated batch # 6) ARCADIS also collected samples from "Batch # 7" for all of the analytes required for the SPDES permit equivalent. AECOM bled air from the top of the carbon and organoclay vessels in the TWTS. AECOM and LFR believe that air may have entered the vessels and is now allowing water to "tunnel" through the carbon resulting in decreased contact time. ARCADIS collected samples after the air is bled from the vessels.

AECOM's subcontractor Tioga is not onsite today, awaiting the delivery of the manholes and the blind flanges that will be used to test the HDPE pipe.

AECOM receives manholes MH-1C and MH-1B today.

AECOM secured the excavation by placing orange construction fencing and parking both excavators and loader around the perimeter of the open area.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 30° F to 50°F

Cloud cover: Clear

Rainfall: 0.00"

Wind Speed Average and Direction: 5 mph NNW

CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. No exceedances.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

**C. REMARKS**

ESMI/Broome County Landfill Disposed Offsite (daily tons): **0/0**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **3080/1155**

**D. UPCOMING SITE ACTIVITIES**

1. Pour the base for MH-1B
2. Install MH1-B and MH-1C
3. Install the HDPE pipe

**E. DAILY SITE PHOTOGRAPHS**



**View of the manholes being delivered.**



**View of the manholes being unloaded.**



**DAILY PROGRESS REPORT 46: 1/9/12****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for January 09, 2012 as observed by E. Michael Flynn of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

AECOM has completed the majority of the trench excavation. Tioga excavated additional clay soil where the southern collar for MH-1C will be poured. Tioga also removed additional clay from below the elevation of the MH-1C base in order to “key” the collar into the native clay below the manhole base. The collars at MH-1C and MH-1B will both be utilized as a water stop for the phase two activities. Excavated clay from the MH-1C area was stockpiled at the southern end of the trench (near MH-1B location) where it will be loaded out at a later date.

AECOM continues to dewater the trench, pumping to the weir tanks at the TWTS. AECOM continues treatment in “batch” mode due to the continued issues with VOC’s in the treated water.

ARCADIS received results for “batch #6-2” and the VOC results are below the permit requirements. AECOM discharged the treated water batch.

Tioga placed re-bar and forms for the southern collar at MH-1C. Tioga poured the lower half of the collar this afternoon. The upper half of the collar will be poured once the HDPE pipe has been installed.

Tioga placed MH-1C on the concrete base and bolted the manhole in position.

AECOM applied BioSolve via pressure washers and poly sheeting odor control measures to minimize odor of impacted materials. AECOM secured the excavation by placing orange construction fencing and parking both excavators and loader around the perimeter of the open area.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 25° F to 39°F

Cloud cover: Clear

Rainfall: 0.00"

Wind Speed Average and Direction: 5 mph SSW

CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. No exceedances.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

**C. OFFSITE DISPOSAL:**

ESMI/Broome County Landfill Disposed Offsite (daily tons): **0/0**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **3080/1155**

**D. SIGNIFICANT COMMUNICATIONS:**

A meeting was held at the site today between NYSEG, ARCADIS and AECOM to discuss phase two work. Items such as sequencing and alternative construction methods were discussed. Additional items that will be discussed prior to phase two are: submittals, alternate methods, schedule and construction issues.

**E. UPCOMING SITE ACTIVITIES**

1. Pour the base for MH-1B
2. Install MH-1B
3. Install the HDPE pipe

**F. DAILY SITE PHOTOGRAPHS**



**View of MH-1C being lowered into position.**



**View of re-bar being placed for the southern collar at MH-1C.**

**DAILY PROGRESS REPORT 47: 1/10/12****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for January 10, 2012 as observed by E. Michael Flynn of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

AECOM has completed the majority of the trench excavation. AECOM loaded one truck with soil for ESMI. The soil was removed from the collar at MH-1C yesterday.

AECOM continues to dewater the trench and pump to the weir tanks at the TWTS. AECOM continues treatment in "batch" mode due to the continued issues with VOC's in the treated water. AECOM's subcontractor LFR is onsite today to backflush the carbon vessels at the TWTS. LFR did not have the correct fittings for back-flushing and will return Thursday for back-flushing.

ARCADIS received the results for batch # 7 of treated water. VOC's are again present in the sample. AECOM will re-treat the batch.

Tioga completes the placement of the crusher run base below MH-1B. Atlantic Testing (ATL) is onsite to verify the compaction. All results are > 95 % compaction. ARCADIS also requests that ATL re-test several locations in the center of the pipe trench where sub-base material was previously tested to document that moisture and/or frost had not adversely affected areas that were previously tested and would not affect subsequent lifts of material. All areas are > 95% compaction.

Keystone Associates locates the position of the base for MH-1B.

AECOM secured the excavation by placing orange construction fencing and parking both excavators and loader around the perimeter of the open area.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 30° F to 35°F

Cloud cover: Clear

Rainfall: 0.00"

Wind Speed Average and Direction: 5 mph SSW

CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. No exceedances.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

**C. OFFSITE DISPOSAL:**

ESMI/Broome County Landfill Disposed Offsite (daily tons): **35/0**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **3115/1155**

**D. SIGNIFICANT COMMUNICATIONS:**

The weekly site progress meeting was held at the site today. Please refer to the meeting minutes for details of the meeting.

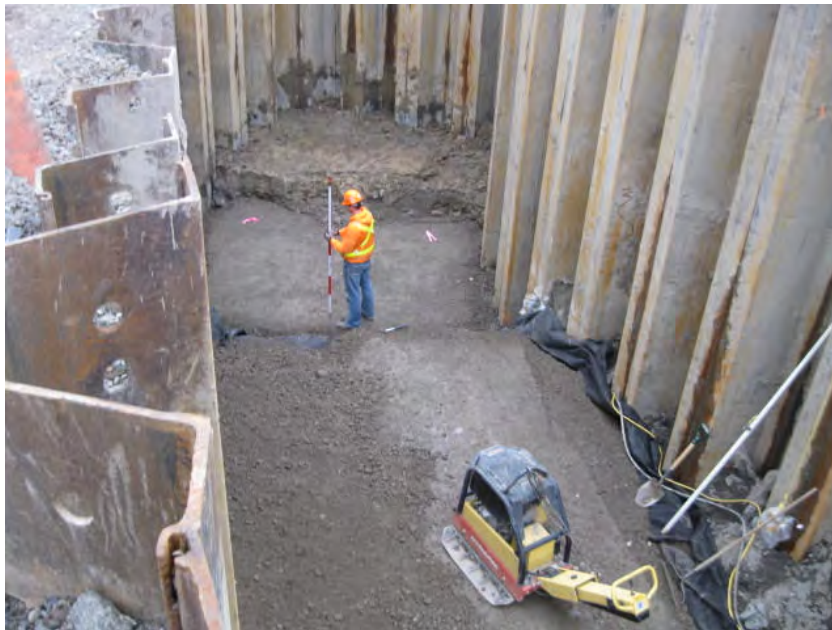
**E. UPCOMING SITE ACTIVITIES**

1. Pour the base for MH-1B
2. Install MH-1B
3. Install the HDPE pipe

**F. DAILY SITE PHOTOGRAPHS**



**View of ATL testing compaction.**



**View of Keystone marking the location of MH-1B.**



**DAILY PROGRESS REPORT 48: 1/11/12****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for January 11, 2012 as observed by E. Michael Flynn of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

AECOM has completed the majority of the trench excavation. No additional excavation or offsite disposal was performed today.

AECOM continues to dewater the trench and pump to the weir tanks at the TWTS. AECOM continues treatment in "batch" mode due to the continued issues with VOC's in the treated water

ARCADIS enters MH-2 to re-check the elevations of the southern inverts. Measurements are difficult inside the manhole due to the presence of grout around the existing Danby liner. AECOM and Tioga utilized laser levels inside the manhole and at the ground surface to determine the elevations where the new HDPE will be slip lined into the existing RCP.

Tioga poured the base for MH-1B. ATL was onsite to perform testing of the concrete.

AECOM secured the excavation by placing orange construction fencing and parking both excavators and loader around the perimeter of the open area.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work.

An AECOM employee was injured today while attempting to remove a section of 3" hose at the TWTS. The employee pulled on the hose and once the hose was disconnected, the employee was struck in the mouth, injuring several teeth. The employee was taken to a local clinic for first aid treatment.

Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak units.

Temperature: 30° F to 48°F

Cloud cover: Clear

Rainfall: 0.00"

Wind Speed Average and Direction: 5 mph SSW



CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. No exceedances.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

**C. OFFSITE DISPOSAL:**

ESMI/Broome County Landfill Disposed Offsite (daily tons): **0/0**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **3115/1155**

**D. SIGNIFICANT COMMUNICATIONS:**

NONE

**E. UPCOMING SITE ACTIVITIES**

1. Install MH-1B
2. Install the HDPE pipe

**F. DAILY SITE PHOTOGRAPH**



**View of forms and re-bar for the base of MH-1B.**

**DAILY PROGRESS REPORT 49: 1/12/12****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for January 12, 2012 as observed by E. Michael Flynn of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

AECOM has completed the majority of the trench excavation. No additional excavation or offsite disposal was performed today.

AECOM continues to dewater the trench and pump to the weir tanks at the TWTS. AECOM continues treatment in "batch" mode due to the continued issues with VOC's in the treated water. AECOM's subcontractor LFR was onsite today to backflush the carbon vessels at the TWTS. LFR back flushed the organoclay, carbon and zeolite vessels today. LFR utilized water from batch # 8 for back flushing. Once the process was completed, AECOM began re-treating batch # 8.

Tioga poured the lower half of the northern collar at MH-1B. ATL is onsite to perform concrete testing. All results are within specifications.

AECOM secured the excavation by placing orange construction fencing and parking both excavators and loader around the perimeter of the open area.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 30° F to 40°F

Cloud cover: Clear

Rainfall: 0.00"

Wind Speed Average and Direction: 5 mph SSW

CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. No exceedances.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

**C. OFFSITE DISPOSAL:**

ESMI/Broome County Landfill Disposed Offsite (daily tons): **0/0**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **3115/1155**

**D. SIGNIFICANT COMMUNICATIONS:**

NONE

**E. UPCOMING SITE ACTIVITIES**

1. Install MH-1B
2. Install the HDPE pipe

**F. DAILY SITE PHOTOGRAPHS**



**View of the base for MH-1B after forms are removed.**



**View of the rebar placed for the northern collar at MH-1B.**

**DAILY PROGRESS REPORT 50: 1/13/12****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for January 13, 2012 as observed by E. Michael Flynn of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

AECOM has completed the majority of the trench excavation. No additional excavation or offsite disposal was performed today.

AECOM continues to dewater the trench and pump to the weir tanks at the TWTS. AECOM continues treatment in "batch" mode due to the continued issues with VOC's in the treated water. AECOM re-treats batch # 7-2 and # 8 today.

ARCADIS collected samples from "batch # 7-2" and "batch # 8".

Tioga poured the inverts inside of MH-1C. ATL was onsite to perform air entrainment and slump testing of the concrete. All results were within specifications.

AECOM secured the excavation by placing orange construction fencing and parking both excavators and loader around the perimeter of the open area.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 25° F to 30°F

Cloud cover: Clear

Rainfall: 0.00"

Wind Speed Average and Direction: 10 mph SSW

CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. No exceedances.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

**C. OFFSITE DISPOSAL**

ESMI/Broome County Landfill Disposed Offsite (daily tons): **0/0**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **3115/1155**

**D. SIGNIFICANT COMMUNICATIONS**

NONE.

**E. UPCOMING SITE ACTIVITIES**

1. Install MH-1B
2. Install the HDPE pipe



**F. DAILY SITE PHOTOGRAPHS**



**View of the inverts at MH-1C facing south.**



**View of the inverts at MH-1C facing north.**



**DAILY PROGRESS REPORT 51: 1/16/12****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for January 16, 2012 as observed by E. Michael Flynn of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

AECOM has completed the majority of the trench excavation. No additional excavation or offsite disposal was performed today.

AECOM continued to dewater the trench and pump to the weir tanks at the TWTS. AECOM continues treatment in "batch" mode due to the continued issues with VOC's in the treated water. AECOM continues treating batch # 8 today. No samples were collected today.

ARCADIS received results for batch # 7-2 today, results met the SPDES discharge permit equivalent limits, and AECOM discharged the batch.

Tioga did not pour any concrete today due to the cold temperatures.

Tioga received the blind flanges that will be used to perform leak testing on the HDPE pipe. Tioga attached both flanges with the split rings. Tioga has cut two of the solid rings in half to make split flanges that will fit over the HDPE pipe. Tioga attached the flanges but did not begin the water test this afternoon due to the cold temperatures overnight.

AECOM secured the excavation by placing orange construction fencing and parking both excavators and loader around the perimeter of the open area.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 8° F to 25°F

Cloud cover: Clear

Rainfall: 0.00"

Wind Speed Average and Direction: 10 mph WNW

CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. No exceedances.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

**C. OFFSITE DISPOSAL**

ESMI/Broome County Landfill Disposed Offsite (daily tons): **0/0**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **3115/1155**

**D. SIGNIFICANT COMMUNICATIONS**

None.

**E. UPCOMING SITE ACTIVITIES**

1. Pour concrete for spillway between MH-1C and MH-1D
2. Exfiltration testing of the HDPE pipe
3. Install the HDPE pipe

**F. DAILY SITE PHOTOGRAPHS**



**View of a backer ring cut in half to fit over the HDPE ring.**



**View showing a split backer ring installed on the pipe.**

**DAILY PROGRESS REPORT 52: 1/17/12****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for January 17, 2012 as observed by Kasey Cornwell of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

AECOM has completed the majority of the trench excavation. No additional excavation or offsite disposal was performed today.

AECOM continued to dewater the trench and pump to the weir tanks at the TWTS. AECOM continued treatment in "batch" mode due to the continued issues with VOC's in the treated water. AECOM continues treating batch # 8 today. No samples were collected today.

Tioga poured the concrete for the "emergency sluiceway" between MH-1C and MH-1D that will be used for an emergency spillway during phase two activities. Tioga poured the concrete from MH-1C to the edge of the northern sheetpile alignment. ATL is onsite to perform slump and air entrainment testing. All testing results were within specifications.

Tioga removed the concrete forms from the MH-1B base.

Tioga filled the HDPE pipe length for MH-1C and MH-1B with water (via the city fire hydrant) to perform a leak test of the fusion welded joints between sections of HDPE. The pipe was filled with water and after the required two hour waiting period, the water level was unchanged. Tioga and AECOM gravity drained the clean water from the HDPE pipe to MH-1 overnight.

AECOM secured the excavation by placing orange construction fencing and parking both excavators and loader around the perimeter of the open area.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 35° F to 38°F

Cloud cover: Clouds

Rainfall: scattered showers

Wind Speed Average and Direction: 5-10 mph WNW

CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. No exceedances.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

**C. OFFSITE DISPOSAL**

ESMI/Broome County Landfill Disposed Offsite (daily tons): **0/0**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **3115/1155**

**D. SIGNIFICANT COMMUNICATIONS**

None.

**E. UPCOMING SITE ACTIVITIES**

1. Install the HDPE pipe.
2. Pour the inverts in MH-1B.

**F. DAILY SITE PHOTOGRAPHS**



**View of blind flange attached to HDPE pipe.**



**View of air vent on blind flange.**

**DAILY PROGRESS REPORT 53: 1/18/12****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for January 18, 2012 as observed by E. Michael Flynn of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

AECOM has completed the majority of the trench excavation. No additional excavation or offsite disposal was performed today.

AECOM continued to dewater the trench and pump to the weir tanks at the TWTS. AECOM continued treatment in "batch" mode due to the continued issues with VOC's in the treated water. AECOM discharged batch # 8 today after receipt of analytical results.

ARCADIS collected samples from AE-Batch # 9 today (effluent) and AE-influent.

Tioga finished draining the water from the HDPE pipe this morning and placed the section of HDPE pipe in the trench between MH-1B and MH-1C. While installing the HDPE pipe, Tioga and AECOM discovered two different backup rings (used to secure the flanged sections of HDPE together) were installed on the manholes and on the HDPE pipe. AECOM attempted to order new "split-rings" that are manufactured to fit over the HDPE flanges but is unable to order the split rings for the 63" diameter HDPE. AECOM contacted the supplier and ordered new rings to match the rings installed on the manholes. AECOM plans to cut the solid rings into two pieces. Tioga temporarily bolted the manholes to the HDPE pipe with two sets of split rings, in order to hold the pipe in place until the new rings arrived onsite. Tioga continued with backfill activities around the main length of pipe.

AECOM secured the excavation by placing orange construction fencing and parking both excavators and loader around the perimeter of the open area.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 20° F to 35°F

Cloud cover: Clear

Rainfall: a.m. flurries



Wind Speed Average and Direction: 5-10 mph NNW

CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. No exceedances.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

**C. OFFSITE DISPOSAL**

ESMI/Broome County Landfill Disposed Offsite (daily tons): **0/0**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **3115/1155**

**D. SIGNIFICANT COMMUNICATIONS**

The weekly site progress meeting is held onsite today. Please refer to the meeting minutes for details on the meeting.

**E. UPCOMING SITE ACTIVITIES**

1. Begin backfilling the trench between MH1-B and MH-1C.
2. Pour the inverts in MH-1B.

**F. DAILY SITE PHOTOGRAPHS**



**View of HDPE draining after leak test.**



**View of HDPE being placed in the trench.**

**DAILY PROGRESS REPORT 54: 1/19/12****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for January 19, 2012 as observed by E. Michael Flynn of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

AECOM has completed the majority of the trench excavation. No additional excavation or offsite disposal was performed today.

AECOM continued to dewater the trench and pump to the weir tanks at the TWTS. AECOM continued treatment in "batch" mode due to the continued issues with VOC's in the treated water. AECOM continues to treat batch # 9 today. No samples were collected today.

Tioga began backfilling the HDPE pipe in the trench between MH-1C and MH-1B. Atlantic Testing Laboratories (ATL) was onsite to perform compaction testing. Crusher-run stone was placed in 12" lifts on either side of the HDPE pipe. Tioga laborers shoveled stone below the pipe as it was placed.

Tioga poured the inverts inside MH-1B today. ATL tested the concrete and all tests met the specifications.

AECOM and Tioga performed deflection measurements inside of the HDPE pipe between MH-1B and MH-1C. Measurements were taken at 25' intervals inside the pipe to measure the "pre-backfill" conditions of the HDPE pipe. Measurements will be taken at the same locations after the backfill has been placed in order to verify that the pipe has not deflected due to the backfill placement.

AECOM secured the excavation by placing orange construction fencing and parking both excavators and loader around the perimeter of the open area.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 15° F to 30°F

Cloud cover: Clear

Rainfall: 0.00"

Wind Speed Average and Direction: 5-10 mph NNW

CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. No exceedances.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

**C. OFFSITE DISPOSAL**

ESMI/Broome County Landfill Disposed Offsite (daily tons): **0/0**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **3115/1155**

**D. SIGNIFICANT COMMUNICATIONS**

None.

**E. UPCOMING SITE ACTIVITIES**

1. Continue backfilling the trench between MH-1B and MH-1C.
2. Install new backup rings at MH-1B and MH-1C.
3. Pour the concrete collars at MH-1B and MH-1C.

**F. DAILY SITE PHOTOGRAPHS**



**View of temporary connection at MH-1C (to secure HDPE for backfill until new rings arrived onsite)**



**View of Tioga placing the first lift of crusher run stone around the HDPE.**

**DAILY PROGRESS REPORT 55: 1/20/12****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for January 20, 2012 as observed by E. Michael Flynn of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

AECOM has completed the majority of the trench excavation. No additional excavation or offsite disposal was performed today.

AECOM continued to dewater the trench and pump to the weir tanks at the TWTS. AECOM continued treatment in "batch" mode due to the continued issues with VOC's in the treated water. AECOM continues to treat batch # 9 today. No samples were collected today.

Tioga began backfilling the HDPE pipe in the trench between MH-1C and MH-1B. Atlantic Testing Laboratories (ATL) was onsite to perform compaction testing. Crusher-run stone was placed in 12" lifts on either side of the HDPE pipe. Tioga laborers shoveled stone below the pipe as it was placed.

AECOM secured the excavation by placing orange construction fencing and parking both excavators and loader around the perimeter of the open area.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 15° F to 30°F

Cloud cover: Clear

Rainfall: 0.00"

Wind Speed Average and Direction: 5-10 mph W

CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. No exceedances.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

**C. OFFSITE DISPOSAL**

ESMI/Broome County Landfill Disposed Offsite (daily tons): **0/0**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **3115/1155**

**D. SIGNIFICANT COMMUNICATIONS**

None

**E. UPCOMING SITE ACTIVITIES**

1. Continue backfilling the trench between MH-1B and MH-1C.
2. Install new backup rings at MH-1B and MH-1C.
3. Pour the concrete collars at MH-1B and MH-1C.



**F. DAILY SITE PHOTOGRAPHS**



**View of compaction alongside the HDPE pipe. Geotextile fabric is visible on the side of the trench.**



**View of backfill at MH-1B**

**DAILY PROGRESS REPORT 56: 1/23/12****66-INCH STORM SEWER REPLACEMENT  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
COURT STREET FORMER MGP SITE, BINGHAMTON, NEW YORK**

This daily progress report summarizes project-related activities performed by AECOM and its subcontractors, on behalf of New York State Electric and Gas (NYSEG), at the Court Street Former MGP Site in Binghamton, New York (the site) for January 23, 2012 as observed by E. Michael Flynn of ARCADIS.

**A. COMPLETED WORK/WORK IN PROGRESS**

AECOM completed the trench excavation. No additional excavation or offsite disposal was performed today.

AECOM continued to dewater the trench. The collected water was pumped into the weir tanks at the TWTS. AECOM continued treatment in "batch" mode due to the continued issues with VOC's in the treated water. ARCADIS received the results from AE-Batch-9 today. No constituents were detected at concentrations exceeding SPDES permit equivalent discharge criteria. Hence, AECOM started discharging Batch 9.

Tioga continued backfilling the HDPE in the trench between MH-1C and MH-1B. Crusher-run stone was placed in 12" lifts on either side of the HDPE pipe and compacted with a walk behind vibratory compactor. Atlantic Testing Laboratories (ATL) was onsite to perform compaction testing. Compaction results were above the specified 95% dry density. At the end of the day, backfill was placed up to the top of the HDPE pipe.

AECOM secured the excavation by placing orange construction fencing and parking both excavators and loader around the perimeter of the open area.

**B. HEALTH & SAFETY REMARKS**

AECOM conducted tailgate safety meetings. All site personnel were required to sign in. Hard hats, safety glasses, reflective vests, and steel-toe boots were required to perform site work. No injuries or illnesses were observed or reported. Air monitoring is being performed on a daily basis using Multi-Rae and Dust Trak (weather permitting) units. No violation of safety procedures were observed or recorded.

Temperature: 35° F to 45°F

Cloud cover: Clear

Rainfall: none

Wind Speed Average and Direction: 5-10 mph SSE

CAMP: CAMP Stations UP, DW 1 and DW 2 deployed. No exceedances.

Calibration: Dust Trak and PID units for each station calibrated at start of day.

**C. OFFSITE DISPOSAL:**

ESMI/Broome County Landfill Disposed Offsite (daily tons): **0/0**

ESMI/Broome County Landfill Disposed Offsite (total to date tons): **3115/1155**

**D. SIGNIFICANT COMMUNICATIONS:**

None

**E. UPCOMING SITE ACTIVITIES**

1. Continue backfilling the trench between MH-1B and MH-1C.
2. Install new backer rings at MH-1B and MH-1C.
3. Pour the concrete collars at MH-1B and MH-1C.