

April 20, 2016

Mr. John R. Strang, P.E.
Environmental Engineer 2
New York State Department of Environmental Conservation
Region 4
1130 South Westcott Road
Schenectady, New York 12306-2014

Via Electronic Mail

Re: Chlorinated Solvent Plume- Monitoring Well Baseline Sampling
Parcel C Monitoring Well Network
ALCO – BCP Site C447044
Schenectady, NY

Dear Mr. Strang:

On behalf of Maxon ALCO Holdings, LLC, Barton & Loguidice, Inc. (B&L) has prepared the following report for the results of the Parcel C Monitoring Well Network (Network) baseline sampling for the Chlorinated Solvent Plume.

Summary of IRM Activities

The Parcel C Monitoring Well Network sampling activities were undertaken in accordance with the January 2016 approved Parcel C Remedial Design Report dated December 2015. The Network is composed of the following:

MW	PARCEL	DEPTH*
MW-19	C	19.75
MW-46	C	42.9
MW-70S	C	27.22
MW-70D	C	43.05

*measured from top of casing

Groundwater sampling of the Network was conducted on February 29 and March 1, 2016.

Summary of Sample Results

A total of four (4) groundwater samples were collected from monitoring wells shown on the attached figure. Groundwater samples were analyzed for volatile organic compounds (VOCs), sodium, potassium, calcium, magnesium, sulfate, chloride, hardness, and nitrate. Detections are summarized on the attached table. The four (4) groundwater samples had one or more of the following at concentrations above their respective 6 NYCRR Part 703.5 Groundwater Quality Standards:

- 1,2,4-Trimethylbenzene,





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- 1,3,5-Trimethylbenzene/P-ethyltoluene,
- Benzene,
- cis-1,2-Dichloroethene,
- n-Propylbenzene,
- sec-Butylbenzene
- Tetrachloroethene,
- trans-1,2-Dichloroethene,
- Trichloroethene,
- Xylene (total),
- Sodium, and
- Chloride.

As discussed in the Supplemental Remedial Investigation (SRI) Report (B&L, 2013), chlorinated solvents are the primary contaminants for MW-19 and MW-46. At MW-19, within the source area on Parcel C, tetrachloroethene (PCE) is the primary contaminant, while its breakdown product cis1,2-dichloroethene (12 -DCE) is the primary contaminant on Parcels B and C. The sequential breakdown of chlorinated solvents such as PCE and trichloroethene (TCE) in the subsurface due to biological and chemical processes has been documented in numerous sites in New York and in research articles, and is discussed in detail in Weidemeier, et al, 1999. Such degradation is at work at this site.

Petroleum related compounds were detected above Part 703.5 Groundwater Quality Standards in MW-70s and MW-70D. These compounds were not observed in MW-19 or MW-46.

Additional sampling of the Network will be conducted four (4) weeks post remedial injection work on Parcels B and C. Please feel free to contact the undersigned at (518) 218-1801 with any questions or need for additional information.

Very truly yours,

BARTON & LOGUIDICE, INC.

Andrew J. Barber
Sr. Environmental Consultant

AJB/akd

Enclosure

cc: Steve Porter, Esq. - Maxon ALCO Holdings LLC
Steve Luciano - Maxon ALCO Holdings LLC
Paul Fallati - Maxon ALCO Holdings LLC
Dean Sommer, Esq. - Young Sommer
Rich Ostrov - NYSDEC Region 4, OGC
Al DeMarco -NYSDOH

			Baseline Sampling 2/29/2016							
PARAMETER	PART 703	UNITS	MW-19		MW-46		MW-70S		MW-70D	
			Result	DF	Result	DF	Result	DF	Result	DF
1,2,4-Trimethylbenzene	5	µg/l	-	1	-	1	220 D	3	10	1
1,3,5-Trimethylbenzene/P-ethyltoluene	5	µg/l	-	1	-	1	19	1	6.3	1
Acetone	50	µg/l	-	1	-	1	6 J	1	5.6 J	1
Benzene	1	µg/l	-	1	-	1	120	1	1.1	1
Chloroform	7	µg/l	-	1	-	1	-	1	1.9	1
cis-1,2-Dichloroethene	5	µg/l	130 D	5	370 D	5	5.9	1	1.2	1
n-Butylbenzene	5	µg/l	-	1	-	1	4.7 S	1	1.3 S	1
n-Propylbenzene	5	µg/l	-	1	-	1	8	1	1.5	1
sec-Butylbenzene	5	µg/l	-	1	-	1	7.2 S	1	1.1 S	1
tert-Butylbenzene	5	µg/l	-	1	-	1	1.2	1	-	1
Tetrachloroethene	5	µg/l	780 D	10	5.6	1	-	1	-	1
Toluene	5	µg/l	-	1	-	1	2.8	1	-	1
trans-1,2-Dichloroethene	5	µg/l	1.8	1	3.1	1	-	1	-	1
Trichloroethene	5	µg/l	100	1	11	1	-	1	-	1
Vinyl chloride	2	µg/l	-	1	1.7	1	1.1	1	-	1
Xylene (total)	5	µg/l	-	1	-	1	35	1	2.7	1
Magnesium	[35]	mg/l	51.6	1	61.9	1	33.6	1	26.3	1
Sodium	20	mg/l	1490 D	5	1810 D	5	124	1	309	1
Chloride	250	mg/l	2660 D	100	2990 D	100	126 D	10	423 D	10
Nitrate	10	mg/l	1.97		-	1	-	1	-	1
Hardness	-	mg/l	1350 D	10	1330	10	520 D	10	370 D	10

1. 6 NYCRR Part 703.5 Groundwater Quality Standards
- D Results for Dilution
- J Estimated Value
- S Recovery outside of control limits for this analyte
- DF Dilution Factor
- Not Detected
- [] Guidance Value

			PARCEL C													
			OSMW-1	OSMW-3	MW-19				MW-46				MW-70S	MW-70D		
			9/27/2011	4/4/2012	9/27/2011	9/27/2011	6/18/2013	3/1/2016	9/30/2011	9/30/2011	6/18/2013	2/29/2016	2/29/2016	2/29/2016		
Parameter	PART 703	Units	Result	DF	Result	DF	Result	DF	Result	DF	Result	DF	Result	DF	Result	DF
1,2,4-Trimethylbenzene	5	µg/l	NA		NA		NA		NA		NA		220 D	3	10	1
1,3,5-Trimethylbenzene/P-ethyltoluene	5	µg/l	NA		NA		NA		NA		NA		19	1	6.3	1
Acetone	50	µg/l	3.8 J	1	-	1	-	1	-	1	-	1	6 J	1	5.6	1
Benzene	1	µg/l	-	1	-	1	-	1	-	1	-	1	120	1	1.1	1
cis-1,2-Dichloroethene	5	µg/l	2.9	1	1.5	1	110 EJ	1	120	10	79.4	1	130 D	5	1200 EJ	1
n-Butylbenzene	5	µg/l	NA		NA		NA		NA		NA		1700	20	821	1
n-Propylbenzene	5	µg/l	NA		NA		NA		NA		NA		370 D	5	5.9	1
sec-Butylbenzene	5	µg/l	NA		NA		NA		NA		NA		4.7 S	1	1.3 S	1
tert-Butylbenzene	5	µg/l	NA		NA		NA		NA		NA		8.0	1	1.5	1
Tetrachloroethene	5	µg/l	NA		NA		NA		NA		NA		7.2 S	1	1.1 S	1
Toluene	5	µg/l	NA		NA		NA		NA		NA		1.2	1	-	1
trans-1,2-Dichloroethene	5	µg/l	-	1	10	1	520 EJ	1	660	10	1150	1	780 D	10	190 EJ	1
Trichloroethene	5	µg/l	-	1	-	1	-	1	-	10	-	1	220	20	15.7	1
Vinyl chloride	2	µg/l	-	1	-	1	-	1	-	10	-	1	5.6	1	-	1
Xylenes, Total	5	µg/l	-	1	-	1	-	1	-	10	-	1	2.8	1	-	1
			-	1	-	1	-	1	-	10	1.11	1	1.8	1	12	1
			-	1	-	1	-	1	-	10	1.11	1	3.1	1	-	1
			9.9	1	23	1	83	1	86	10	88.2	1	100	1	88	1
			-	1	-	1	1.3	1	-	10	-	1	94	20	13.1	1
			-	1	-	1	-	1	-	10	-	1	11	1	-	1
			-	1	-	1	-	1	-	10	-	1	1.1	1	1.1	1
			-	1	-	1	-	1	-	10	-	1	35	1	2.7	1
Calcium	-	mg/l	NA		NA		NA		NA		NA		460	1	165	1
Magnesium	[35]	mg/l	NA		NA		NA		NA		NA		61.9	1	33.6	1
Potassium	-	mg/l	NA		NA		NA		NA		NA		18.8	1	26.3	1
Sodium	20	mg/l	NA		NA		NA		NA		NA		1810 D	5	124	1
Chloride	250	mg/l	NA		NA		NA		NA		NA		2990 D	100	126 D	10
Sulfate	250	mg/l	NA		NA		NA		NA		NA		190 D	10	1.2 J	1
Nitrate	10	mg/l	NA		NA		NA		NA		NA		ND	1	ND	1
Hardness	-	mg/l	NA		NA		NA		NA		NA		1330 D	10	520 D	10

1. 6 NYCRR Part 703.5 Groundwater Quality Standards

D Results for Dilution

J Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than MDL.

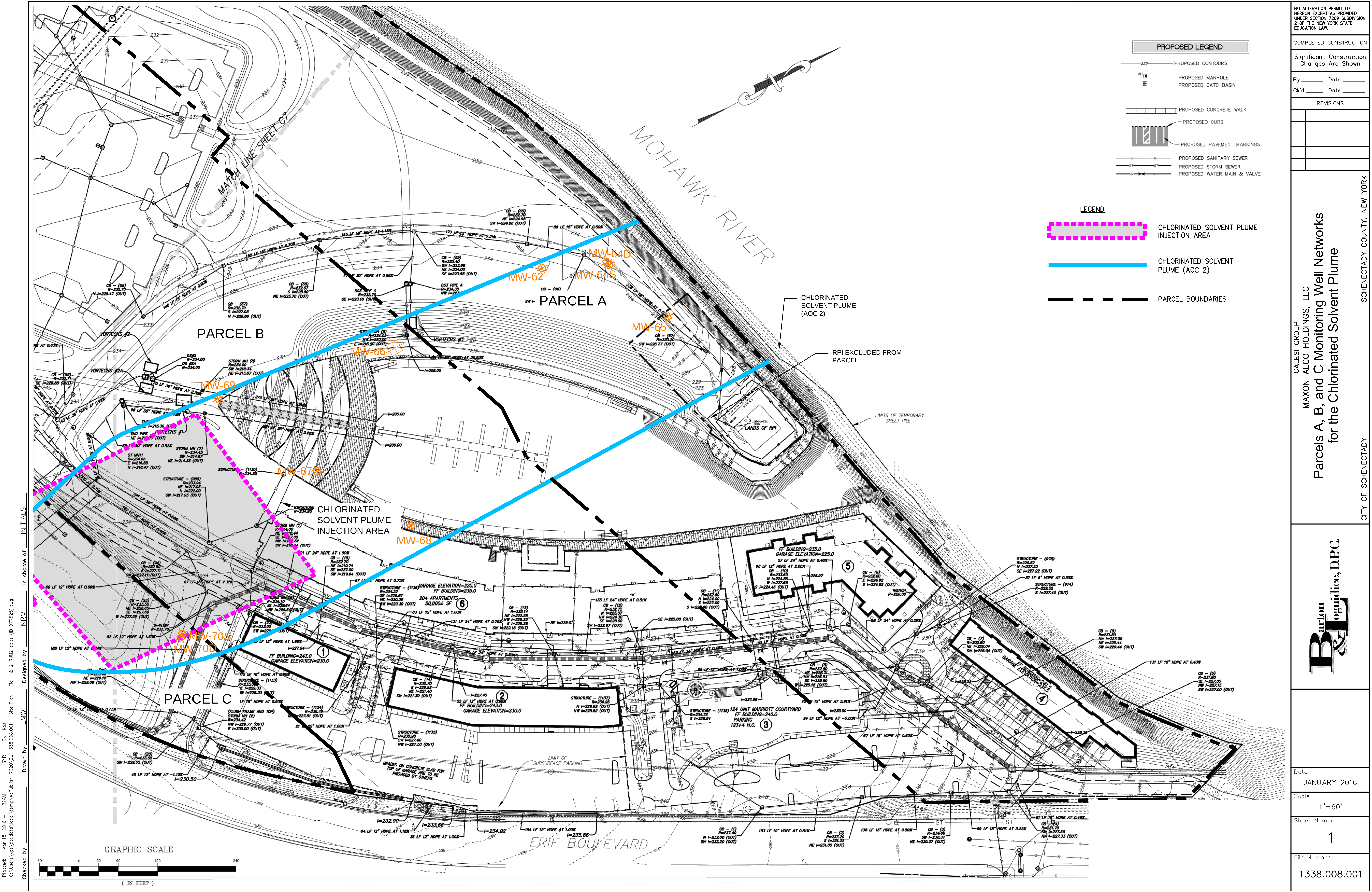
EJ - Result exceeded the calibration range. Analyte is present, but the reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.

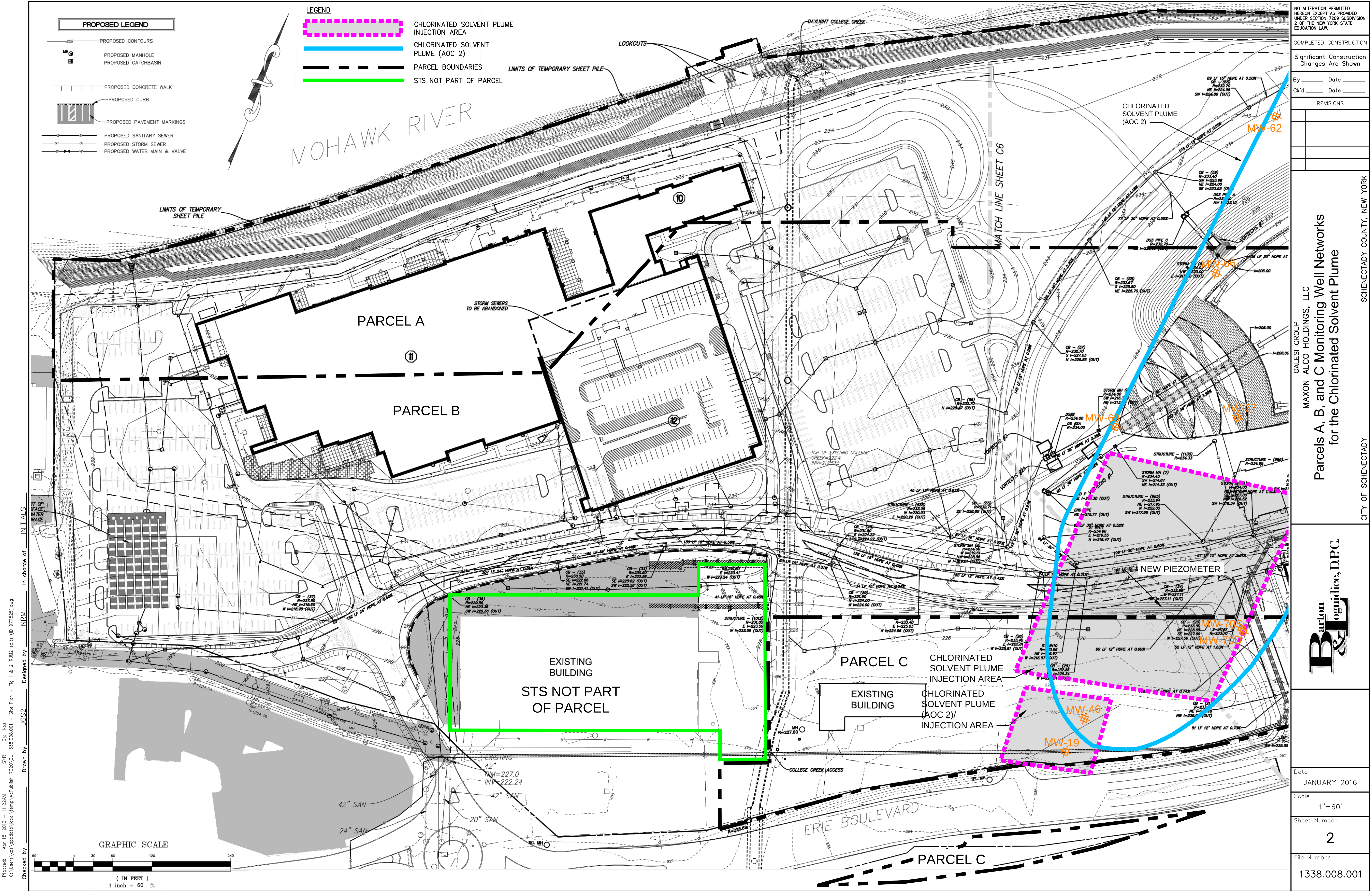
DF Dilution Factor

- Not Detected

[] Guidance Value

NA Not Analyzed





NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

COMPLETED CONSTRUCTION

Significant Construction Changes Are Shown

By _____ Date _____
Ck'd _____ Date _____

REVISIONS

SALES GROUP
MAXON ALCO HOLDINGS, LLC

Parcels A, B, and C Monitoring Well Networks
for the Chlorinated Solvent Plume

CITY OF SCHENECTADY
SCHENECTADY COUNTY, NEW YORK

Barton
B&L
Engineering, D.P.C.

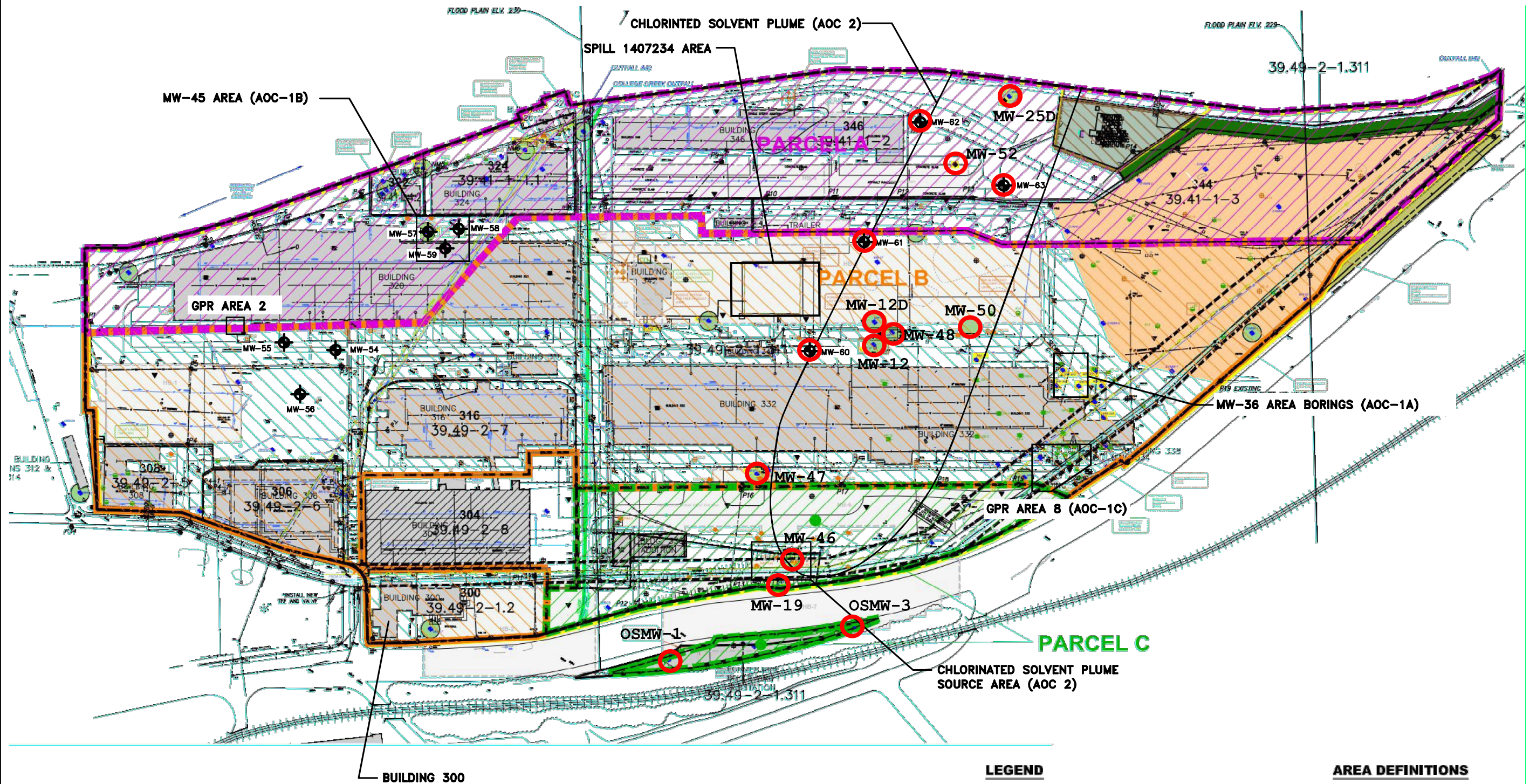
Date
JANUARY 2016

Scale
1"=60'

Sheet Number
2

File Number
1338.008.001

Plotted: Mar 24, 2015 - 3:27PM SYR By: jgs
Z: \\BL-Vault\\D2\\18217AD2-1C71-4823-8927-99D5C4054147\\0\\765000-765099\\765084\\L\\1368001_IRM Work Plan-Figure 1 (ID 765084).dwg



MAP REFERENCE:

- 1) "SURVEY OF LANDS, ALCO LOCOMOTIVE, INC., CITY OF SCHENECTADY, COUNTY OF SCHENECTADY", DATED MARCH 1970, AS PREPARED BY C.T. MALE ASSOCIATES.
- 2) "A SUBDIVISION OF A PORTION OF LANDS OF SCHENECTADY INDUSTRIAL CORPORATION", DATED JUNE 30, 1988, AS PREPARED BY THE ENVIRONMENTAL DESIGN PARTNERSHIP.
- 3) "SITE PLAN, PROPOSED C & D RECYCLING FACILITY, NOTT STREET INDUSTRIAL PARK", DATED FEBRUARY 1995, AS PREPARED BY INGALLS SMART ASSOCIATES.

SOURCE:

- 1) ABD ENGINEERS AND SURVEYORS FEBRUARY 1988, REVISED NOVEMBER 1999.
- 2) HISTORIC BUILDING (HB) LOCATIONS BASED ON A "FUEL OIL PIPING" PLAN, PREPARED FOR AMERICAN LOCOMOTIVE CO., REVISED AUGUST 22, 195.

LEGEND

	PROPERTY BOUNDARY		MONITORING WELL (MW)
	BCP SITE BOUNDARY		TEMPORARY MONITORING WELL (TMW)
	MANHOLE WITH DRAINAGE STRUCTURE NUMBER		RECOVERY WELL
	CATCH BASIN WITH DRAINAGE STRUCTURE NUMBER		PIEZOMETER
	LIFT STATION WITH DRAINAGE STRUCTURE NUMBER		GEOPROBE BORING
	MANHOLE (M.H.)		SURFACE SOIL SAMPLE LOCATION (SS)
	CATCH BASIN (C.B.)		SOIL BORING LOCATION

AREA DEFINITIONS

	BUILDINGS/STRUCTURES
	FORMER BUILDINGS (PREVIOUSLY DEMOLISHED)
	"EVI" PARCEL
	"RPI" PARCEL
	OTHER PROPERTIES NO PART OF SITE
	REMEDATION AREA
	FORMER UST/AST LOCATIONS



MONITORING WELL (SRI INVESTIGATION 2013)



Chlorinated Solvent Plume MW

MAXON ALCO HOLDINGS, LLC

Former Monitoring Well Network for the Chlorinated Solvent Plume

CITY OF SCHENECTADY

NEW YORK

Barton
Bogudice, DPC.

Date
MARCH, 2015

Scale
1" = 100'

Figure Number
3

Project Number
1368.001.001