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June 23, 2017

Anthony Lopes, P.E.  
NYSDEC - Region 9, Buffalo  
Division of Environmental Remediation  
270 Michigan Avenue  
Buffalo, New York, 14203

*Re: Sub-slab Soil Vapor Sampling Work Plan  
1360 Niagara Street Site, Buffalo, New York*

Mr. Lopes:

On behalf of 1360 Niagara Street Owner, LLC, C&S Engineers (C&S) is providing this Work Plan to collect sub-slab soil vapor sample within the building located at 1360 Niagara Street in Buffalo, New York.

## **I. PROJECT UNDERSTANDING**

1360 Niagara Street Owner, LLC is a Volunteer undertaking remediation of the 1360 Niagara Street Site (1336, 1340, and 1360 Niagara Street, Buffalo, NY) (the "Site") under a New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Agreement (BCP Site No. 915302) and expects to achieve a Track 1/Unrestricted Use cleanup level. The Site currently consists of a four-story building with a basement and a parking area, which is a combined total of approximately 80,000 square feet (1360 Niagara Street). Vacant land that was previously developed with buildings, which have since been demolished, comprises the southern portion of the Site (1336 and 1340 Niagara Street).

Environmental impacts to the Site consist of unregulated urban fill material. Based on investigations conducted to date, the known contaminants of concern in the urban fill include semivolatile organic compounds (SVOCs) and metals including arsenic, copper, lead, mercury and zinc. All urban fill is being excavated and disposed from the Site to achieve a Track 1/Unrestricted Use cleanup.

### **A. ChemCore Site**

Directly north of the Site is the former ChemCore facility. The ChemCore Site is located at 1382 Niagara Street, Buffalo, NY; is a Class 2 (significant threat) Site on DEC's Inactive Hazardous Waste Site Registry (Site Code 915176); was a chemical management and wholesale facility from the 1930s until around 1999; and is located immediately adjacent to (to the north) the Site. Site investigations at the ChemCore Site have shown the presence of significant concentrations of chlorinated volatile organic compounds (CVOCs), primarily TCE, DCE, vinyl chloride, and PCE, in soil and groundwater. PCE was detected in subsurface soils in concentrations as high as 38,000 mg/kg and TCE was detected as high as 8 mg/kg. VOCs such as PCE and its breakdown products (including TCE, DCE, and vinyl chloride) were found in all well locations on the ChemCore Site. In groundwater, PCE was found at concentrations as high as 21,000 ug/L and TCE was found as high as 16,000 ug/L. Cis-1,2-dichloroethene (DCE) was found as high as 30,000 ug/L. The contaminant plume extends from the 1382 Niagara Street Site underneath the former Garrett Leather building and to the western portion of 1340 Niagara Street.

Following significant remedial activities at the ChemCore Site, groundwater sampling indicated that contaminants from the ChemCore Site, including PCE, TCE and its common daughter compounds (1,1-Dichloroethane, cis-1,2-Dichloroethene, trans-1,2-Dichloroethene and vinyl chloride), still impact the groundwater within the fractured bedrock underneath the ChemCore and 1360 Niagara Street Sites at depths of approximately 30 to 50 feet below grade. This fractured bedrock is overlain by 5 to 15 feet of clay, which significantly limits the potential for vertical migration of soil vapors into the building from the groundwater beneath the clay.

**Figure 1** presents the groundwater sampling data compiled by SJB and obtained by C&S through a FOIL Request. This is the most recent groundwater sampling data C&S has obtained from sampling associated with the ChemCore Site.

#### B. Soil Vapor Intrusion Evaluation

Prior to entering into the BCP, a sub-slab sample and indoor air sample was collected on October 3 through October 4, 2015 in the basement of the building. Sample results indicate that, although CVOCs were detected in the sub-slab and indoor air samples, the detected concentrations did not exceed New York State Department of Health (NYSDOH) regulations.

Considering the known off-site contamination source and the future Track 1 status of the Site, the NYSDEC requested the collection of sub-slab soil vapor samples to demonstrate that CVOC impacted soil vapor is not an issue for the 1360 Niagara Street building.

The sections below describe the groundwater contamination and the proposed scope of work for collecting sub-slab soil vapor samples.

## **II. NATURE AND EXTENT OF GROUNDWATER CONTAMINATION**

Under the BCP, C&S conducted two rounds of sampling to characterize groundwater conditions prior to remediation. On February 9 and 10, 2017, C&S collected the first round of groundwater samples from five monitoring wells located on 1360, 1340 and 1336 Niagara Street. The second round of samples were collected on March 9 and 10, 2017. **Figure 2** shows the locations of the monitoring wells on the BCP Site. **Table 1** summarizes the analytical results and compares the results to the New York State Division of Water Technical and Operational Guidance Series (1.1.1) protection for source of drinking water (groundwater – GA) standards (NYS TOGS).

Sample results from the on-site groundwater monitoring indicate the following:

- ) The contaminant plume from the ChemCore Site still impacts the fractured bedrock of the properties located to the south (1360 and 1340 Niagara Street).
- ) The first groundwater sample collected from MW-11, located on 1360 Niagara Street, contained concentrations of 1,1-DCE (88.2 ug/L), cis-1,2-DCE (14.8 ug/L) and vinyl chloride (68.7 ug/L), which are above NYS TOGS values. The second round of groundwater sampling indicates slightly higher concentrations to the same analytes: 1,1-DCE (121 ug/L); cis-1,2-DCE (19.5 ug/L) and vinyl chloride (96 ug/L).

- J The first groundwater sample from MW-16, located on 1340 Niagara Street, contained concentrations of PCE (10.9 ug/L), cis-1,2-DCE (286 ug/L) and vinyl chloride (273 ug/L). PCE was not detected in the second round of sampling. Increased concentrations were detected in the second round for cis-1,2-DCE (437 ug/L) and vinyl chloride (298 ug/L).
- J MW-17, also located on 1340 Niagara Street, contained only vinyl chloride (7.3 ug/L). Vinyl chloride concentrations decreased to 4.58 ug/L in the second round of sampling.
- J The samples collected from MW-18, located on 1336 Niagara Street, did not contain any analyte concentrations that exceeded NYS TOGS in both rounds of groundwater sampling.
- J Well MW-3, located on the BCP Site (1360 Niagara Street) and the closest monitoring well to the ChemCore Site, is considered a sentinel (upgradient) well for the 1360 Niagara Street Site. The condition of and the sampling results from this well were anomalous when compared to the other wells, including:
  - o During sample collection, this well still contained a portion of the vegetable oil that was last injected in September 2013. The water purged from this well had a milky color and a strong rancid odor.
  - o Water quality measurements showed that the pH of the water was between 4.8 and 5, which was unique compared to the other wells which the pH was between 6 and 7.
  - o The only chlorinated solvent that was detected in this groundwater sample was DCE at 128 ug/L in the first round of sampling and 139 ug/L in the second round of sampling.
  - o Phenol, acetone and 2-butanone concentrations were significantly above NYS TOGS. Phenol was detected at 5,570 ug/L in first round and 10,700 ug/L in the second round; acetone was detected at 11,000 ug/L in the first round and 9,560 ug/L in the second round; and 2-butanone was detected at 4,980 ug/L in the first round and 8,700 ug/L in the second round.
  - o Multiple pesticides were detected in the first round of sampling above NYS TOGS, these include: DDD, Alpha BHC, lindane and heptachlor. Pesticides were not detected in any of the other groundwater monitoring wells. The second round of sampling only detected one pesticide, Alpha BHC, at a concentration above NYS TOGS.
  - o Barium (5,120 ug/L), manganese (1,720 ug/L) and selenium (21.6 ug/L) were detected at concentrations above NYS TOGS. The second round of sampling indicates these concentrations are similar to the first round.

### **III. BUILDING CONSTRUCTION AND USAGE**

The building that occupies 1360 Niagara Street was constructed in 1919 and was operated by the Mentholatum Company as manufacturer of various pharmaceutical and skin care products until 1998. Garrett Leather purchased the property in 2001, with operations including design and warehousing of bulk leather products.

The Site was purchased in order to redevelop the properties under the BCP to reuse the existing structure to accommodate residential apartment units and first floor mixed use space. The basement floor has access from Brace Street and will be used as tenant parking.

The floor slabs of the basement and the first floor are approximately six inches thick.

#### IV. SCOPE OF WORK – SUB-SLAB SOIL VAPOR SAMPLING

The following scope of work has been designed to determine if CVOCs present in the groundwater have impacted the soil vapor underneath the building slab at the 1360 Niagara Street building.

Soil vapor samples will be collected to characterize potential impacts under the building slab. This work will be completed in accordance with the NYSDOH, “Guidance for Evaluating Soil Vapor Intrusion in New York State, 2006.” The air sampling locations recommended for this investigation are shown on **Figure 3 and 4**. However, these locations may be modified based on field observations and NYSDOH input.

##### *Sub-slab Sampling*

One sub-slab air sample will be collected within the basement/parking garage along the northern property line, and two samples at the northern section of the building. **Figure 3 and 4** generally shows the proposed sample locations, although these locations may be modified based on field conditions and NYSDOH input. The following approach will be used to collect the sub-slab samples:

- ) A hammer drill will be used to puncture ½ inch hole through the concrete slab floor at the three locations shown on Figure 2.
- ) Polyethylene tubing will be inserted one to two inches into each hole and the floor penetration around the tubing will be sealed at each location using soft, pliable, VOC-free clay.
- ) An enclosure will be constructed around the sub-slab sampling point (e.g., plastic bag, plastic bucket, etc.) and sealed to the sample point tubing in order to perform a tracer gas evaluation.
- ) The enclosure will be enriched with helium as a tracer gas.
- ) The sub-slab sampling point will be purged 1 to 3 tubing volumes at a rate not to exceed 0.2 L/m to ensure that a representative sample of soil vapor will be obtained.
- ) During purging, the purged soil gas will be tested for the tracer gas by an appropriate meter (i.e., a meter capable of measuring the concentration of the tracer gas in at least percentage increments).
- ) In the event that the tracer gas is detected at a concentration of 10% or greater, the sample point will be resealed and retested prior to sampling.
- ) Subsequent to purging and tracer gas testing, a certified clean summa canister equipped with a laboratory calibrated regulator will be connected to the tubing to collect the sample over a 24-hour period.
- ) At the end of sampling, at least one inch of vacuum will be left in the summa canister to meet data quality objectives.
- ) After removing the tubing from holes in the floor, the floor will be repaired with a quick drying cement mixture.

##### *Laboratory Analysis of Air Samples*

The collected samples will be sent to Centek laboratories in Syracuse, New York and analyzed for VOCs by United States Environmental Protection Agency (USEPA) Method TO-15. Centek is an NYSDOH ELAP certified laboratory. Proposed detection limits are 0.25 mcg/m<sup>3</sup> for Matrix 1 analytes and 1 mcg/m<sup>3</sup>

for all other analytes.

**V. REPORTING**

The analytical results for the samples will be compared to the guidance values outlined in the 2006 guidance document and associated matrices.

A summary of the findings will be submitted to the NYSDEC that will include the results of the investigation and recommendations for mitigative measures, if appropriate.

**VI. SCHEDULE**

C&S Engineers is prepared to initiate this project as soon as approval of the scope of work is received from the NYSDEC.

Should you have any questions regarding this work plan, please feel free to contact me at (716) 847-1630.

Sincerely,

C&S ENGINEERS, INC.



Cody Martin  
Environmental Scientist



Daniel E. Riker, P.G.  
Department Manager – Environmental Services



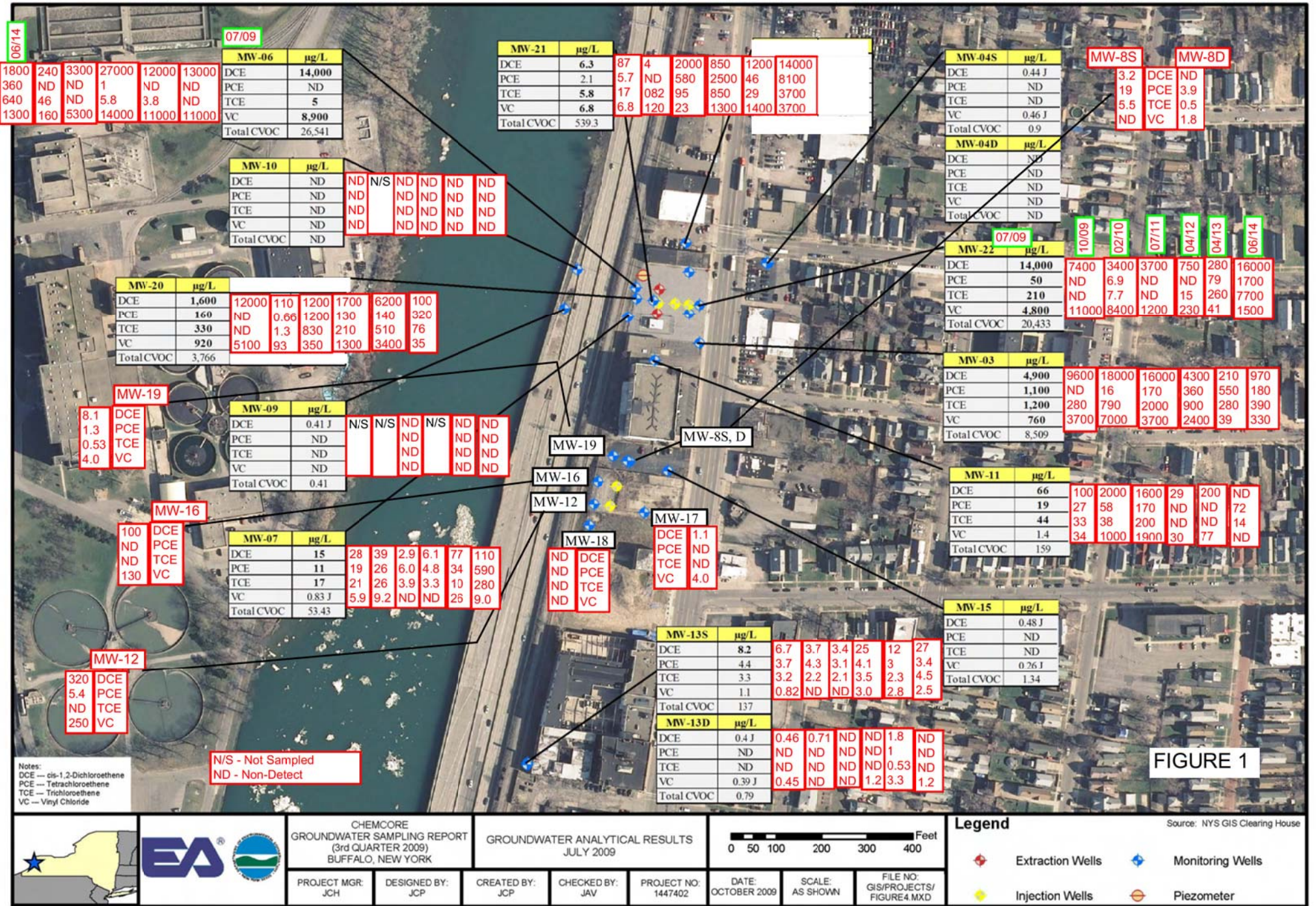


FIGURE 1

Source: NYS GIS Clearing House

CHMCORE  
 GROUNDWATER SAMPLING REPORT  
 (3rd QUARTER 2009)  
 BUFFALO, NEW YORK

GROUNDWATER ANALYTICAL RESULTS  
 JULY 2009

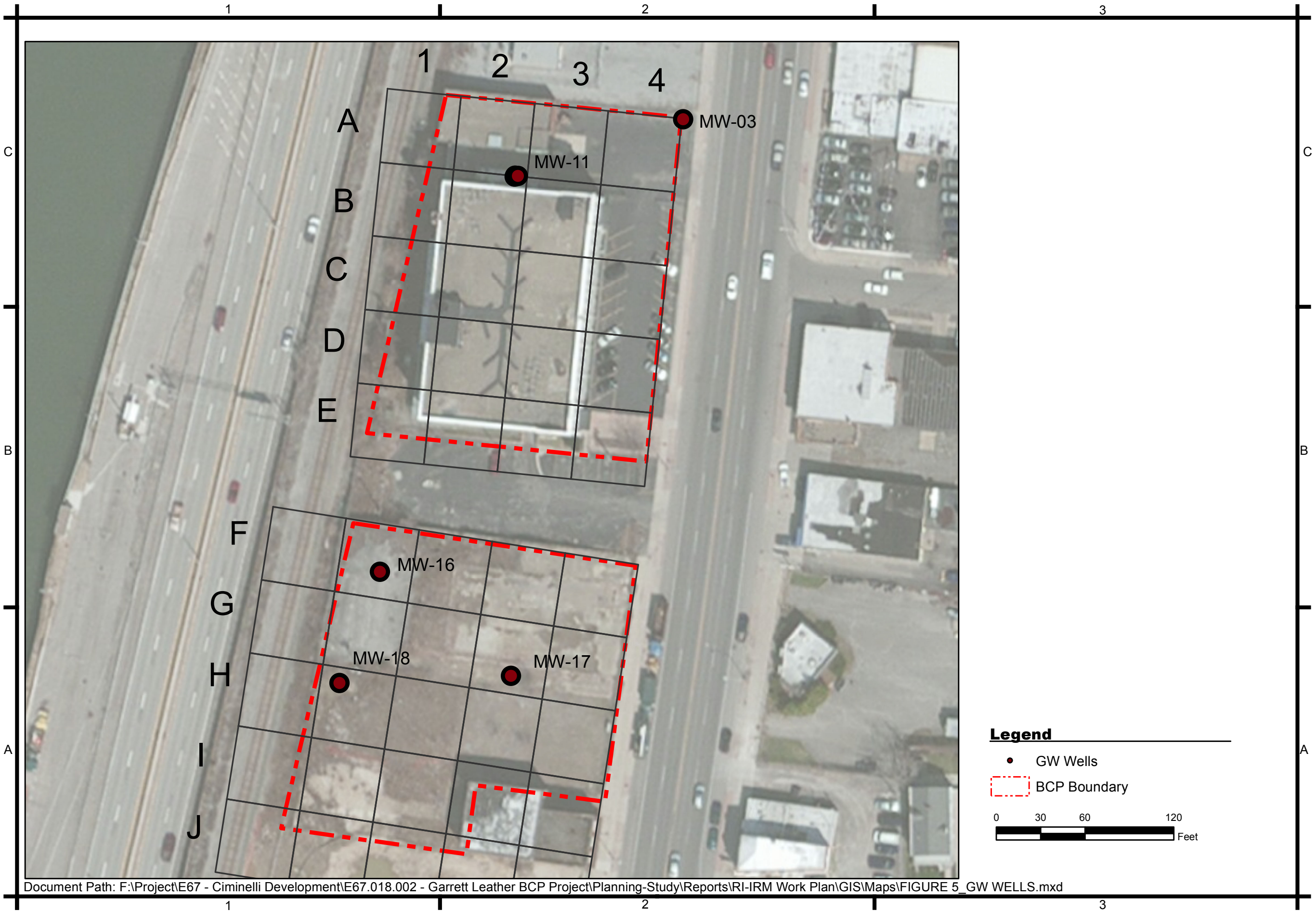
PROJECT MGR: JCH    DESIGNED BY: JCP    CREATED BY: JCP    CHECKED BY: JAV    PROJECT NO: 1447402    DATE: OCTOBER 2009    SCALE: AS SHOWN    FILE NO: GIS/PROJECTS/FIGURE4.MXD

**Legend**

- Extraction Wells
- Monitoring Wells
- Injection Wells
- Piezometer

The pump and treat system was turned off in Sept. 2011 after approximately five years of operation. The November 2011 injections were done in 3 infiltration galleries (1 drum each) and MW-3, 6, 11, 20 (1 drum equally distributed). August 2012 injections were done in 3 infiltration galleries (1 drum each); MW-3, 6, 20, 21 and 22 (1.5 drum equally distributed) and MW-11, 12, 16 and 19 (0.5 drum equally distributed). June 2013 injections were in 3 infiltration galleries (2 drums each), MW-6, 20 and 21 (two drums each), MW-3 and 22 (one drum each), and MW-7, 11, 12, 16 and 19 (0.5 drum each).





Document Path: F:\Project\E67 - Ciminelli Development\E67.018.002 - Garrett Leather BCP Project\Planning-Study\Reports\RI-IRM Work Plan\GIS\Maps\FIGURE 5\_GW WELLS.mxd

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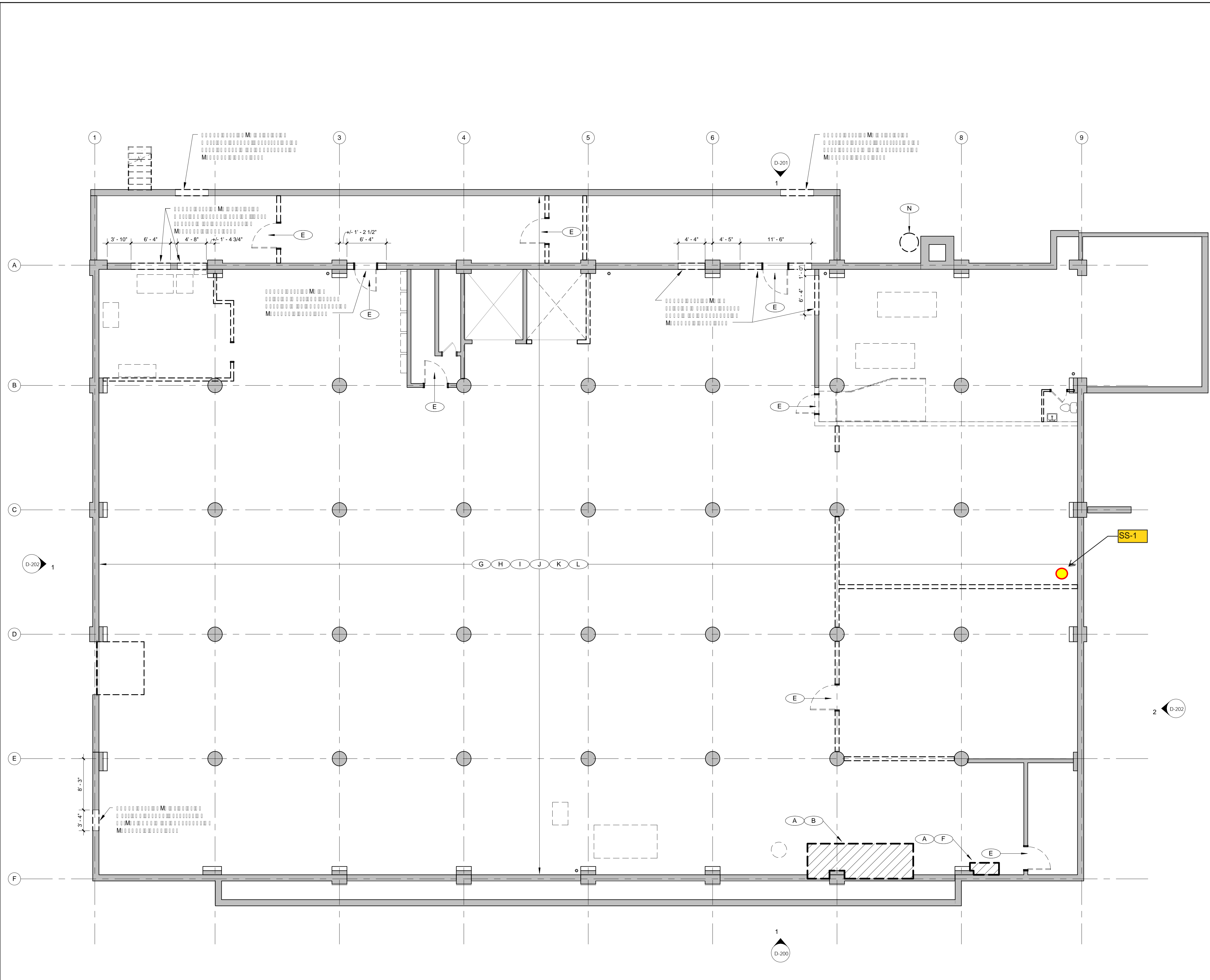


**GARRETT LEATHER  
 REMEDIAL INVESTIGATION-  
 INTERIM REMEDIAL MEASURES  
 WORK PLAN  
 BUFFALO, NEW YORK  
 APRIL 2016**

MARK	DATE	DESCRIPTION
REVISIONS		
PROJECT NO: E67.018.001		
DATE: APRIL 2016		
DRAWN BY: S. HERBERGER		
DESIGNED BY: S. HERBERGER		
CHECKED BY:		
NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW		

**GROUNDWATER  
 WELL  
 LOCATIONS**

**FIGURE 2**



1 D-100 BASEMENT FLOOR PLAN  
1/8" = 1'-0"

FIGURE 3

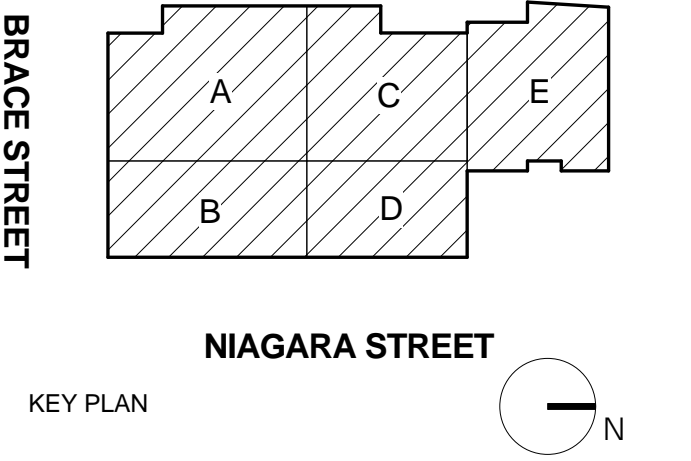
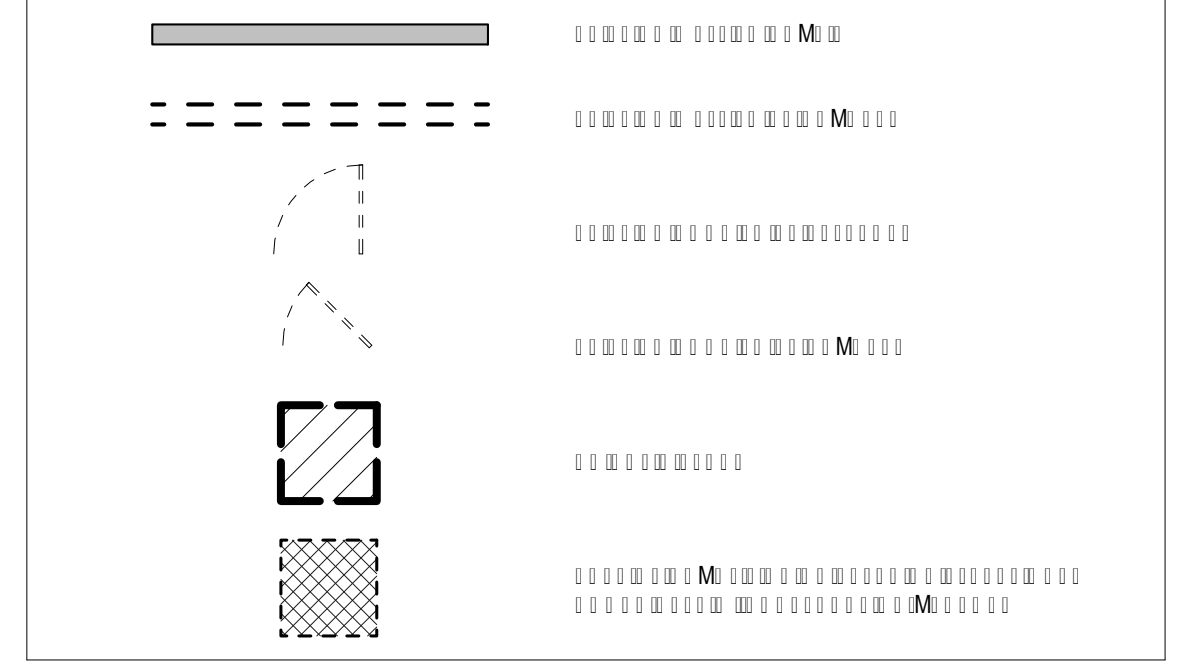
**GENERAL DEMOLITION NOTES**

2: DEMOLITION OF ALL EXISTING STRUCTURE INCLUDING CONCRETE, BRICK, BLOCK, AND METAL TO BE PERFORMED IN ACCORDANCE WITH THE FOLLOWING NOTES:  
 ALL EXISTING STRUCTURE TO BE REMOVED TO FINISH GRADE EXCEPT WHERE NOTED OTHERWISE.  
 ALL EXISTING CONCRETE TO BE REMOVED TO UNFINISHED CONCRETE SURFACE.  
 ALL EXISTING BRICK AND BLOCK TO BE REMOVED TO UNFINISHED MASONRY SURFACE.  
 ALL EXISTING METAL TO BE REMOVED TO UNFINISHED METAL SURFACE.  
 ALL EXISTING PARTITION WALLS TO BE DEMOLISHED TO FINISH FLOOR SLAB.  
 ALL EXISTING CEILING STRUCTURE TO BE DEMOLISHED TO FINISH FLOOR SLAB.  
 ALL EXISTING MECHANICAL AND ELECTRICAL SYSTEMS TO BE REMOVED.  
 ALL EXISTING FLOORING TO BE DEMOLISHED TO FINISH FLOOR SLAB.  
 ALL EXISTING ROOFING TO BE DEMOLISHED TO UNFINISHED ROOF DECK.  
 ALL EXISTING PAINT TO BE REMOVED.  
 ALL EXISTING ASBESTOS TO BE REMOVED AND HANDLED IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.  
 ALL EXISTING LEAD TO BE REMOVED AND HANDLED IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.  
 ALL EXISTING HAZARDOUS MATERIALS TO BE REMOVED AND HANDLED IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.  
 ALL EXISTING STRUCTURE TO BE DEMOLISHED IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.  
 ALL EXISTING STRUCTURE TO BE DEMOLISHED IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.

**DEMOLITION PLAN KEYNOTES**

- (A) DEMOLITION OF ALL EXISTING STRUCTURE INCLUDING CONCRETE, BRICK, BLOCK, AND METAL TO BE PERFORMED IN ACCORDANCE WITH THE FOLLOWING NOTES:
- (B) DEMOLITION OF ALL EXISTING STRUCTURE INCLUDING CONCRETE, BRICK, BLOCK, AND METAL TO BE PERFORMED IN ACCORDANCE WITH THE FOLLOWING NOTES:
- (C) DEMOLITION OF ALL EXISTING STRUCTURE INCLUDING CONCRETE, BRICK, BLOCK, AND METAL TO BE PERFORMED IN ACCORDANCE WITH THE FOLLOWING NOTES:
- (D) DEMOLITION OF ALL EXISTING STRUCTURE INCLUDING CONCRETE, BRICK, BLOCK, AND METAL TO BE PERFORMED IN ACCORDANCE WITH THE FOLLOWING NOTES:
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- (O) DEMOLITION OF ALL EXISTING STRUCTURE INCLUDING CONCRETE, BRICK, BLOCK, AND METAL TO BE PERFORMED IN ACCORDANCE WITH THE FOLLOWING NOTES:

**DEMOLITION PLAN LEGEND**



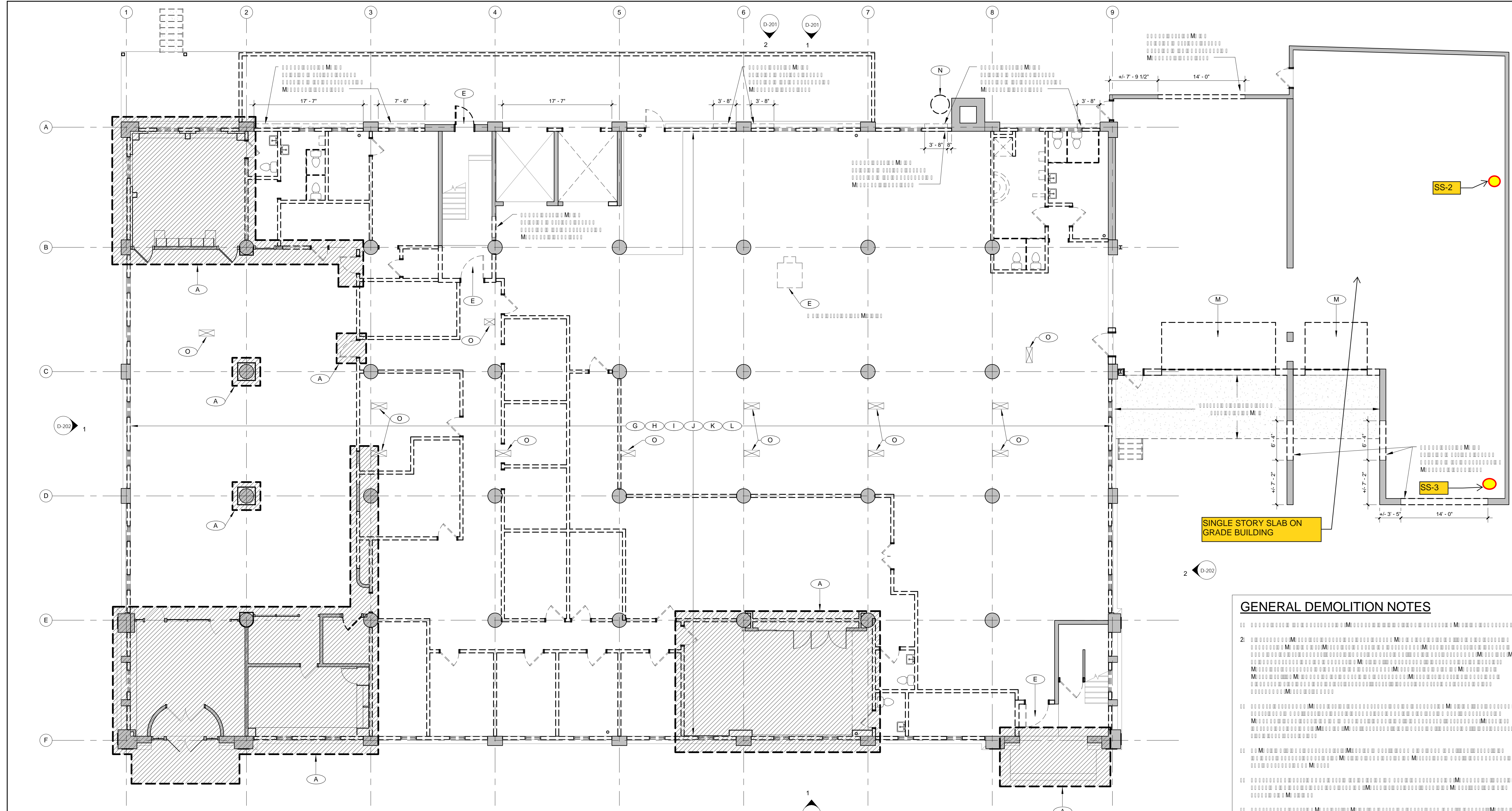
CLIENT: 1360 NIAGARA STREET OWNER, LLC  
 1360 NIAGARA STREET  
 1360 NIAGARA ST, BUFFALO NY 14213

REV. #	DESCRIPTION	DATE

JOB NO.	1541
SCALE	As indicated
ISSUE DATE	04/11/2016
DRAWN BY	NJM
CHECKED BY	RES

DRAWING TITLE  
**BASEMENT DEMOLITION PLAN**  
**D-100**





1 FIRST FLOOR DEMO PLAN  
D-101 1/8" = 1'-0"

(A)	[Hatched Pattern]
(B)	[Hatched Pattern]
(C)	[Hatched Pattern]
(D)	[Hatched Pattern]
(E)	[Hatched Pattern]
(F)	[Hatched Pattern]
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**FIGURE 4**

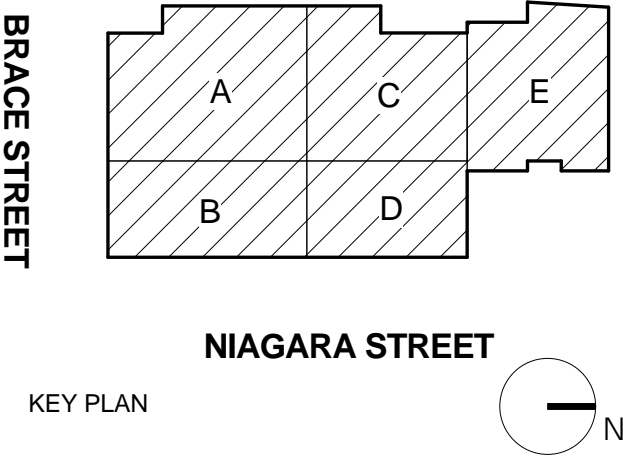
**GENERAL DEMOLITION NOTES**

2:

12:

THIS IS A SINGLE SHEET OF A COHESIVE SET OF CONSTRUCTION DOCUMENTS (INCLUDING DRAWINGS AND SPECIFICATIONS). INTERPRETATION OF THE INFORMATION AS PRESENTED SHOULD BE BASED ON THE ENTIRE SET OF DOCUMENTS.

DRAWING TITLE  
**FIRST FLOOR DEMOLITION PLAN**  
**D-101**



CLIENT: 1360 NIAGARA STREET OWNER, LLC  
**1360 NIAGARA STREET**  
1360 NIAGARA ST, BUFFALO NY 14213

REV. #	DESCRIPTION	DATE

JOB NO. 1541  
SCALE As indicated  
ISSUE DATE 04/11/2016  
DRAWN BY NJM  
CHECKED BY RES

**TABLE 1  
GROUNDWATER SAMPLE RESULTS  
1360 NIAGARA STREET  
BUFFALO, NEW YORK**

Location ID	Sample Matrix	MW-3		MW-11		MW-16		MW-17		MW-18	
		WG	WG	WG	WG	WG	WG	WG	WG	WG	WG
Date Sampled		02/09/2017	03/10/2017	02/09/2017	03/10/2017	02/10/2017	03/09/2017	02/09/2017	03/09/2017	02/10/2017	03/09/2017
Units		ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Groundwater Guidance Value											
<b>Semi-volatile Organic Compounds</b>											
Acenaphthene	20.0 ug/l	--	U	--	U	--	U	--	U	--	U
Acenaphthylene		--	U	--	U	--	U	--	U	--	U
Anthracene	50.0 ug/l	--	U	--	U	--	U	--	U	--	U
Benzo(A)Anthracene	0.002 ug/l	--	U	--	U	--	U	--	U	--	U
Benzo(A)Pyrene		--	U	--	U	--	U	--	U	--	U
Benzo(B)Fluoranthene	0.002 ug/l	--	U	--	U	--	U	--	U	--	U
Benzo(G,H,I)Perylene		--	U	--	U	--	U	--	U	--	U
Benzo(K)Fluoranthene	0.002 ug/l	--	U	--	U	--	U	--	U	--	U
Chrysene	0.002 ug/l	--	U	--	U	--	U	--	U	--	U
Dibenz(A,H)Anthracene		--	U	--	U	--	U	--	U	--	U
Fluoranthene	50.0 ug/l	--	U	--	U	--	U	--	U	--	U
Fluorene	50.0 ug/l	--	U	--	U	--	U	--	U	--	U
Indeno(1,2,3-C,D)Pyrene	0.002 ug/l	--	U	--	U	--	U	--	U	--	U
Naphthalene	10.0 ug/l	--	U	--	U	--	U	--	U	--	U
2-Methylphenol (O-Cresol)		--	U	--	U	--	U	--	U	--	U
Pentachlorophenol	1.0 ug/l	--	U	--	U	--	U	--	U	--	U
Phenanthrene	50.0 ug/l	--	U	--	U	--	U	--	U	--	U
Phenol	1.0 ug/l	5570		10700		--	U	--	U	--	U
Pyrene	50.0 ug/l	--	U	--	U	--	U	--	U	--	U
<b>Volatile Organic Compounds</b>											
1,1,1-Trichloroethane	5.0 ug/l	--	U	--	U	1.37	J	1.90	J	--	U
1,1-Dichloroethane	5.0 ug/l	--	UM	--	U	88.2		121		--	U
1,1-Dichloroethene	5.0 ug/l	--	U	--	U	--	U	--	U	--	U
1,2,4-Trimethylbenzene		--	U	--	U	--	U	--	U	--	U
1,2-Dichlorobenzene	3.0 ug/l	--	U	--	U	--	U	--	U	--	U
1,2-Dichloroethane	0.6 ug/l	--	U	--	U	--	U	--	U	--	U
5-Trimethylbenzene (Mesitylene)	5.0 ug/l	--	U	--	U	--	U	--	U	--	U
1,3-Dichlorobenzene	3.0 ug/l	--	U	--	U	--	U	--	U	--	U
1,4-Dichlorobenzene	3.0 ug/l	--	U	--	U	--	U	--	U	--	U
1,4-Dioxane (P-Dioxane)		--	U	--	U	--	U	--	U	--	U
Acetone	50.0 ug/l	11000		9560		11.1		--	U	--	U
Benzene	1.0 ug/l	--	UM	--	U	--	U	--	U	--	U
Carbon Tetrachloride	5.0 ug/l	--	U	--	U	--	U	--	U	--	U
Chlorobenzene	5.0 ug/l	--	U	--	U	--	U	--	U	--	U
Chloroform	7.0 ug/l	--	UM	--	U	--	U	--	U	--	U
Cis-1,2-Dichloroethylene	5.0 ug/l	128	J	139	J	14.8		19.5		286	437
Ethylbenzene	5.0 ug/l	--	U	--	U	--	U	--	U	--	U
Hexachlorobenzene	0.04 ug/l	--	U	--	U	--	U	--	U	--	U
Methylene Chloride	5.0 ug/l	--	U	--	U	--	U	--	U	--	U
N-Butylbenzene	5.0 ug/l	--	U	--	U	--	U	--	U	--	U
N-Propylbenzene	5.0 ug/l	--	U	--	U	--	U	--	U	--	U
Sec-Butylbenzene	5.0 ug/l	--	U	--	U	--	U	--	U	--	U
Methyl Ethyl Ketone (2-Butanone)	50.0 ug/l	4980		8700		--	U	--	U	--	U
2-Hexanone		--	U	535		--	U	--	U	--	U
Tert-Butyl Methyl Ether		--	U	--	U	--	U	--	U	--	U
Tetrachloroethylene (PCE)	5.0 ug/l	--	U	--	U	--	U	10.9		--	U
Toluene	5.0 ug/l	--	U	--	U	--	U	--	U	--	U
Trans-1,2-Dichloroethene	5.0 ug/l	--	U	--	U	1.50	J	2.30		--	U
Trichloroethylene (TCE)	5.0 ug/l	--	U	--	U	--	U	2.18	J	--	U
Vinyl Chloride	2.0 ug/l	--	UM	--	U	68.7		96		273	298
<b>Pesticides</b>											
Silvex (2,4,5-TP)		--	U	--	U	--	U	--	U	--	U
P,P'-DDE	0.2 ug/l	0.132	PM	--	U	--	U	--	U	--	U
P,P'-DDT	0.2 ug/l	0.104	PM	--	U	--	U	--	U	--	U
P,P'-DDD	0.3 ug/l	0.963	PM	--	U	--	U	--	U	--	U
Aldrin		--	U	--	U	--	U	--	UM	--	U
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.01 ug/l	0.133	PM	0.168		--	U	--	U	--	U
Alpha Endosulfan		--	UM	0.0754	JP	--	U	--	U	--	U
Beta Bhc (Beta Hexachlorocyclohexane)	0.04 ug/l	--	UM	--	U	--	U	--	U	--	U
Beta Endosulfan		--	UM	--	U	--	U	--	U	--	U
cis-Chlordane		0.205	PM	--	U	--	U	--	U	--	U
trans-Chlordane		0.360	PM	--	U	--	U	--	U	--	U
Delta BHC (Delta Hexachlorocyclohexane)	0.04 ug/l	--	UM	--	U	--	U	--	U	--	U
Dibenzofuran		--	U	--	U	--	U	--	U	--	U
Dieldrin		--	UM	--	U	--	U	--	U	--	U
Endosulfan Sulfate		--	UM	--	U	--	U	--	U	--	U
Endrin		0.433	PM	--	U	--	U	--	U	--	U
Gamma Bhc (Lindane)	0.05 ug/l	0.0744	JPM	--	U	--	U	--	U	--	U
Heptachlor	0.04 ug/l	0.0916	JM	--	U	--	U	--	UM	--	U
<b>PCBs</b>											
PCB-1016 (Aroclor 1016)	0.09 ug/l	--	UM	--	U	--	U	--	U	--	U
PCB-1221 (Aroclor 1221)	0.09 ug/l	--	U	--	U	--	U	--	U	--	U
PCB-1232 (Aroclor 1232)	0.09 ug/l	--	U	--	U	--	U	--	U	--	U
PCB-1242 (Aroclor 1242)	0.09 ug/l	--	U	--	U	--	U	--	U	--	U
PCB-1248 (Aroclor 1248)	0.09 ug/l	--	U	--	U	--	U	--	U	--	U

**TABLE 1  
GROUNDWATER SAMPLE RESULTS  
1360 NIAGARA STREET  
BUFFALO, NEW YORK**

Location ID	Sample Matrix	MW-3		MW-11		MW-16		MW-17		MW-18	
		WG	WG	WG	WG	WG	WG	WG	WG	WG	WG
Date Sampled		02/09/2017	03/10/2017	02/09/2017	03/10/2017	02/10/2017	03/09/2017	02/09/2017	03/09/2017	02/10/2017	03/09/2017
Units		ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Groundwater Guidance Value											
PCB-1254 (Aroclor 1254)	0.09 ug/l	-- U	-- U	-- U	-- U	-- U	-- U	-- U	-- U	-- U	-- U
PCB-1260 (Aroclor 1260)	0.09 ug/l	-- UM	-- U	-- U	-- U	-- U	-- U	-- U	-- U	-- U	-- U
PCB-1262 (Aroclor 1262)	0.09 ug/l	-- U	-- U	-- U	-- U	-- U	-- U	-- U	-- U	-- U	-- U
PCB-1268 (Aroclor 1268)	0.09 ug/l	-- U	-- U	-- U	-- U	-- U	-- U	-- U	-- U	-- U	-- U
<b>Metals</b>											
Arsenic	25.0 ug/l	-- U	-- U	-- U	-- U	7.65 J	-- U	-- U	-- U	-- U	-- U
Barium	1000.0 ug/l	5120	5120	75.5 J	73.1 J	76.8 J	98.8 J	104	86.7 J	96.4 J	157
Beryllium	3.0 ug/l	-- U	-- U	-- U	-- U	-- U	-- U	-- U	-- U	-- U	-- U
Cadmium	5.0 ug/l	-- U	-- U	-- U	-- U	-- U	-- U	-- U	-- U	-- U	-- U
Chromium, Hexavalent	50.0 ug/l	-- UM	-- U	-- U	-- U	-- U	-- U	-- U	-- U	-- U	-- U
Chromium, Total	50.0 ug/l	-- U	5.39 J	-- U	-- U	-- U	-- U	-- U	-- U	-- U	-- U
Copper	200.0 ug/l	-- U	29.3	-- U	-- U	-- U	-- U	-- U	-- U	-- U	-- U
Cyanide	200.0 ug/l	9.30 J		-- U	-- U	-- U	-- U	-- U	-- U	-- U	-- U
Lead	25.0 ug/l	6.59 J	10.3	-- U	-- U	-- U	-- U	-- U	-- U	-- U	-- U
Manganese	300.0 ug/l	1720	1940	71	113	263	254	23	36.3	67.9	66.7
Mercury	0.7 ug/l	-- U	-- U	-- U	-- U	-- U	-- U	-- U	-- U	-- U	-- U
Nickel	100.0 ug/l	-- U	-- U	-- U	-- U	-- U	-- U	-- U	-- U	-- U	-- U
Selenium	10.0 ug/l	21.6 D	24.4	-- U	-- U	-- U	-- U	12	-- U	-- U	-- U
Silver	50.0 ug/l	-- U	-- U	-- U	-- U	-- U	-- U	-- U	-- U	-- U	-- U
Zinc	2000.0 ug/l	33.8 J	131	-- U	-- U	-- U	-- U	-- U	-- U	-- U	-- U