July 15, 2016

Mr. Christopher Mannes, III, P.E.
NYSDEC, Region 7
615 Erie Boulevard West
Syracuse, New York 13204

Re: Work Plan – Supplemental Sampling Activities
Celi Drive BCP Site
5762 Celi Drive, Dewitt, New York
NYSDEC BCP Site #C734108
GHD Project No. 37-11082

Dear Mr. Mannes:

We are submitting this work plan on behalf of GSP Holdings, Inc. (formerly known as GSP, Inc., or GSP) to outline the completion of proposed supplemental remedial investigation activities at the above-referenced Brownfield Cleanup Program (BCP) Site, in accordance with requests received from the New York State Department of Environmental Conservation (NYSDEC). The objective of these proposed activities is to further refine the nature and extent of soil/sediment and groundwater contamination in order to develop appropriate remedial actions. The specific proposed scope of work is provided below.

1.1 Groundwater Monitoring Well Replacement. One (1) soil boring will be installed in the eastern portion of the Site, in the reported vicinity of historic groundwater monitoring well MW-8 (Figure 1), for the purposes of installing a replacement groundwater monitoring well. The boring will be located on the parcel of property that GSP is in the process of acquiring from AAA. The soil boring will be completed to a maximum depth of 20 feet below ground surface (bgs) using direct push techniques. Continuous soil samples will be taken during completion of the borings using macrocore soil sampling methods. Soil samples will be visually examined by GHD's field representative for evidence of impacts (i.e., elevated photoionization detector (PID) readings, staining, odors, etc.) and observations noted in a field book.

Once the soil boring is completed, a permanent 1.5-inch diameter polyvinyl chloride (PVC) groundwater monitoring well will be constructed in the soil boring with 10 feet of perforated screen set such that it straddles the groundwater table. A sand filter pack will be placed in the annular space around the PVC screen and will extend a minimum of 2 feet above the top of the screen. The remainder of the boring annulus will be filled with bentonite chips that will be hydrated in place. The permanent well will be completed with a locking J-plug and a bolt-down flush-mount protective cover set in a concrete pad. Following installation, the permanent well will be developed by alternating surging with a PVC surge block and evacuating water with a peristaltic pump with dedicated tubing until turbidity is less than 50 NTUs or ten (10) well volumes of water have been removed, whichever occurs first. A groundwater sample will be taken from the newly installed permanent groundwater monitoring well a minimum of one week after development; this will be done at the same time as existing groundwater monitoring wells are sampled, as described below.

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1.2 **Groundwater Sampling.** Groundwater samples will be taken from seven (7) of the eight (8) Site monitoring wells (MW-1, MW-2, MW-3, MW-4, MW-5, MW-7, and MW-8) utilizing low-flow sampling techniques (i.e., peristaltic pump) with dedicated tubing for each location. Monitoring well MW-6 will not be sampled based on its proximity to MW-7 and the historical sample analytical results which indicate no impacts of concern. Prior to sampling, the depth to water and total depth of well will be recorded, and the water volume will be calculated. To minimize the turbidity of the groundwater samples, the wells will be purged using low-flow methods until field parameters (i.e., pH, temperature, conductivity, and turbidity) stabilize, at which point groundwater samples will be taken for laboratory analysis. Stabilized water (i.e., adequate purge) will be based on: 1) turbidity that has stabilized below 50 Nephelometric Turbidity Units (NTUs); 2) at least three consecutive measurements of pH remaining within 0.1 standard units; 3) specific conductance varying no more than 10 percent; and 4) temperature remaining consistent.

The groundwater sample will be sent to a NYSDOH ELAP-certified laboratory for TCL VOCs, TCL SVOCs, TCL PCBs, TAL metals, hexavalent chromium, and cyanide analysis, using appropriate EPA Methods. In addition, for QA/QC purposes one (1) blind field duplicate sample, one (1) matrix spike (MS) sample, and one (1) matrix spike duplicate (MSD) sample will be taken for laboratory analysis for the same analytical list. Groundwater monitoring well development and purge water will be containerized in a steel 55-gallon drum, which will be staged on-Site to await characterization and proper disposal off-Site.

1.3 **AOC-3 Catch Basin Inspection.** The stormwater catch basins located in AOC-3, between the GSP facility and the discharge of the buried culvert pipe to the Bridge Street Swale, will be inspected to observe whether or not significant solids have accumulated since cleaning occurred in 2014. The presence, or absence, of solids and general description will be noted and reviewed with GSP and NYSDEC.

1.4 **AOC-4 – Bridge Street Swale Sampling.** A representative sediment sample will be taken in the vicinity of the buried stormwater box culvert discharge to the Bridge Street Swale, if access allows. The representative sediment sample will be composited from three (3) grab samples taken along a transect across the culvert discharge area (Figure 2). The sediment sample will be submitted to a NYSDOH ELAP-certified laboratory for Site contaminants of concern (total chromium, total copper, total nickel, total cyanide, and hexavalent chromium) analysis, using appropriate EPA Methods.

1.5 **AOC-4 – Downstream Swale Sampling.** Three (3) soil samples will be taken from each of seven (7) sample transects spaced at 100-foot intervals across this portion of the swale, which is approximately 750 feet in length and extends from the limits of the Community Bank development to the confluence of the Interstate 690 swale (Figure 2). This section of the swale is the portion of AOC-4 that the Town of DeWitt previously excavated as part of their maintenance of the stormwater conveyance in 2012. The three (3) samples taken along each transect will consist of one (1) from each edge of water, as determined at the time of sampling, and one (1) from the approximate mid-point of the swale bottom. In addition, two (2) blind field duplicates will be taken for quality assurance/quality control purposes. In total, twenty-three (23) soil samples will be submitted to a NYSDOH ELAP-certified laboratory where they will be analyzed for total chromium, total copper, total nickel, total cyanide, and hexavalent chromium, using appropriate EPA Methods. Each sediment sample will be collected from the upper 6 inches of sediment using

either a hand auger or mini clam-shell sediment sampler, depending on the conditions encountered at the time of sample collection. Between each sampling location, any non-dedicated sampling devices will be decontaminated by washing in an Alconox and potable water solution, rinsing with potable water, and allowing to air dry. The location of each sample transect will be staked in the field for future reference.

1.6 **Survey.** The newly installed groundwater monitoring well location, ground elevation, and elevation of PVC riser will be surveyed by a NYS licensed surveyor for inclusion on the Site figure. The horizontal location will be to a minimum accuracy of 0.1 feet, and the vertical location will be to a minimum accuracy of 0.01 feet.

1.7 **Data Usability Summary Report (DUSR).** The laboratory will provide a Category B data deliverable package so that a data usability summary report (DUSR) may be completed for the groundwater samples, by an independent third party.

The DUSR is carried out to evaluate the quality control measures that were implemented during the field and laboratory analytical programs, with the objective of determining whether the reported analytical data are representative. The DUSR will evaluate whether all analytical requirements were met and documented and will review the Site data to determine whether they are adequate to draw conclusions regarding the nature and extent of contamination.

The following items are reviewed as part of the DUSR:

- completeness (number of samples taken and analyzed compared to plans);
- chain of custody determined to be complete and accurate;
- holding times met;
- instrument calibration;
- relative percent difference between field duplicates;
- reasonableness of data (e.g., relationships between total and soluble analytes); and
- blank contamination.

1.8 **EQuIS.** Following receipt of laboratory and DUSR information, the groundwater results will be uploaded to the NYSDEC's EQuIS Database in their required electronic data deliverable format.

1.9 **Reporting.** Following receipt of laboratory, survey, and DUSR information, a Supplemental Sampling Summary Letter Report will be prepared and submitted to NYSDEC and NYSDOH for review and acceptance. The report will contain a description of the methods used and the data acquired, and will include the following:

- discussion of investigation methods and results, as well as any deviations from the approved methods;
- a Site figure showing sample locations and pertinent analyte concentrations;
- analytical summary tables including parameters that were detected and those that exceeded applicable standards, criteria, and guidance (SCGs);
- soil boring logs and permanent groundwater monitoring well construction details;
- laboratory analytical reports;

- data usability summary reports;
- EQuIS upload confirmation; and
- Development and purge water disposal documentation.

1.10 Schedule. Field activities will be scheduled upon receipt of NYSDEC and NYSDOH approval of this Work Plan and off-site access. Field work has tentatively been scheduled for late July to early August 2016, with final report submittal during September 2016.

Please contact me (315-679-5838) or Ian McNamara (315-679-5732) if you have any questions or require additional information.

Sincerely,

GHD CONSULTING SERVICES INC.

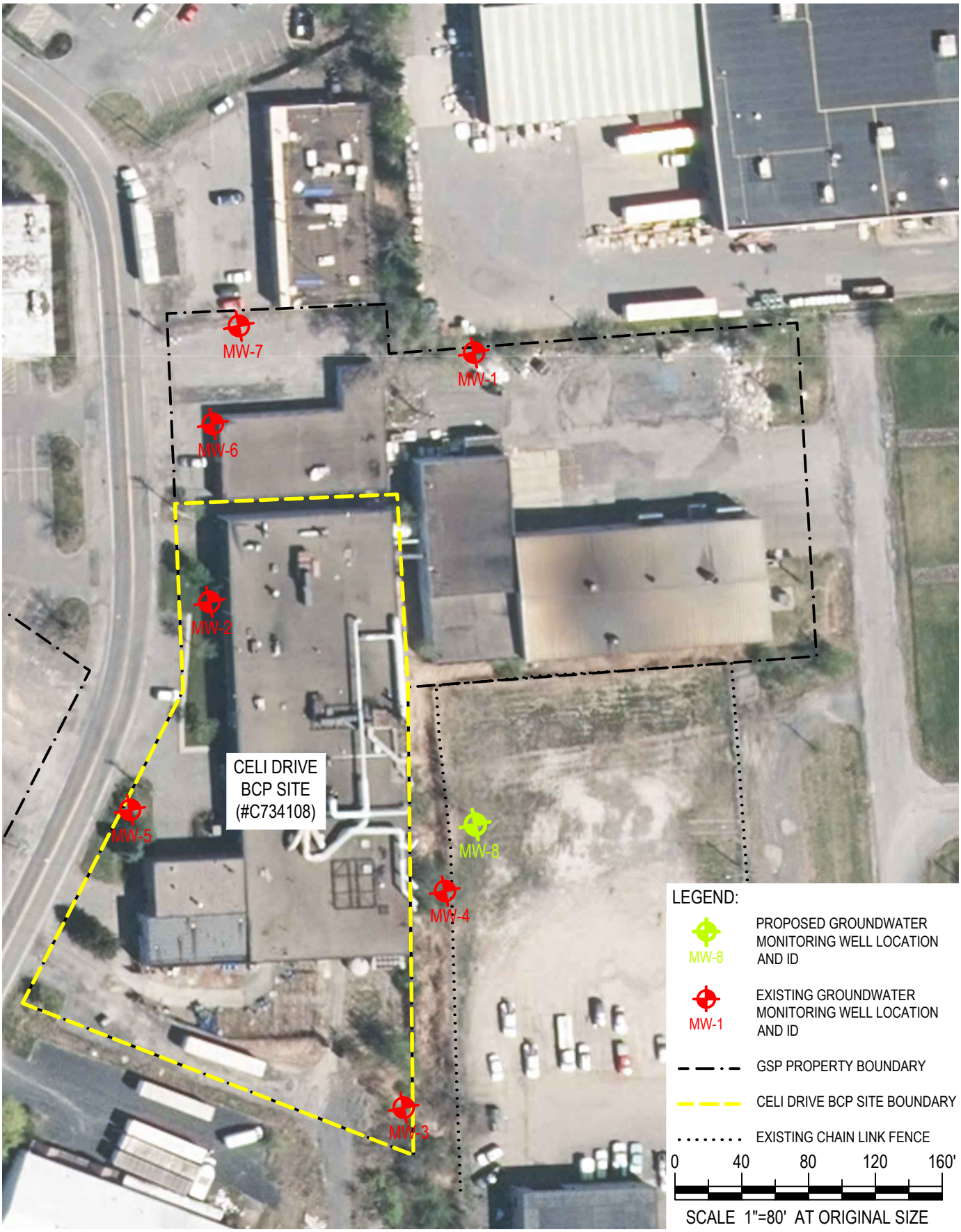
Damian J. Vanetti, P.E.
Principal Engineer – Environment

DJV/jfs

Enclosures:

Figure 1: Proposed Groundwater Monitoring Well Location
Figure 2: Proposed Bridge Street Swale Sediment Sample Location
Figure 3: Proposed AOC-4 Swale Sediment Sample Locations

cc: Mr. Richard Jones, NYSDOH (w/enclosures)
Ms. Doreen Simmons, Hancock & Estabrook (w/enclosures)
Ms. Holly Austin, Hancock & Estabrook (w/enclosures)
Ms. Kimberly Jeffery, GSP Holdings, Inc. (w/enclosures)
Mr. Tom Gerhardt, GSP Holdings, Inc. (w/enclosures)



NOTES:

1. Site features are from a field survey completed by D.W. Hannig L.S., P.C. dated November 8, 2002 and revised 9-1-2005, 3-2-2010, 5-10-2010, 6-15-2010, 6-24-2010, and 4-1-2014.
2. Aerial photographs are 2015 1-foot 4 band central zone index from the NYSGIS Clearinghouse website: http://gis.ny.gov/
3. MW-8 could not be located in the field and was not surveyed previously.

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Supplemental Sampling Activities
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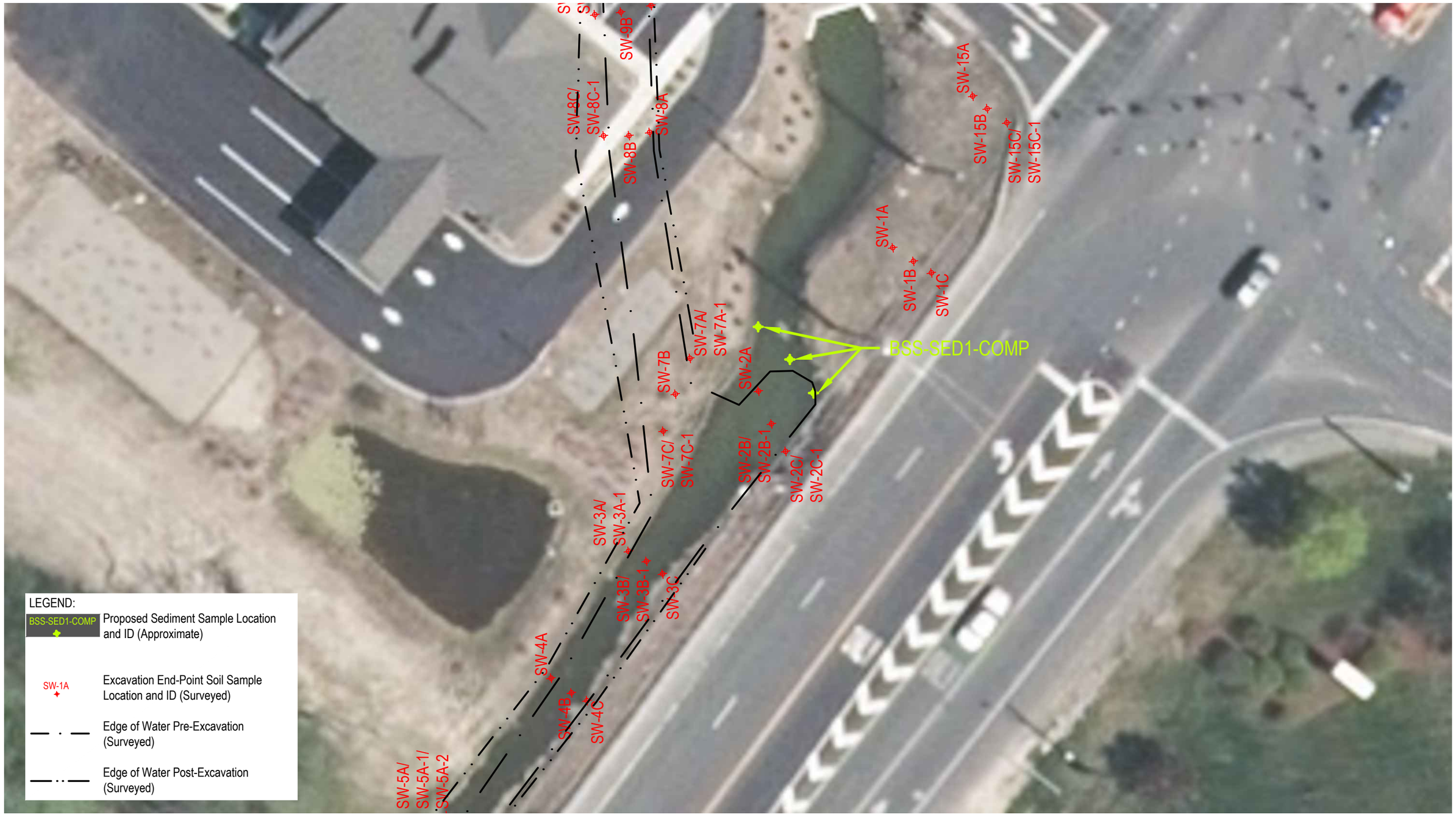
Proposed Groundwater Monitoring Well Location

Job Number	37-11082
Revision	A
Date	07.07.2016

Figure 1

One Remington Park Drive, Cazenovia NY 13035 USA **T** 1 315 679 5800 **F** 1 315 679 5801 **E** cazmail@ghd.com **W** www.ghd.com

Plot Date: 8 July 2016 - 11:54 AM Cad File No: G:\37\11082\Add. Investigation WP\Figure 1 - GW Well Re-Install.dwg



0 10 20 30 40 50'

SCALE 1"=25' AT ORIGINAL SIZE

N

NOTES:
1. Aerial photographs are 2015 1-foot resolution color orthoimagery from the NYS GIS Clearinghouse website (http://gis.ny.gov/gateway/mg/index.html).
2. Previous sediment sample locations were surveyed.

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Proposed Bridge Street Swale Sediment Sample Locations

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Figure 2

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Plot Date: 8 July 2016 - 11:55 AM Cad File No: G:\37\11082\Add. Investigation WP\Figure 2 - Proposed Sample Locations.dwg

0 50 100 150 200'

SCALE 1"=100' AT ORIGINAL SIZE

N

NOTES:
1. Aerial photographs are 2015 1-foot resolution color orthoimagery from the NYS GIS Clearinghouse website (http://gis.ny.gov/gateway/mg/index.html).
2. Previous sediment sample locations were surveyed.

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Supplemental Sampling Activities
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Proposed AOC-4 Swale Sediment Sample Locations

Job Number	37-11082
Revision	A
Date	07.07.2016

Figure 3

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Plot Date: 8 July 2016 - 11:57 AM Cad File No: G:\37\11082\Add. Investigation WP\Figure 3 - Proposed Sample Locations.dwg