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July 18, 2019

Mr. Joshua Haugh
Engineering Geologist, Division of Environmental Remediation
New York State Department of Environmental Conservation
1130 N. Westcott Road
Schenectady, NY 12306
Via Email: joshua.haugh@dec.ny.gov

Re: Supplemental Remedial Investigation Work Plan (RIWP)
NYS Brownfields Cleanup Program
Hamilton Hill II – Target Area 1 Site
830 and 834 Albany Street Parcels
City of Schenectady, Schenectady County
BCP Site No. C447052

Dear Mr. Haugh:

A Draft Remedial Investigation (RI) Report was prepared for the Hamilton Hill II Target Area 1 Brownfields Cleanup Program (BCP) Site (i.e., Target Area 1 BCP Site). The Target Area 1 BCP Site consists of two (2) non-contiguous parcels identified as the 830 Albany Street and 834 Albany Street Parcels.

The purpose of this Supplemental RIWP is to address the New York State Department of Environmental Conservation's (NYSDEC's) June 12, 2019 comments to the RI Report related to data gaps pertaining to comments 1, 4, 15 and 17 concerning the following areas:

- The northwestern portion of the 834 Albany Street Parcel (Comment No. 1): Due to the presence of utility lines and the former site building, a planned boring (RIMW6D) was unable to be advanced in this area.
- Potential drum/tank and known underground storage tank (UST) on the 830 Albany Street Parcel (Comment No. 4): Although test borings were completed near these features, based on the direction of groundwater flow as determined during the RI, the borings were not advanced in positions down-gradient from these features.
- Area of RISV1 on the 830 Albany Street Parcel (Comment Nos. 15 and 17): Elevated soil vapor results and photoionization detector (PID) results were recorded at RISV1, a soil vapor point advanced as a function of the RI. As RISV1 was advance for the purpose of collecting a soil vapor sample, soil samples were not submitted for laboratory analysis from this sample location.

The supplemental investigation to be completed at the 830 and 834 Albany Street Parcels will be subject to the same methodologies as described in the Target Area 1 BCP Site RIWP except where noted herein.

Supplemental RI Scope

The scope of work for the 830 and 834 Albany Street Parcels will include the following:

- Advancement of soil borings to characterize the parcel's subsurface fill and/or native soils as it relates to the above data gaps; to aid in the collection of fill and/or native soil samples for laboratory analysis; and for installation of monitoring wells.
- Collection and laboratory analysis of groundwater samples from newly installed monitoring wells.

Advancement of Soil Borings and Soil Sampling

Five (5) Geoprobe soil borings will be completed within the site boundaries as follows:

- RIGP1 will be advanced in proximity to RISV1 on the 830 Albany Street Parcel.
- RIGP2 will be advanced to the eastern and down-gradient side of the suspect buried drum/tank on the 830 Albany Street Parcel.
- RIGP3 will be advanced to the eastern and down-gradient side of the suspect petroleum UST on the 830 Albany Street Parcel.
- RIGP4 will be advanced on the northwestern portion of 834 Albany Street Parcel.
- RIGP5 will be advanced within the northwestern portion of the former building foundation on the northwestern portion of the Albany Street parcel. If the Geoprobe is unable to enter the foundation area, RIGP5 will be advanced using and auger or dolly mounted Geoprobe.

With respect to the other locations referenced in Comment No. 15 that had slightly elevated PID readings (RIMW6D (0 to 2-foot sampling interval with a PID reading of 32 parts per million (ppm); and RISB8 4 to 6-foot interval (15.8 ppm) and 6 to 8-foot interval (12.5 ppm)) it is noted that these samples did not appear impacted via organoleptic perception and the PID readings were relatively low. Each of these soil samples were moist and the elevated PID readings are likely attributed to high humidity conditions within the Ziploc bag that the soils were contained in when they were assessed. Additionally, VOCs were not detected above regulatory values in groundwater at RIMW6 (only acetone, a common laboratory artifact was detected above the laboratory method detection limit). As such, additional sampling is not planned for these two locations.

Soil boring RIGP1 will be completed to assess subsurface conditions, to aid in the collection of soil samples for laboratory analyses, and for installation of a monitoring well to aid in the collection of a groundwater sample for laboratory analyses. RIGP1 is being advanced in proximity to RISV1 where an elevated PID reading was recorded and perchloroethene (PCE) was detected in a soil vapor sample. Soils at this location will be analyzed for the Target Compound List (TCL) of volatile organic compounds (VOCs) plus Tentatively Identified Compounds (TICs). Samples will be submitted for every two-foot interval until the groundwater table is encountered (anticipated at approximately 10 feet below grade surface (bgs)).

Soil borings RIGP2 and RIGP3 will be completed to assess the subsurface conditions, to aid in the collection soil samples for laboratory analysis and for the installation of monitoring wells to aid in the collection of groundwater samples for laboratory analysis. These borings are being advanced in proximity to a suspect buried UST/drum (RIGP2) and suspect petroleum UST (RIGP3). Soil samples are proposed to be collected from the approximate bottom of the buried vessels. At RIGP2 samples will be submitted for laboratory analysis from the 6 to 8-foot interval and from the 8 to 10-foot interval. As the contents of this vessel are unknown the samples will be submitted for laboratory analyses for TCL VOCs, semi volatile organic compounds (SVOCs), pesticides and PCBs, the Target Analyte List (TAL) of metals (including mercury and hexavalent chromium) and cyanide (TCL/TAL Parameters). These samples will also be analyzed for emerging contaminants 1,4-dioxane and PFAS. At RIGP3 soil samples will be submitted for laboratory analysis from the 6 to 8-foot interval and from the 8 to 10-foot interval. As RIGP3 is being advanced at a suspect petroleum tank these samples will be analyzed for TCL VOCs and TCL SVOCs plus TICs. In addition to the planned soil sampling intervals for these borings, soil sample intervals either above or below the target intervals which exhibit visual and/or olfactory evidence of contamination will also be subjected to laboratory analysis.

Soil borings RIGP4 and RIGP5 will be completed to assess the subsurface conditions, to aid in the collection of subsurface fill/soil samples for laboratory analyses and for the installation of monitoring wells to aid in the collection of groundwater samples for laboratory analysis. At these boring locations, one sample representative of fill/soil will be collected from the 2 to 4-foot depth interval and then at subsequent 2 foot depth intervals until native soil is encountered. The sample collected from the 2 to 4-foot sampling depth interval will be subjected to laboratory analyses for SVOCs plus TICs, TAL Metals (including mercury and hexavalent chromium), and cyanide. The samples collected from the deeper sampling intervals will be held at the laboratory for possible analyses. If RI compound(s) of concern (COC) is detected above its Unrestricted Use soil cleanup objective (SCO) in the sample collected from the 2 to 4-foot sampling depth

interval, additional fill/soil samples from the deeper fill/soil sampling depth intervals (i.e. 4 to 6-feet, etc.) will be analyzed for the COC(s) detected above its Unrestricted Use SCO in the sample interval from immediately above.

The borings will be completed utilizing Geoprobe direct-push drilling methods as discussed in the Field Sampling Plan (FSP) in Appendix A of the RIWP. Soil samples will be collected continuously by advancing a field decontaminated (alconox wash and tap water rinse) macro-core sampler containing a new, disposable acetate liner within its interior the desired sampling depth interval employing direct-push methods. Upon obtaining the soil samples at the prescribed depth, the acetate liner will be removed from the macro-core sampler and provided to the geologist. The geologist will then retain the requisite samples for visual and/or olfactory evidence of contamination and laboratory analyses. A new pair of nitrile gloves will be used for each acetate liner. The soil sampling procedures will conform to the FSP in Appendix A.

The boring locations may be modified at the time of drilling based on buried utility locations mapped by Dig Safely New York. The NYSDEC Project Manager will be notified if the locations of the soil borings are modified.

Installation of Monitoring Wells

One (1)-inch diameter monitoring wells with PVC slotted screens and risers will be installed in soil borings RIGP1 through RIGP5 (see the attached Remedial Investigation Plan). The screened portion of the monitoring well will straddle the water table approximately five feet above and five feet below the water table. A filter sand pack will be installed from the bottom of the borehole to at least 1 foot above the top of the well screen. The monitoring wells will be finished with a surface seal and protected with lockable protective enclosures. Samples submitted for laboratory analysis from the newly installed monitoring wells will be analyzed for the contaminates of concern for each area. Specifically:

- RIGP1: Groundwater at this location will be analyzed for TCL VOCs plus TICs.
- RIGP2: Groundwater at this location will be analyzed for TCL/TAL Parameters plus emerging contaminants 1,4-dioxane and PFAS.
- RIGP3: Groundwater at this location will be analyzed for TCL VOCs plus TICs and TCL SVOCs plus TICs.
- RIGP4 and RIGP5: Groundwater at these locations will be analyzed for SVOCs plus TICs, TAL Metals (including mercury and hexavalent chromium), and cyanide.

The monitoring wells will be installed, developed and sampled in accordance with the Target Area 1 BCP Site RIWP and the FSP in Appendix A.

At the time the monitoring wells are sampled, depth to groundwater measurements will be recorded for the purpose of determining groundwater flow contours across the site. The groundwater elevations will be used to construct a groundwater contour map for inclusion in the Supplemental RI Report.

Field Quality Control

Quality Assurance/Quality Control (QA/QC) samples at a ratio of one (1) set of QA/QC samples per 20 media samples will be collected and analyzed. The QA/QC samples for soil and groundwater will include a blind duplicate sample, matrix spike (MS) sample, matrix spike duplicate (MSD) sample and equipment (field) blank sample. Laboratory prepared Trip Blanks will be submitted with aqueous samples requiring analysis for TCL VOCs.

Laboratory Reporting and Data Validation

The laboratory will generate NYSDEC ASP Category B data deliverable packages of the investigative analytical data. A Data Usability Summary Report (DUSR) of the analytical data developed during this investigation will be prepared to confirm that it is valid and usable for subsequent decision making purposes. The DUSR will be completed by an independent data validator.

Survey

A horizontal survey will be completed to locate the RI sampling points and other pertinent Site features. The vertical elevations of the top of the well casings will also be established utilizing a project benchmark.

Reporting

Upon completion of supplemental field activities and receipt and independent validation of the analytical laboratory data, the existing RI Report will be revised to include a summary of the supplemental investigations at the Site, analytical results of samples collected and analyzed, and interpretations of the data.

Miscellaneous

The Community Air Monitoring Plan, as provided in Appendix C of the Health and Safety Plan within the Target Area 1 BCP Site RIWP, will be implemented during ground intrusive investigation activities.

Investigation derived wastes will be managed as outlined in the Target Area 1 BCP Site RIWP. Subcontractors are anticipated to be the same as identified in the Target Area 1 BCP Site RIWP. The field activities are anticipated to commence on July 18, 2019.

If you have any questions or require any additional information please contact me at your convenience at a.smith@ctmale.com and/or 518-223-2413.

Respectfully submitted,

C.T. MALE ASSOCIATES

Aimee Smith
Sr. Environmental Scientist

Kirk Moline, P.G.
Sr. Project Manager/Managing Geologist

Attachment: Remedial Investigation Plan

c: Jennica Petrik-Huff, The Community Builders, Inc.
Kelly Melarango, The Community Builders, Inc.
Susan McCann, Hamilton Hill II Limited Partnership
Steve Bieber, C.T. Male Associates

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XREFS: NONE

PROJECT NUMBER: 16.6334

MAP REFERENCES:

1. "Map Showing Lot Line Adjustment of No. 310 Craig Street No. 807 Emmett Street" City of Schenectady, County of Schenectady, New York State of New York prepared by Hershberg & Hershberg, Consulting Engineers and Land Surveyors dated March 23, 2016, Map No. 160068 and filed in the Schenectady County Clerk's Office on December 2, 2016 in Cabinet N, Map No. 279.

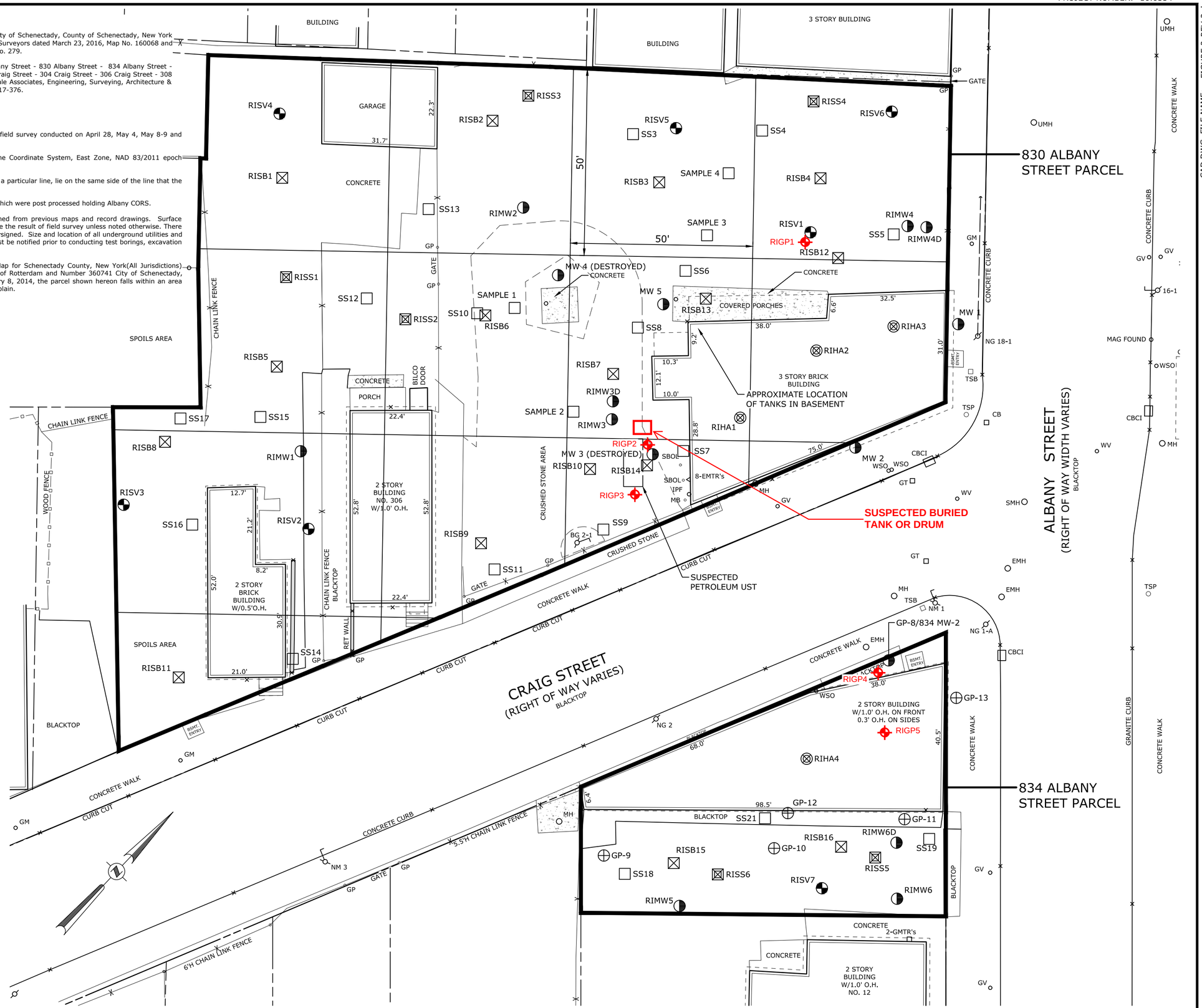
2. ALTA/NSPS Land Title Boundary and Topographic Survey 820 Albany Street - 824 Albany Street - 830 Albany Street - 834 Albany Street - 840 Albany Street - 811 Albany Street - 827 Albany Street - 831 Albany Street - 302 Craig Street - 304 Craig Street - 306 Craig Street - 308 Craig Street - 310 Craig Street, prepared for TCB Holdings, Inc.", prepared by C.T. Male Associates, Engineering, Surveying, Architecture & Landscape Architecture, D.P.C., dated May 24, 2017, Project No. 17.7266, Drawing No. 17-376.

MAP NOTES:

1. Boundary and topographic information shown hereon was compiled from an actual field survey conducted on April 28, May 4, May 8-9 and May 24, 2017 and June 15, 2017.
2. North orientation and bearings are Grid North based on the New York State Plane Coordinate System, East Zone, NAD 83/2011 epoch 2010.00 obtained from GPS observations.
3. Objects shown on this drawing with a distance indicating how far that object is from a particular line, lie on the same side of the line that the offset distance is written.
4. Vertical datum shown hereon is NAVD 88 and was obtained from GPS observations which were post processed holding Albany CORS.
5. Underground facilities, structures, and utilities have been plotted from data obtained from previous maps and record drawings. Surface features such as catch basin rims, manhole covers, water valves, gas valves, etc. are the result of field survey unless noted otherwise. There may be other underground utilities, the existence of which is not known to the undersigned. Size and location of all underground utilities and structures must be verified by the appropriate authorities. Dig Safely New York must be notified prior to conducting test borings, excavation and construction.
6. Per map entitled National Flood Insurance Program, FIRM Flood Insurance Rate Map for Schenectady County, New York(All Jurisdictions) contains Community Number 360739, Town of Niskayuna, Number 360740, Town of Rotterdam and Number 360741 City of Schenectady, Panel 170 of 257, Map Suffix: D, Map Number 36093C0170D, effective date January 8, 2014, the parcel shown hereon falls within an area designated as Zone X areas determined to be outside the 0.2% annual chance floodplain.

LEGEND

CB	CATCH BASIN
CBCI	CATCH BASIN CURB INLET
CBOL	CONCRETE BOLLARD
DMH	DRAINAGE MANHOLE
EMH	ELECTRIC MANHOLE
EMTR	ELECTRIC METER
GM	GAS MARKER
GMTR	GAS METER
GT	GAS TEST
GV	GAS VALVE
GP	GATE POST
HYD	HYDRANT
IPF	IRON PIPE FOUND
IRF	IRON ROD FOUND
MB	MAIL BOX
MFP	METAL FENCE POST
SMH	SANITARY MANHOLE
SBOL	STEEL BOLLARD
TMH	TELEPHONE MANHOLE
TSB	TRAFFIC SIGNAL BOX
TSP	TRAFFIC SIGNAL POLE
MH	UTILITY MANHOLE
UMH	UNKNOWN UTILITY MANHOLE
	UTILITY POLE
	UTILITY POLE W/LIGHT
WSO	WATER SHUT-OFF
WV	WATER VALVE
GP-10	~~PRE-RI EXISTING~~ GEOPROBE (APPROXIMATE LOCATION)
MW1	~~PRE-RI EXISTING~~ MONITORING WELL LOCATION
SS3	~~PRE-RI EXISTING~~ SHALLOW SOIL SAMPLE LOCATION (APPROXIMATE LOCATION)
RISB1	RI SUBSURFACE SOIL SAMPLE LOCATION
RISV1	RI SOIL VAPOR SAMPLE LOCATION
RISS1	RI SURFACE SOIL LOCATION
RIHA1	RI HAND AUGER LOCATION
RIMW1	RI MONITORING WELL LOCATION
RIGP1	SUPPLEMENTAL RI GEOPROBE/MONITORING WELL LOCATION



CAD DWG. FILE NAME: C:\Users\MicheleD\Desktop\michele 2\New folder\FIGURE DRAWINGS\FIGURE 2-REV 2.dwg

CAD DWG. FILE NAME: FIGURE 2-REV 2.dwg

DATE		REVISIONS RECORD/DESCRIPTION	DRAFTER	CHECK	APPR.
2/21/19	1	SAMPLE POINT REVISIONS AND ADDITIONS	GLB		
3/29/19	2	FIELD LOCATION OF SAMPLE POINTS	MDD		
	3				
	4				
	5				
	6				
	7				
	8				
	9				

DESIGNED:
DRAFTED : GLB
CHECKED : JAM
PROJ. NO : 16.6334
SCALE : 1" = 20'
DATE : DEC. 11, 2018

FIGURE 2: SITE FEATURES MAP
830 & 834 ALBANY STREET PARCELS

HAMILTON HILL - TARGET AREA 1 SITE

CITY OF SCHENECTADY — SCHENECTADY COUNTY, NEW YORK

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SHEET 1 OF 9

DWG. NO: 18-578