

11 February 2021

Mr. Timothy Schneider, P.E.  
New York State Department of Environmental Conservation  
Division of Environmental Remediation  
6274 East Avon-Lima Road  
Avon, NY 14414

VIA ELECTRONIC MAIL

**Subject: Amendment #1**  
**Interim Remedial Measure #5 Work Plan**  
**Former Sperry Remington Site – North Portion (NYSDEC #c808022)**  
**777 South Main Street**  
**City of Elmira, Chemung County, NY**

Dear Mr. Schneider:

On behalf of Unisys Corporation (Unisys), Geosyntec Consultants, Inc. and its New York engineering affiliate, B&B Engineers & Geologists of New York, P.C. (collectively, Geosyntec) are submitting this first amendment (Amendment #1) to the Interim Remedial Measure #5 (IRM #5) Work Plan for the Former Sperry Remington Site – North Portion (Site #c808022) (Site) in Elmira, New York. The Site is located at Elmira High School (EHS). IRM #5 is being conducted in accordance with the Brownfields Cleanup Agreement (BCA) for the Site executed on 23 March 2017 with the consent of Elmira City School District (ECSD). The revised Final (100%) IRM #5 Work Plan was submitted on 24 November 2020 and was given conditional approval by the New York Department of Environmental Conservation (NYSDEC) on 4 December 2020. IRM #5 construction began with mobilization on 7 December 2020. The purpose of IRM #5 is to conduct soil removal and former industrial sewer removal in the EHS Football Field Complex (FFC) prior to ECSD stadium construction at EHS beginning in Spring 2021. Compounds of Potential Concern (COPCs) include polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs) and metals as at the Site based on comparison to Restricted Residential Soil Cleanup Objectives<sup>1</sup> (SCOs). IRM #5 is being constructed concurrently with Amendment #1 to the IRM #4 Work Plan (IRM #4A) dated 8 September 2020 and approved as modified by NYSDEC on 15 September 2020. Unisys has agreed to support stadium construction by completing utility trenches and foundation excavations under the interim Site Management Plan (ISMP) approved by NYSDEC on 20 December 2019 following completion of IRM #5 soil removal. This Amendment #1 to the IRM #5 Work Plan presents items required by the 5 December 2020 conditional approval and plans for excavations under the ISMP. This amendment provides notification to NYSDEC and ECSD of intrusive activities in accordance with the Excavation Work Plan (EWP) included in the ISMP.

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<sup>1</sup> 6 NYCRR Subpart 375

## PROPOSED SCOPE OF WORK

The IRM #5 Amendment #1 scope of work is presented in the Construction Drawings (**Attachment 1**) and will be conducted in accordance with the IRM #5 Construction Specifications included in the revised Final (100%) IRM #5 Work Plan. It will make use of temporary facilities in use for IRM #5. Soil removal will be conducted with cleanup goals for IRM #5, which include:

- COPC concentrations in soils greater than or equal to Restricted Residential SCOs at depths less than two (2) feet bgs;
- Total PCB concentrations greater than or equal to ten (10) mg/kg at depths between two (2) feet bgs and fourteen (14) ft bgs
- Total PCB concentrations greater than or equal to 3.2 mg/kg within the vadose zone and below the water table.<sup>2</sup>, where PCB have been detected above groundwater standards i.e. below fourteen (14) ft bgs;
- Metal<sup>3</sup> concentrations greater than twenty (20) times the equivalent toxicity characteristic of hazardous waste with exception of lead;
- Lead concentrations greater than 200 times the equivalent lead toxicity characteristic, i.e. 1,000 mg/kg<sup>4</sup>; and
- Total PAH concentrations greater than 100 mg/kg below two (2) feet bgs.

Total PCB concentrations are also compared to the limit of fifty (50) mg/kg for PCB remediation wastes as defined in 40 CFR §761.3 Toxic Substances Control Act (TSCA). TSCA limits are considered in PCB delineation for identification of those soils that may be classified as hazardous waste containing PCBs as defined in 6 NYCRR Part 371.4 (e). The following sections summarize key elements of the work.

### **Remedial Excavation and Soil Management**

The analytical results for confirmation samples collected from the IRM #4A excavation exceeded the IRM cleanup goals presented above along the boundary between the IRM #4A and IRM #5 limits of excavation. Soil management areas within the IRM #5 excavation have been modified on Sheets 5 to 7 of the Construction Drawings (Attachment 1) for the 0 to 2 ft , 2 to 4 ft and 4 to 6 ft excavations. Updated Figures

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<sup>2</sup> Depth to water was measured at 16.1 ft bgs at monitoring well MW-15S in September 2016 with a groundwater elevation of 839.62 feet above mean sea level (ft msl).

<sup>3</sup> Resource Recovery and Conservation Act (RCRA) list of eight (8) metals (RCRA 8 metals) for which toxicity characteristics are based on toxicity characteristic leach procedure (TCLP) results: arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver.

<sup>4</sup> Based on NYSDEC experience, lead concentrations of 1,000 mg/kg or greater are more indicative of soils having toxicity characteristics of hazardous waste.

5A, 5B, 6A and 6B present the updated extent of PCBs and metals for those excavations. Soils will be managed based on final disposition in accordance with the IRM #5 Work Plan.

### **ISMP Excavations**

It is anticipated that EHS stadium construction will require excavation beyond the extent of IRM #4 and IRM #5 excavations and beyond the extent of soil cover system presented in the ISMP. Such excavations are to be conducted in accordance with the EWP included in the ISMP. As shown on Sheet 2 of Construction Drawings (Attachment 1), the IRM contractor will complete excavations to prepare portions of the Site for installation of utilities and foundations by ECSD as part of EHS stadium construction. Control points for the limits of the utility trenches and foundations are presented on Sheet 2 with x- and y-coordinates, elevations and trench widths provided on Sheet 3. Trench and foundation layouts will be confirmed with ECSD and the stadium construction contractor prior to excavation.

Upon completion of these excavations, confirmation samples will be collected as follows:

- Trenches four (4) feet in width or less: sidewall samples at 2-ft intervals every 30 linear feet from the trench sidewall in the direction of surface runoff and samples from the trench bottom every 900 square feet; and
- Trenches over four (4) feet in width and foundations:
  - i. less than 20 feet in perimeter, include one bottom sample and sidewall samples at 2-ft intervals biased in the direction of surface runoff; or
  - ii. greater than 20 feet in perimeter, sidewall samples at 2-ft intervals for every 30 linear feet of sidewall and one sample from the excavation bottom for every 900 square feet of bottom area.

Confirmation samples will be submitted to a fixed laboratory for analyses of PCBs, metals, SVOCs and VOCs in accordance with the Quality Assurance Project Plan (QAPP) presented in the IRM #5 Work Plan. Sidewall or bottom samples requiring VOC analyses will be collected (1) from the zero to six-inch interval at the excavation floor within 24 hours of excavation; or (2) at six to twelve inches after 24 hours. Confirmation sample location and elevation will be surveyed by a NYS licensed surveyor to document as-built conditions.

The extent of the excavation will be surveyed and a demarcation layer, consisting of orange snow fencing material, white geotextile or equivalent material, will be placed on the sidewalls and bottom of the excavation to provide a visual reference of the limit of the as-built excavation. Excavations will then be turned over to ECSD for installation of utilities and foundations, backfilling and final restoration. If an excavation will remain open for an extended period, the excavation may be backfilled up to four (4) feet below existing grade with IRM #5 soils approved by NYSDEC for reuse in accordance with DER-10 and the IRM #5 Work Plan to meet safety requirements. The schedule for ISMP excavations will be coordinated with ECSD stadium construction to the extent possible.

Other intrusive activities below the soil cover system including the installation of fence posts, helical piles for foundations, light poles, flag poles and shallow (less than two (2) feet bgs) utility trenches will be completed by ECSD in accordance with the EWP. During those activities, existing equipment wash pads and decontamination areas will be made available to ECSD in coordination with IRM activities.

As-built conditions including the limits of excavation and demarcation layers, the extent and type of backfill and cover system installation will be documented in coordination with ECSD for site management.

### **Former Industrial Sewer Removal**

Test pitting and camera surveys completed as part of FFC Pre-Design Investigation (PDI) Amendment #6 identified Segment 6 of the former industrial sewer as 36-inch pipe east of the EHS property line at the south end of the FFC as shown on Sheet 4 of the Construction Drawings (Attachment 1). Additional test pitting will be conducted at the north end of the FFC as shown on Sheet 4 to identify the extent and location of Segment 6 within the FFC. Trenching will be begin to the east of the unnamed 12-in concrete pipe segment between MH-2 and CB-28 shown on Sheet 4 and continue to the west. The test trench will be excavated to a depth of 11 feet bgs to identify the alignment of Segment 6. Test trench spoils will be managed in accordance with former industrial sewer removal plan. If Segment 6 is encountered during test pitting, the interior of Segment 6 at its northern extent within the FFC will be inspected by inline camera survey. A 4-in diameter core hole will be made in the top of the pipe and a camera will be inserted in the core hole for inspection. If fine-grained material is observed in a quantity sufficient to sample, a sample will be collected with a hand auger for analyses for PCBs, metals, SVOCs, and VOCs in accordance with the QAPP. Upon completion of inspection and sampling of the interior, the core hole will be sealed. Construction adhesive, mesh and hydraulic cement will be used to seal the core hole.

Structure CB-39 at the north end of the 24-inch former industrial sewer (Segment 3) was identified from historic drawings and ground penetrating radar. CB-39 will be located and exposed as part of industrial sewer removal. Prior to removal, the CB-39 structure will be inspected for integrity by inline camera survey. Samples of fine-grained material (if present) will be collected for analyses for PCBs, metals, SVOCs, VOCs, and petroleum hydrocarbons in accordance with the QAPP.

Removal of the former industrial sewer will be performed in accordance with Former Industrial Sewer Removal Work Plan dated 15 December 2020, prepared by Remedial Construction Services, L.P. (RECON) included as Attachment 2.

It is anticipated that ECSD will install a new natural gas service to the EHS building and that the existing natural gas utility located on the east side of the FFC will be deactivated and abandoned in place prior to former industrial sewer removal. Segments of natural gas line encountered during former industrial sewer removal will be removed and the remaining ends will be capped in place. In the event that existing natural gas service is still active at the time of former industrial sewer removal, the IRM contractor will implement the Gas Line Contingency Plan presented in the Former Industrial Sewer Removal Work Plan (Attachment 2).

### **Backfilling and Site Restoration**

Backfill material will include soils previously approved by NYSDEC for use as soil cover, imported fill, soils previously approved by NYSDEC for reuse below soil cover and excavated soils stockpiled for potential reuse. Soils stockpiled for reuse will meet the requirements of Section 5.4 of DER-10 for use below a soil cover system over a demarcation layer. Reuse soils will not be used for backfilling within one (1) foot of the seasonal high-water table or above two (2) ft bgs. Sheets 8 and 9 of the Construction

Drawings (Attachment 1) present intermediate final grades for the top of backfill using NYSDEC-approved reuse soils that will two (2) feet below the final grades of the EHS stadium to be constructed by ECSD and final restoration grades for turnover of the FFC to ECSD that may include NYSDEC-approved imported fill, respectively. The final soil cover system to be implemented within the FFC as an engineering control will include soil/turf, concrete and asphalt. An updated Figure 14 presents the limits of the FFC cover system engineering control and typical sections.

## **COMMUNITY AIR MONITORING**

The community air monitoring program (CAMP) presented in the Soil/Dust Control and Monitoring Plan (SDCMP) included as Appendix E in the Final (100%) IRM #5 Work Plan included monitoring at two locations on the roof of the EHS building as presented on Figure 15 of the IRM #5 Work Plan. Freezing conditions may cause the roof membrane to become a slip and fall hazard and ECSD personnel restricted roof access as a precaution. An updated Figure 15 presents modifications to CAMP monitoring locations to address safety concerns regarding roof access communicated to NYSDEC on 10 November 2020 and approved on 17 November 2020:

1. Dust Monitor #1 was moved to ground level on the north side of the Music Wing. Equipment will be placed at the beginning of each workday when dust monitoring is required and retrieved at the end of the day. During the day, the monitoring location will be secured with snow fencing.
2. Dust Monitor #2 and Tisch Air Sampler #2 have been placed on an aerial manlift located on the north side of A-Wing. The manlift will raise the monitoring equipment to the level of the HVAC system air intake located on top of A-Wing at the beginning of each workday when dust monitoring is required and lowered at the end of the day. Power for the Tisch Air Sampler will be provided by plugging an extension cord to an exterior outlet located on the north side of A-Wing. In addition, a camera will be mounted on the manlift to take a daily photograph of construction progress.

CAMP monitoring locations may be modified to accommodate areas of excavation and be representative of the work being completed. NYSDEC and NYSDOH will be notified prior to CAMP monitoring location modifications.

## **HEALTH AND SAFETY**

All Site activities will be performed in such a manner as to ensure the safety and health of all personnel and the surrounding community. All Site activities shall be conducted in accordance with all pertinent general industry (29 CFR 1910) and construction (29 CFR 1926) Occupational Health and Safety Administration (OSHA) standards, as well as any other applicable New York State and municipal codes or ordinances. All Site activities will comply with those requirements set forth in OSHA's final rule entitled Hazardous Waste Operation and Emergency Response (HAZWOPER), 29 CFR 1910.120, Subpart H.

To ensure that all Site activities are in compliance, each contractor will prepare a Health and Safety Plan (HASP) in accordance with the aforementioned regulations. Each HASP shall conform to the requirements of 29 CFR 1910.120 and all applicable state, federal, local, and other health and safety requirements and safe construction practices not specifically identified in these requirements. A Site-specific HASP has been prepared for IRM tasks. A contingency for chemical specific PCB monitoring would be developed in the event the State determines that it is necessary.

The IRM Contractor will provide a “competent person” per 29 CFR 1926 Subpart P – Excavations on-Site during excavations. The qualifications of the designated “competent person” will be provided to NYSDEC prior to IRM construction. Excavations will be secured with temporary fencing and enhanced barriers at LOD if they remain open for an extended time. Open excavations will be monitored for standing water and dust. Water management and dust control measures will be implemented as appropriate.

## **SCHEDULE AND DELIVERABLES**

### **Schedule**

The proposed schedule for the IRM #5 Amendment #1 is presented in **Table 1**. The following are milestone dates applicable to this IRM:

- 18 January 2021 – IRM #5 Work Plan Amendment #1 Submittal;
- 2 February 2021 – Receipt of agency comments
- 11 February 2021 - IRM #5 Work Plan Amendment #1 Revised Submittal;
- 5 March 2021 – IRM #4A and IRM #5 Remedial Excavation Completion;
- 19 March 2021 – ISMP Excavation Completion; and
- 30 March 2021 – Demobilization from FFC/Turnover to ECSD.

The proposed schedule is based on excavation of up to 600 cubic yards per day. Based on construction of previous IRMs at the Site, the schedule includes contingency for delays of up to three (3) days due to weather. Anticipated working hours are Monday through Friday during daylight hours. Work on weekends may be required to meet schedule milestones.

### **Deliverables**

Unisys will deliver documentation of completion of IRM activities in an area before it is turned over to ECSD for restoration or ISMP activities. Documentation will include locations and depths of COPCs remaining in place based on confirmation samplings results or placement of soils approved by NYSDEC for reuse.

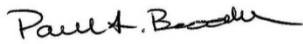
A construction completion report (CCR) will be prepared in accordance with Section 5.8 of DER-10 to document the implementation of the IRM. The CCR will include a description of IRM construction activities, as-built drawings, daily field reports, analytical data reports, and disposal manifests. The CCR will be delivered to NYSDEC within ninety (90) days of substantial completion of IRM #5 construction.

## CLOSING

Geosyntec appreciates the opportunity to submit this work plan amendment to the NYSDEC, NYSDOH and ECSD. If you have any questions, please contact Mr. Kevin Krueger of Unisys at (651) 687-2210.

Sincerely,

Geosyntec Consultants, Inc.



Paul Brookner  
Principal/Project Director  
Geosyntec Consultants, Inc.



Aron Krasnopoler, Ph.D., P.E.  
Senior Engineer/Project Manager  
B & B Engineers and Geologists of New York, P.C.

Attachments: Table 1 – IRM Schedule  
Figure 5A – Extent of PCBs in Soil – 0-2 ft bgs  
Figure 5B – Extent of Metals in Soil – 0-2 ft bgs  
Figure 6A – Extent of PCBs in Soil – 2-4 ft bgs  
Figure 6B – Extent of PCBs in Soil – 4-6 ft bgs  
Figure 7A – Extent of Metals in Soil – 2-4 ft bgs  
Figure 7B – Extent of Metals in Soil – 4-6 ft bgs  
Figure 14 – Proposed Soil Cover System  
Figure 15 – CAMP Monitoring Locations  
Attachment 1 – Construction Drawings  
Attachment 2 – Former Industrial Sewer Removal Work Plan

Copies to: Dave Pratt NYSDEC  
Justin Stenerson, NYSDEC  
Michael Cruden, NYSDEC  
Sara Bogardus, NYSDOH  
Joe Magliocca, ECSD  
Hillary Austin, ECSD  
Paul Sylvestri, Harter, Secrest & Emery

Kevin Krueger, Unisys  
Terry Etter, Unisys  
Elizabeth Parker, Unisys  
Michael G. Murphy, Beveridge & Diamond

## CERTIFICATION

I Aron Krasnopoler certify that I am currently a NYS registered professional engineer as defined in 6 NYCRR Part 375 and that this Amendment #1 to the Interim Remedial Measures #5 Work Plan for the Former Sperry Remington Site – North Portion dated 11 February 2021 was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).



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Aron Krasnopoler, P.E.



2/11/2021



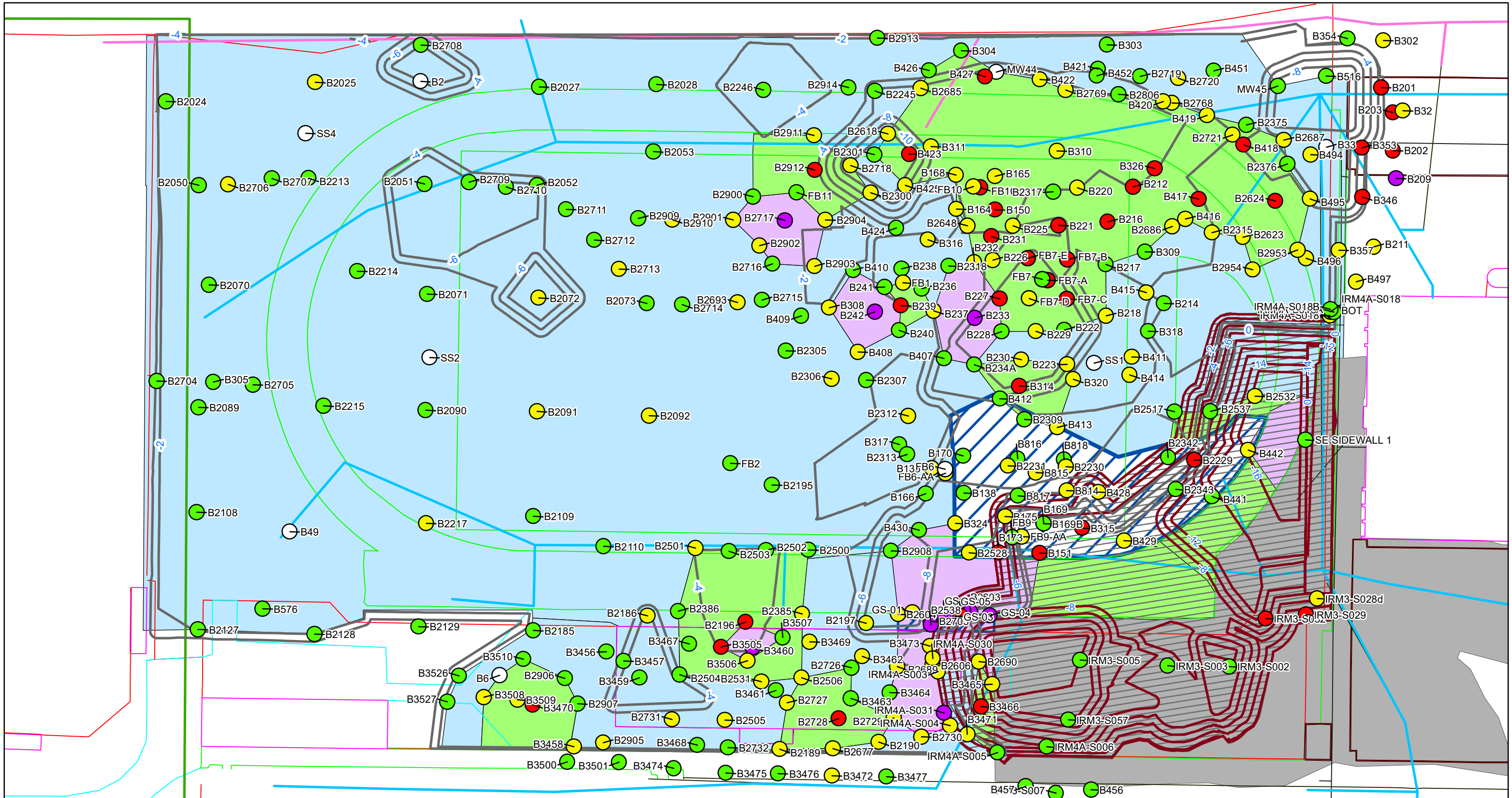
**TABLE 1**  
**IRM Schedule**

**Former Sperry Remington - North Portion**  
**Elmira, Chemung County, New York**

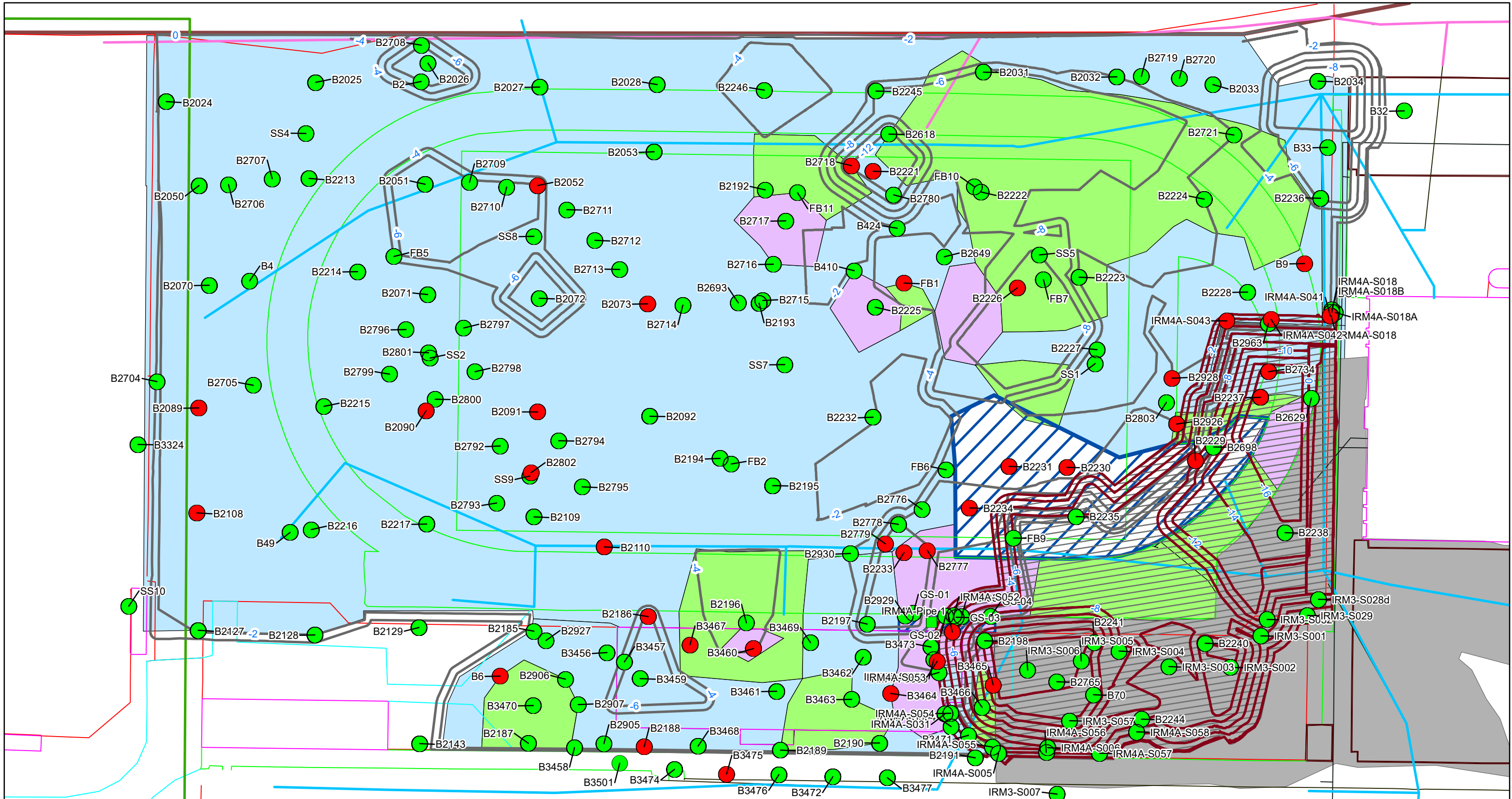
<b>Task Name</b>	<b>Duration</b>	<b>Start</b>	<b>Finish</b>
IRM Strategy & Planning Meeting	0 days	Tue 11/19/2019	Tue 11/19/2019
<b>IRM #5 Work Plan and Design</b>	253 days	Wed 12/18/2019	Fri 12/4/2020
Pre-Final (95%) Work Plan and Design Preparation	15 wks	Wed 12/18/2019	Fri 2/14/2020
Pre-Final (95%) Work Plan and Submittal	0 days	Fri 2/14/2020	Fri 2/14/2020
Agency and ECSD Review	7 weeks	Fri 2/14/2020	Thu 4/2/2020
Agency Comments	0 days	Thu 4/2/2020	Thu 4/2/2020
Final (100%) Work Plan and Design Preparation	2 wks	Fri 4/3/2020	Tue 7/21/2020
Updated IRM #5 Construction Drawings to ECSD	0 days	Mon 6/15/2020	Mon 6/15/2020
ECSD Comments to IRM 5 Draft 100% Design	0 days	Thu 6/25/2020	Thu 6/25/2020
Final (100%) Work Plan and Design Submittal	0 wks	Tue 7/21/2020	Tue 7/21/2020
Agency and ECSD Review	5 wks	Tue 7/21/2020	Thu 8/27/2020
FFC PDI - Soils under EHS Grandstands	4 days	Mon 7/27/2020	Thu 7/30/2020
FFC PDI - Soils under EHS Grandstands - Step Outs	2 days	Mon 8/31/2020	Tue 9/1/2020
Revised Final (100%) Work Plan and Design Submittal	0 days	Mon 9/14/2020	Mon 9/14/2020
NYSDEC Discussion of Revised Final IRM #5 Work Plan	0 days	Thu 10/8/2020	Thu 10/8/2020
Revised Final (100%) Work Plan and Design Submittal	0 days	Fri 10/23/2020	Fri 10/23/2020
Agency and ECSD Review	3 wks	Mon 10/26/2020	Fri 11/13/2020
Revised Final (100%) Work Plan and Design Submittal	0 days	Tue 11/24/2020	Tue 11/24/2020
Virtual Public Availability Session	1 day	Thu 12/3/2020	Thu 12/3/2020
NYSDEC Approval and NTP	0 days	Fri 12/4/2020	Fri 12/4/2020
<b>IRM #5 Work Plan Amendment</b>	74 days	Wed 10/28/2020	Mon 2/8/2021
Last Day for Stadium Renovations Bid Addenda	0 days	Wed 10/28/2020	Wed 10/28/2020
Work Plan Amendment Preparation	7 wks	Thu 10/29/2020	Tue 12/15/2020
Amendment Design Submittal to ECSD	0 days	Tue 12/15/2020	Tue 12/15/2020
ECSD Review	4 wks	Tue 12/15/2020	Fri 1/15/2021
Work Plan Amendment Submittal	0 days	Mon 1/18/2021	Mon 1/18/2021
Agency Review	3 wks	Mon 1/18/2021	Mon 2/8/2021
NYSDEC Approval and NTP	0 days	Mon 2/8/2021	Mon 2/8/2021
<b>IRM #5 Construction</b>	10 wks	Mon 12/7/2020	Tue 3/30/2021
Excavation	10 wks	Mon 12/7/2020	Fri 3/5/2021
Former Industrial Sewer Removal	4 wks	Mon 2/22/2021	Mon 3/22/2021
Backfilling <sup>1,2</sup>	5 wks	Fri 2/12/2021	Fri 3/19/2021
ISMP Excavation	4 wks	Tue 2/16/2021	Tue 3/16/2021
Site Restoration	2 wks	Tue 3/16/2021	Tue 3/30/2021
Demobilization	0 days	Tue 3/30/2021	Tue 3/30/2021
<b>IRM #5 Construction Completion Report (CCR)</b>			
CCR Preparation	3 mons	Tue 3/30/2021	Tue 6/22/2021
CCR Submittal	0 days	Tue 6/22/2021	Tue 6/22/2021
Agency Review	3 mons	Tue 6/22/2021	Tue 9/14/2021
CCR Approval	0 days	Tue 9/14/2021	Tue 9/14/2021

Notes

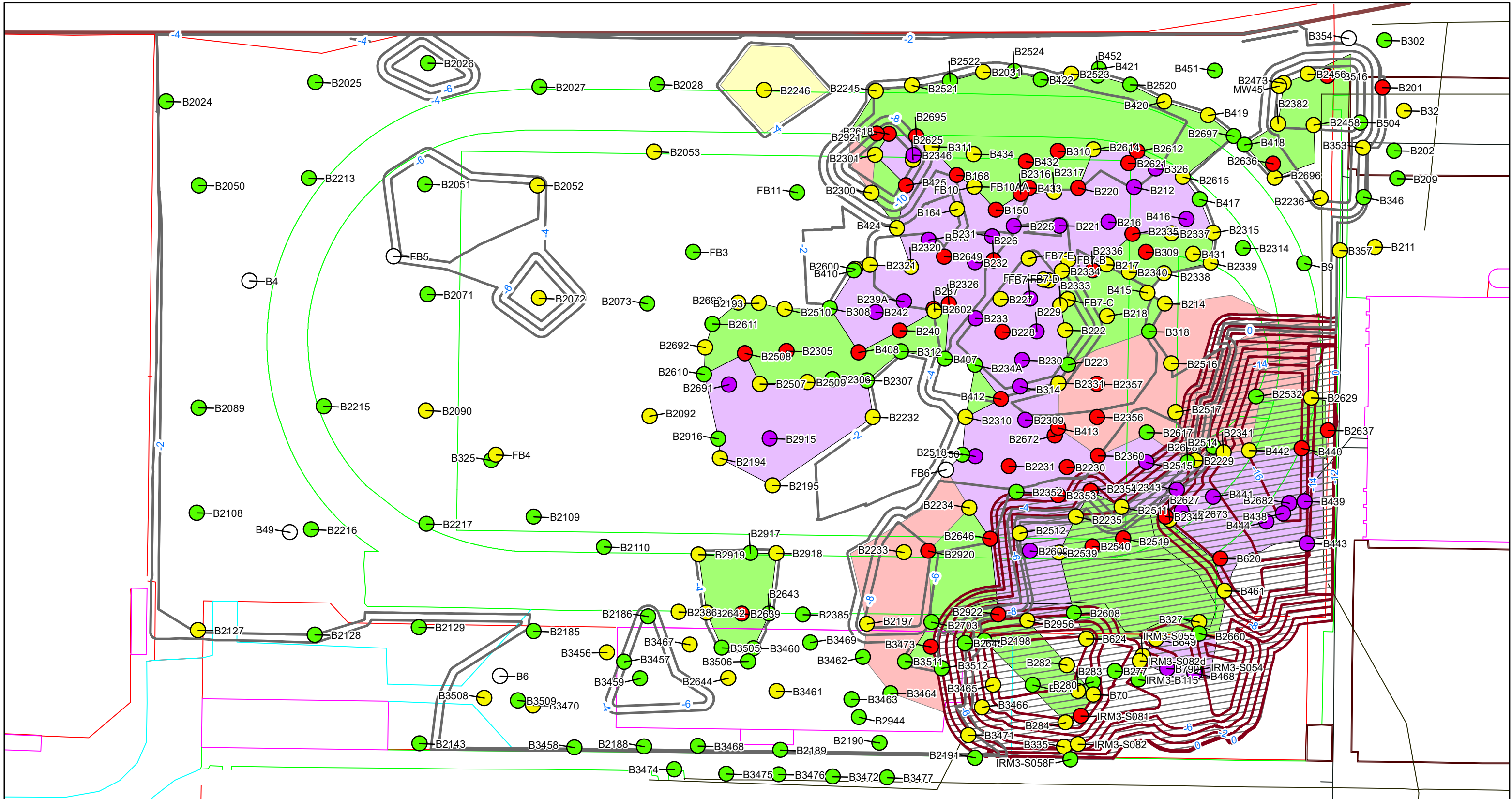
1. Backfilling may begin in phases, pending NYSDEC approval.
2. Backfilling schedule is dependent on weather and imported fill availability during winter months.



<p><b>Legend</b></p> <p><b>Total PCB Concentration</b></p> <ul style="list-style-type: none"> <li>○ Non-Detect</li> <li>● 0 - 1 mg/kg</li> <li>● 1 - 10 mg/kg</li> <li>● 10 - 50 mg/kg</li> <li>● &gt;50 mg/kg</li> </ul>		<p><b>Excavation Classification (IRM 5)</b></p> <ul style="list-style-type: none"> <li>Areas with PCBs 1-10 mg/kg</li> <li>Areas with PCBs 10-50 mg/kg</li> <li>Areas with PCBs &gt; 50 mg/kg</li> </ul>		<p><b>Current EHS Storm</b></p> <ul style="list-style-type: none"> <li>Water Sewer (Post-1979)</li> <li>Former Combined</li> <li>Industrial Sewer (Pre-1979)</li> <li>Sanitary Sewer</li> </ul>		<p><b>Excavated to 1 ft</b></p> <ul style="list-style-type: none"> <li>Extent of IRM#1 Backfill</li> </ul>		<p><b>Notes</b></p> <p>Only data within 15 feet of the Limits of Excavation are depicted</p> <p>ft bgs - Feet below ground surface</p> <p>PCBs - Polychlorinated biphenyls</p> <p>SCO – Soil Cleanup Objective</p> <p>mg/kg - milligrams per kilogram</p> <p>"SSHS-" prefix removed from sample IDs in labels.</p> <p>The screening criterion and IRM action level for total PCBs are the Restricted Residential SCO of 1 mg/kg (6 NYCRR Part 375). See Table 1A and the text for details.</p> <p>Concentrations above screening criteria and IRM action levels are remaining contamination</p> <p>0 30 Feet</p>	<p><b>Extent of PCBs in Soil – 0-2 ft bgs</b></p> <p>IRM #5</p> <p>Former Sperry Remington - North Portion #808022</p> <p>Elmira, New York</p>		<p><b>Figure 5A</b></p>
<p>IRM5 Elevation Contour</p> <p>IRM4 Amendment Elevation Contour</p> <p>IRM4 Amendment 1 Excavation</p>						<p>B&amp;B Engineers &amp; Geologists of new york, p.c.</p> <p>an affiliate of Geosyntec Consultants</p>					
<p>Columbia, Maryland</p> <p>December 2020</p>						<p>December 2020</p>					



<b>Legend</b> <b>Metals Exceedances</b> Does Not Exceed Screening Criteria/IRM Action Levels (Green circle) Exceeds Screening Criteria/IRM Action Levels (Red circle)		<b>Lead TCLP Exceedances</b> TCLP Lead <5 mg/L (Green square) TCLP Lead >5 mg/L (Red square)		<b>IRM4 Amendment Elevation Contour</b> (Red line) <b>IRM5 Elevation Contour</b> (Black line) <b>IRM4 Amendment 1 Excavation</b> (Hatched area) <b>Site Boundary</b> (Brown line)		<b>Excavation Classification (IRM 5)</b> Areas with PCBs 1-10 mg/kg (Light blue) Areas with PCBs 10-50 mg/kg (Light green) Areas with PCBs > 50 mg/kg (Light purple)		<b>Excavated to 1 ft</b> (Blue hatched area) <b>Excavated</b> (Grey hatched area) <b>Current EHS Storm Water Sewer (Post-1979)</b> (Blue line) <b>Former Combined Industrial Sewer (Pre-1979)</b> (Pink line) <b>Sanitary Sewer</b> (Green line)		<b>Notes</b> Only data within 15 feet of the Limits of Excavation are depicted ft bgs - Feet below ground surface IRM - Interim Remedial Measure Screening criteria for metals are Restricted Residential Soil Cleanup Objectives (6 NYCRR Part 375). IRM action levels for metals are Restricted Residential Soil Cleanup Objectives (6 NYCRR Part 375). See Table 1A and the text for details. Concentrations above screening criteria and IRM action levels are remaining contamination		<b>Extent of Metals in Soil – 0-2 ft bgs</b> IRM #5 Former Sperry Remington - North Portion #808022 Elmira, New York B&B Engineers & Geologists of new york, p.c. an affiliate of Geosyntec Consultants Columbia, Maryland      December 2020		<b>Figure 5B</b>
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**Legend**

**Total PCB Concentration**

- Non-Detect
- 0 - 1 mg/kg
- 1 - 10 mg/kg
- 10 - 50 mg/kg
- >50 mg/kg

**IRM5 Elevation Contour**

**IRM4 Amendment Elevation Contour**

**IRM4 Amendment 1 Excavation**

**Site Boundary**

**Excavation Classification (IRM 5)**

- Areas driven by PAHs
- Areas driven by metals
- Areas with PCBs 10-50 mg/kg
- Areas with PCBs > 50 mg/kg

**Notes**

Only data within 15 feet of the Limits of Excavation are depicted ft bgs - Feet below ground surface

PCBs - Polychlorinated biphenyls mg/kg - milligrams per kilogram

SCO - Soil Cleanup Objective

The screening criteria for total PCBs are the Restricted Residential SCO of 1 mg/kg (6 NYCRR Part 375) and 10 mg/kg (NYSDEC CP-15 - Soil Cleanup Policy). The IRM action level is 10 mg/kg. See Table 1A and the text for details.

Concentrations above screening criteria and IRM action levels are remaining contamination

**Extent of PCBs in Soil - 2-4 ft bgs**

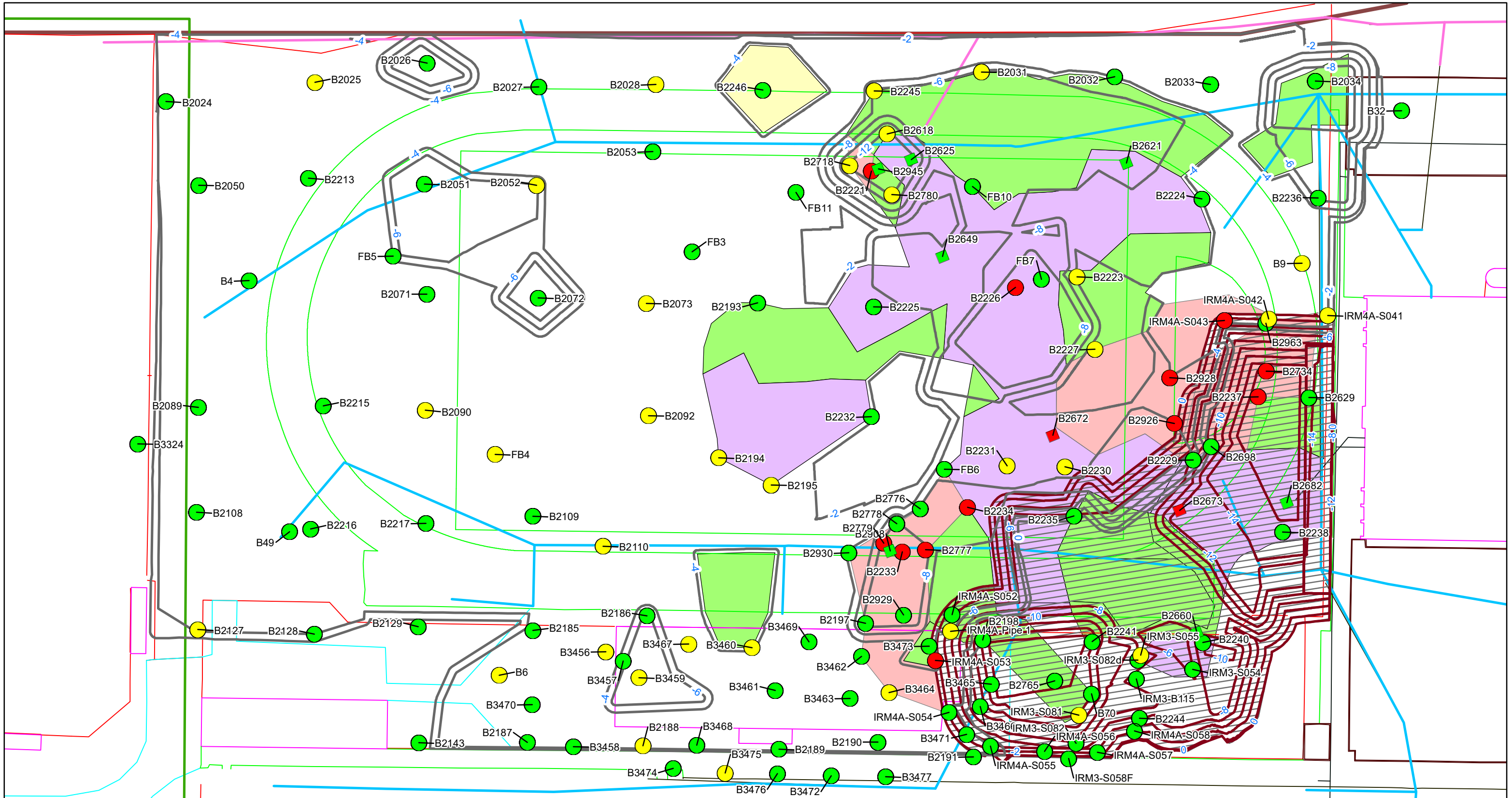
IRM #5  
Former Sperry Remington - North Portion #808022  
Elmira, New York

B&B Engineers & Geologists  
of new york, p.c.  
*an affiliate of Geosyntec Consultants*

Columbia, Maryland      December 2020

**Figure 6A**





**Legend**

<b>Metals Exceedances</b>	<b>Lead TCLP Exceedances</b>	IRM5 Elevation Contour	<b>Excavation Classification (IRM 5)</b>	Current EHS Storm Water Sewer (Post-1979)	<p><b>Notes</b>          Only data within 15 feet of the Limits of Excavation are depicted ft bgs - Feet below ground surface          IRM - Interim Remedial Measure          TCLP - Toxicity characteristic leaching protocol          TCLP defined under 40 CFR § 261.24          RCRA - Resource Conservation and Recovery Act          Screening criteria for metals are Restricted Residential and Protection of Groundwater Soil Cleanup Objectives (6 NYCRR Part 375). IRM action levels are 20x TCLP for RCRA metals and 1,000 mg/kg for lead. See Table 1A and the text for details. Concentrations above screening criteria and IRM action levels are remaining contamination.</p>
● Does Not Exceed Screening Criteria	■ TCLP Lead <5 mg/L	IRM4 Amendment Elevation Contour	■ Areas driven by PAHs	■ Former Combined Industrial Sewer (Pre-1979)	
● Exceeds Screening Criteria	■ TCLP Lead >5 mg/L	IRM4 Amendment 1 Excavation	■ Areas driven by metals	■ Sanitary Sewer	
● Exceeds IRM Action Levels		Site Boundary	■ Areas with PCBs 10-50 mg/kg		
			■ Areas with PCBs > 50 mg/kg		

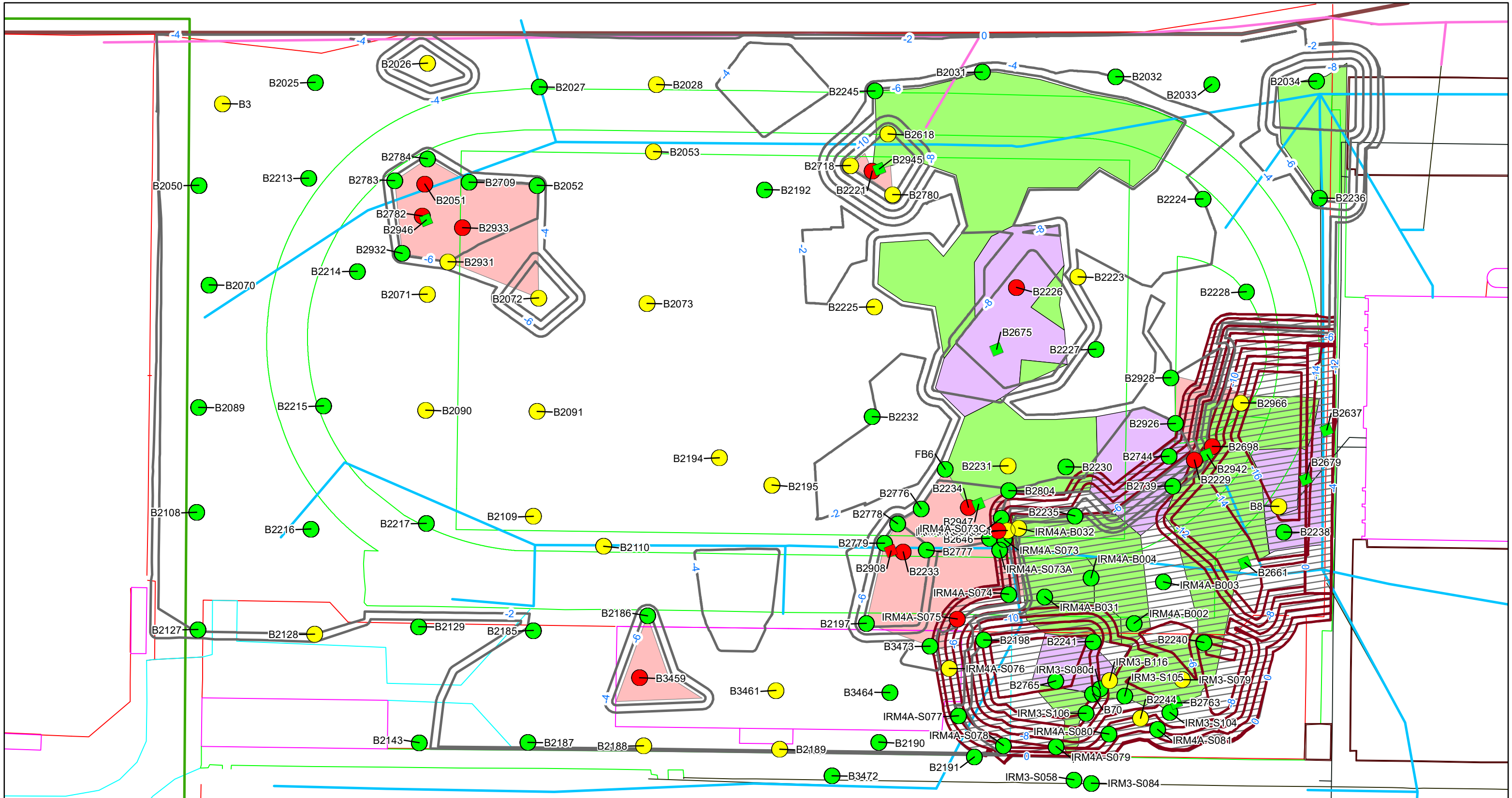
**Extent of Metals in Soil – 2-4 ft bgs**

IRM #5  
Former Sperry Remington - North Portion #808022  
Elmira, New York

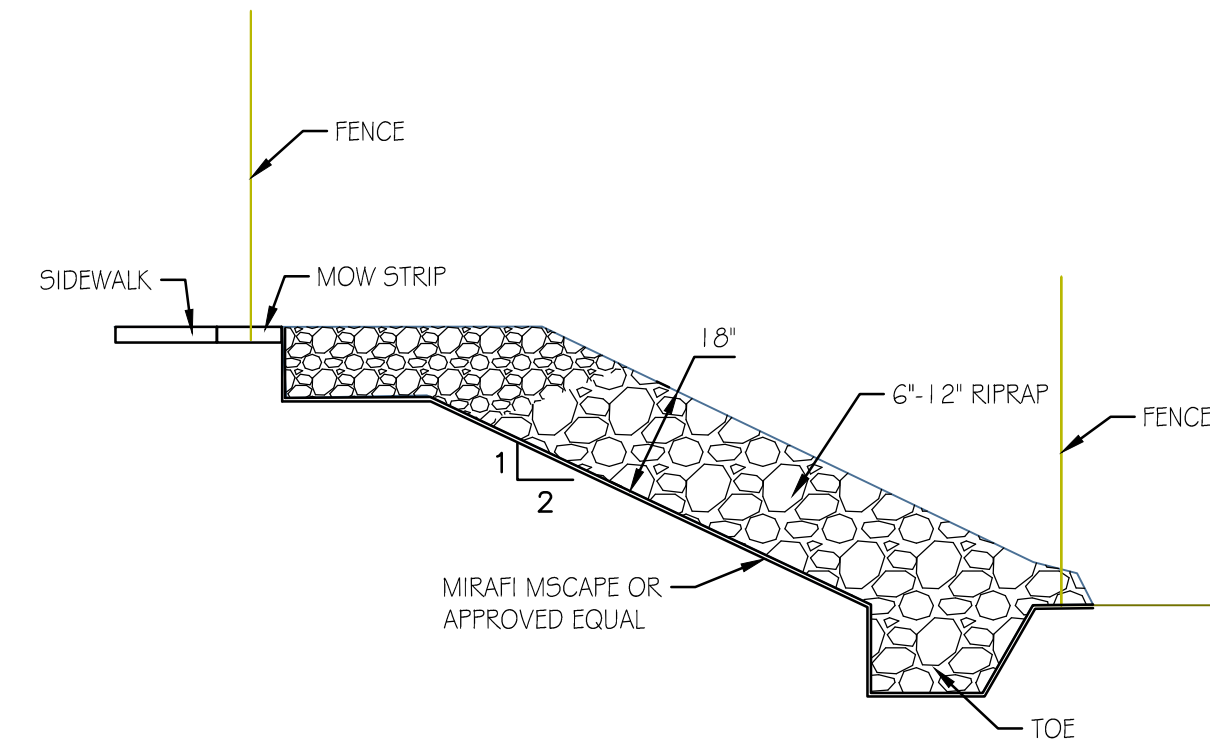
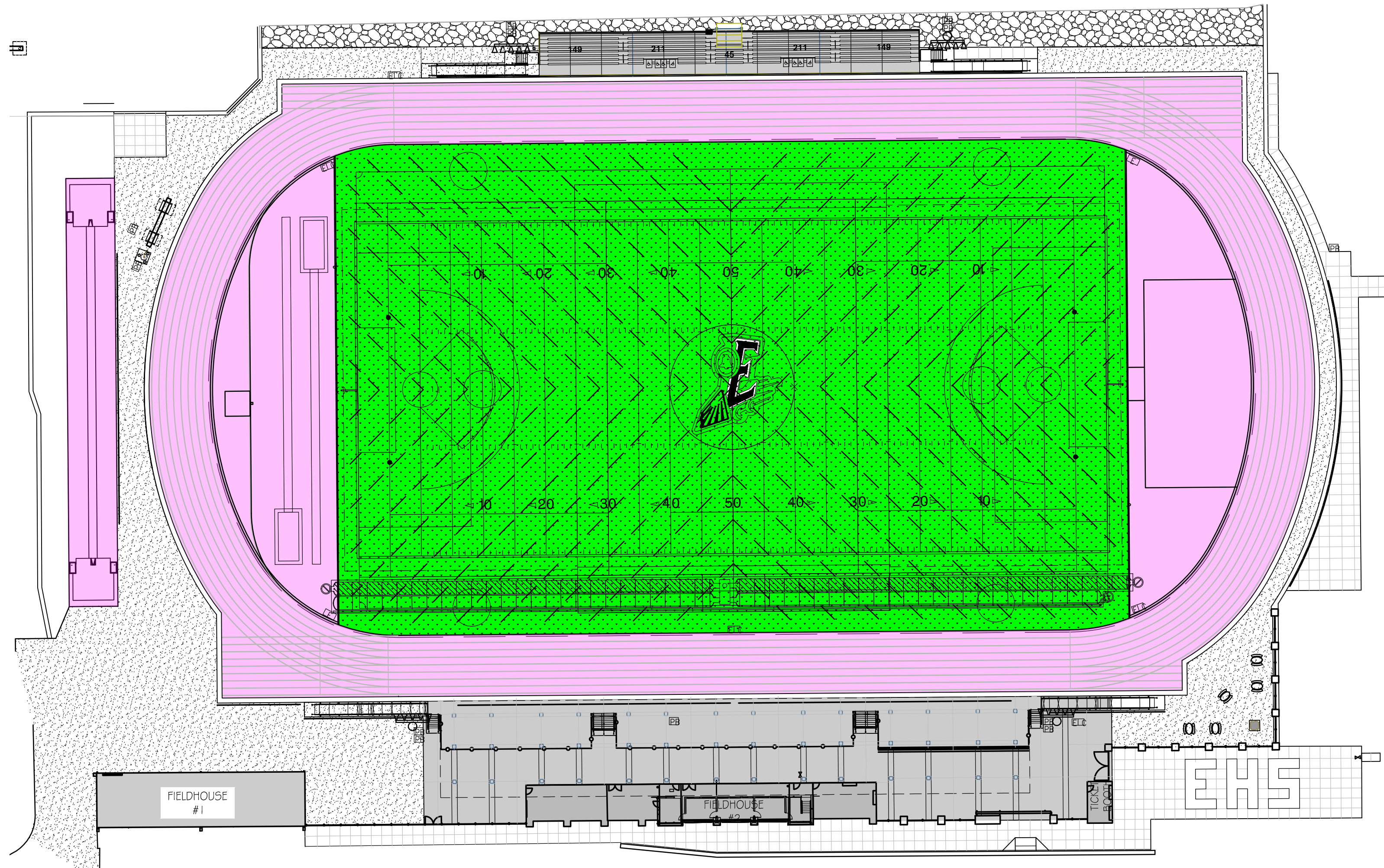
B&B Engineers & Geologists  
of new york, p.c.  
*an affiliate of Geosyntec Consultants*

Columbia, Maryland      December 2020

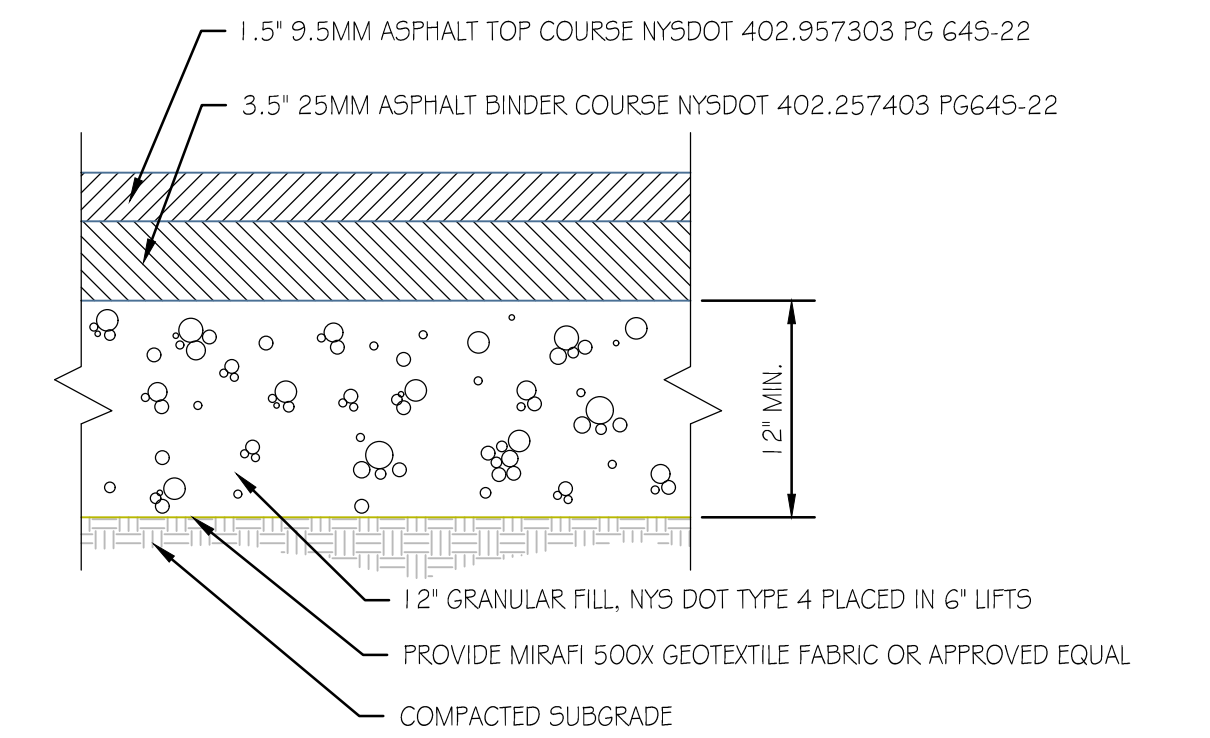
**Figure**  
**7A**



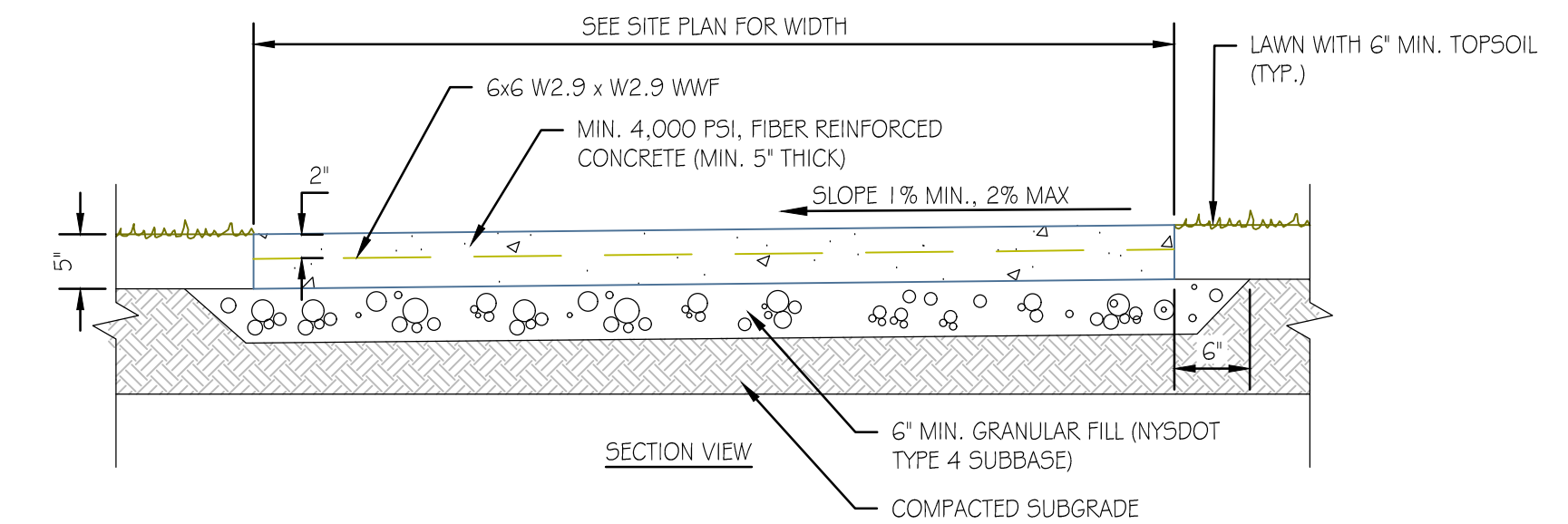
<b>Legend</b> <b>Lead TCLP Exceedances</b> <span style="color: green;">■</span> TCLP Lead <5 mg/L <span style="color: red;">■</span> TCLP Lead >5 mg/L		<b>Excavation Classification (IRM 5)</b> <span style="background-color: #f8cbad;">■</span> Areas driven by metals <span style="background-color: #d9ead3;">■</span> Areas with PCBs 10-50 mg/kg <span style="background-color: #e1d5e7;">■</span> Areas with PCBs > 50 mg/kg		<b>IRM5 Elevation Contour</b> <span style="border-bottom: 1px solid black;">  </span> IRM4 Amendment Elevation Contour <span style="border-bottom: 1px dashed black;">  </span> IRM4 Amendment 1 Excavation <span style="border-bottom: 1px solid brown;">  </span> Site Boundary		<b>Current EHS Storm Water Sewer (Post-1979)</b> <span style="border-bottom: 1px solid blue;">  </span> Former Combined Industrial Sewer (Pre-1979) <span style="border-bottom: 1px solid green;">  </span> Sanitary Sewer	
<b>Notes</b> Only data within 15 feet of the Limits of Excavation are depicted ft bgs - Feet below ground surface IRM - Interim Remedial Measure TCLP - Toxicity characteristic leaching protocol TCLP defined under 40 CFR § 261.24 RCRA – Resource Conservation and Recovery Act Screening criteria for metals are Restricted Residential and Protection of Groundwater Soil Cleanup Objectives (6 NYCRR Part 375). IRM action levels are 20x TCLP for RCRA metals and 1,000 mg/kg for lead. See Table 1A and the text for details. Concentrations above screening criteria and IRM action levels are remaining contamination.							
<b>Extent of Metals in Soil – 4-6 ft bgs</b> IRM #5 Former Sperry Remington - North Portion #808022 Elmira, New York							
B&B Engineers & Geologists of new york, p.c. <i>an affiliate of Geosyntec Consultants</i>				<b>Figure 7B</b>			
Columbia, Maryland			December 2020				



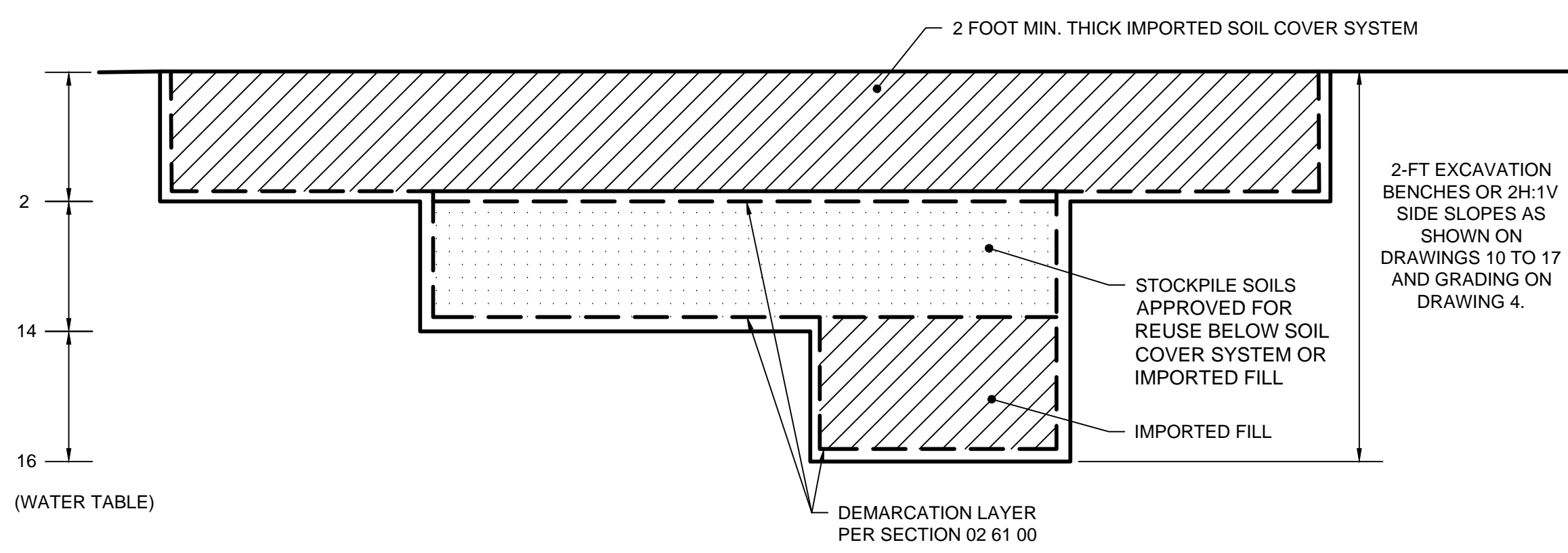
**BANK RIPRAP PROTECTION DETAIL**  
SCALE: N.T.S.



**STANDARD DUTY ASPHALT PAVEMENT**  
SCALE: N.T.S.



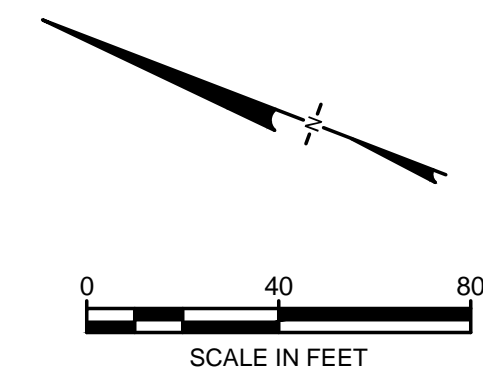
**CONCRETE SIDEWALK**  
SCALE: N.T.S.



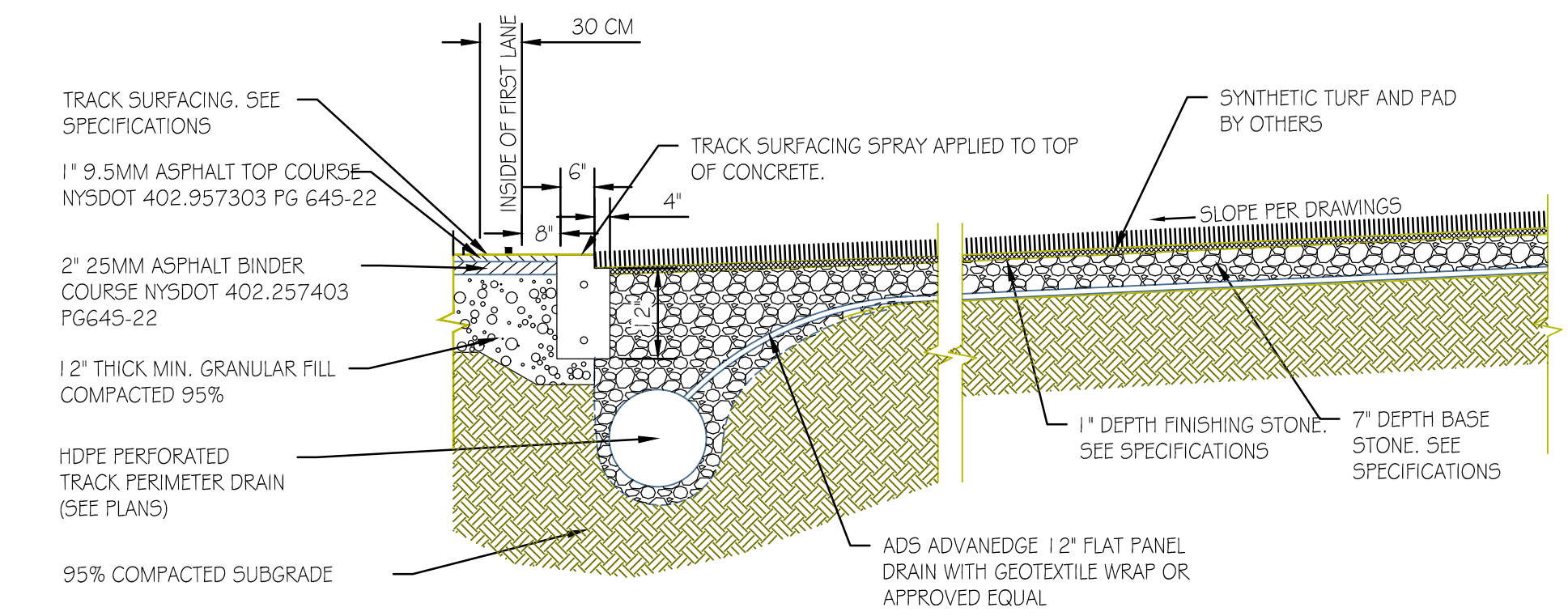
**EXCAVATION BACKFILL**  
SCALE: N.T.S.

**LEGEND**

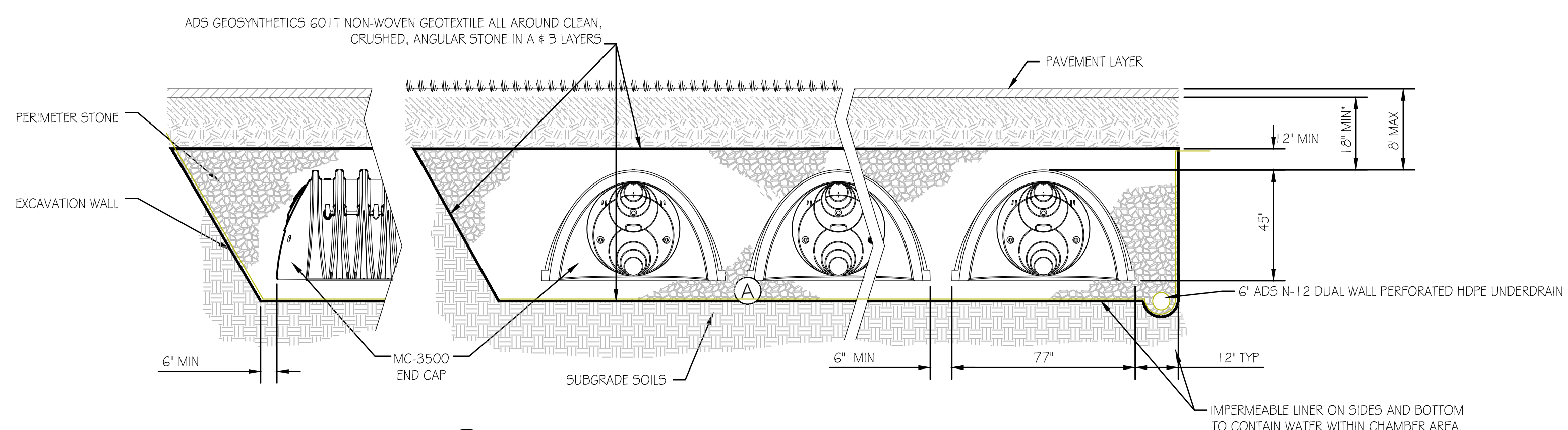
	ASPHALT
	CONCRETE
	TRACK
	TURF
	FOUNDATION
	RIP-RAP



**NOTE:**  
FINAL RESTORATION PLAN AND CROSS-SECTIONS ARE TAKEN FROM DRAWING HS-SITE-NEW.DWG BY HUNT ENGINEERS, ARCHITECTS AND SURVEYORS RECEIVED ON 10 NOVEMBER 2020.



**TURF AND TRACK SURFACE**  
SCALE: N.T.S.



**1 STORM DETENTION SYSTEM**  
SCALE: NOT TO SCALE

**PROPOSED SOIL COVER SYSTEM**

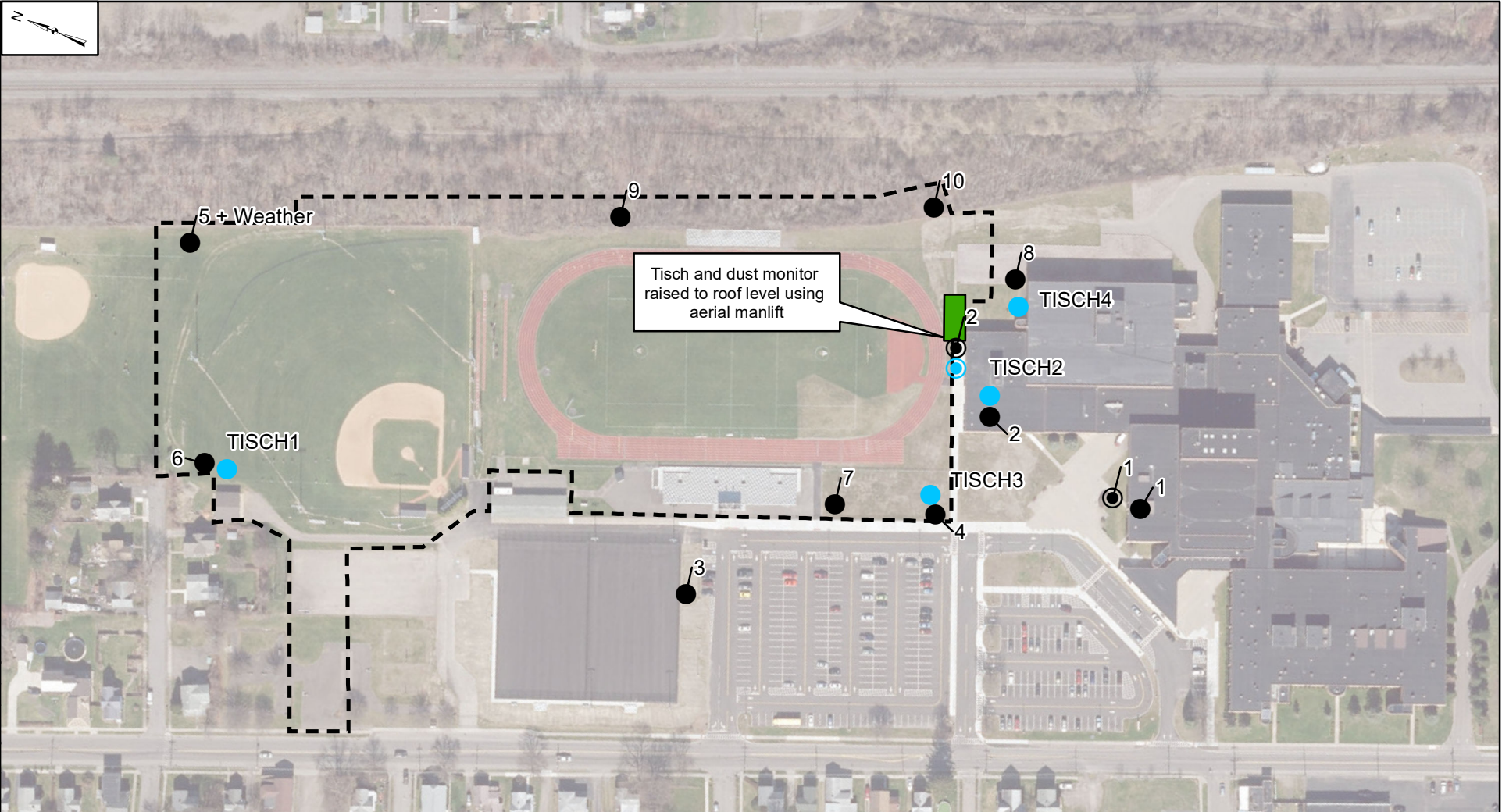
B&B Engineers & Geologists  
of new york, p.c.

**UNISYS**  
an affiliate of Geosyntec Consultants

DATE: DECEMBER 2020  
PROJECT NO. MN08321  
DOCUMENT NO.  
FILE NO. MN08321F1014  
FIGURE NO. 14

V:\COLUMBIA\DATA\CADD\PROJECTS\UNISYS - ELMIRA NY\MN08321\MN08321\IRMP\FIGURES\MN08321F1014





F:\GIS\Bmtrg - M10832\Map3\WPDEF\_AOCN\_BM\_2018\_1R\_Erid\_2018\_Line\_2019\_Worship\_Eruda\_Pub\_Map3\Figure 22 - CAMP Locations.Mxd, Recd, Entered: 17 Dec 2020

**Legend**

- CAMP Locations
- TISCH Monitoring Locations
- ⊙ CAMP Winter Alternative Locations
- ⊙ TISCH Winter Alternative Monitoring Locations
- Manlift
- - - Limits of Disturbance/Temporary Fencing

Notes

CAMP monitoring locations are approximate and will be adjusted based on changes in wind direction, as necessary. At least one monitoring location will be upwind of the work area. Rooftop locations will remain in place.

Aerial imagery and street map accessed via ArcGIS Online and provided by Microsoft on 17 December 2020.

<b>CAMP Monitoring Locations</b> Former Sperry Remington - North Portion Elmira, New York	
<b>B&amp;B Engineers &amp; Geologists</b> of new york, p.c. <i>an affiliate of Geosyntec Consultants</i>	
Columbia, Maryland	December 2020
<b>Figure</b>  <b>15</b>	