APPENDIX A: STORMWATER POLUTION PREVENTION PLAN

STORMWATER POLLUTION PREVENTION PLAN

Brewery Line Trail

City of Rochester
Monroe County, New York

SWPPP Original Date: December 2019

SWPPP Revision Date: August 23, 2021

Prepared For:

City of Rochester

City of Rochester
30 Church Street
Rochester, New York 14614

SWPPP Preparer:

PINEWOODS ENGINEERING, P.C.

Pinewoods Engineering, PC
42 Aston Villa
North Chili, New York 14514

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Appendices

Project Site Information

Project Site Name:	Brewery Line Trail
Project Location:	High Falls Terrace Park, St. Paul Street
City. State Zip:	Rochester, NY 14605
County:	Monroe

Permitted Limits of Disturbance:	0.99 Acres
NYSDEC Permit Identification Number*:	*N/A – Coverage Not Required*
Notice of Intent Submittal Date to NYSDEC:	*N/A – Coverage Not Required*

**This is a unique identifying number assigned to your project by the NYSDEC after the Notice of Intent is received.*

II. Contact Information / Responsible Parties

Owner/Operator (Permit Coverage Holder)	
Entity Name:	City of Rochester
Contact:	Holly Barrett, P.E., City Engineer
Address:	City Hall, 30 Church Street, Room 300B, Rochester, New York 14614
Phone Number:	(585) 428-6828
E-mail:	Holly.Barrett@cityofrochester.gov

Owner's Site Manager	
Entity Name:	*To Be Determined*
Contact:	
Address:	
Phone Number:	
E-mail:	

SWPPP Preparer	
Entity Name:	Pinewoods Engineering, P.C.
Contact:	Sara Gilbert, P.E.
Address:	42 Aston Villa, North Chili, New York 14514
Phone Number:	(585) 261 – 7852
E-mail:	sgilbert@pinewoodseng.com

Regulatory Reviewer (MS4 Authority)	
Entity Name:	City of Rochester
Contact:	Holly Barrett, P.E., City Engineer
Address:	City Hall, 30 Church Street, Room 300B, Rochester, New York 14614
Phone Number:	(585) 428-6828
E-mail:	Holly.Barrett@cityofrochester.gov

Qualified Inspector	
Entity Name:	Pinewoods Engineering, P.C.
Contact:	Sara Gilbert, P.E.
Address:	42 Aston Villa, North Chili, New York 14514
Phone Number:	(585) 261 – 7852
E-mail:	sgilbert@pinewoodseng.com

Site Contractor*	
Entity Name:	
Contact:	
Address:	
Phone Number:	
Emergency Phone:	
E-mail:	

A*ll contractors and subcontractors that will be responsible for installing, constructing, repairing, replacing, inspecting and maintaining the erosion and sediment control practices or constructing the post-construction stormwater management practices **must complete the Contractor Identification and Certification in Appendix B.

Other Important Contacts:

National Spill Response Center: 800-424-8802

NYSDEC Regional Stormwater Office: 585-226-5400

Dig Safely New York: 811 or 1-800-962-7962

III. SWPPP Purpose

This SWPPP has been developed to be in compliance with the City of Rochester ordinance and to generally be in compliance with Part II.B.2.c. of the New York State Department of Environmental Conservation (NYSDEC) SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-20-001) having an effective date of January 29, 2020 and an expiration date of January 28, 2025 [herein referred to as "Permit"]. The project is not required to obtain coverage under the Permit because it will involve soil disturbances less than one acre.

The purpose of this SWPPP is to document the selection, design, installation, implementation and maintenance of the erosion and sediment control measures and practices that will be used to meet the effluent limitations in Part I.B. of the Permit. These effluent limitations are imposed to protect the waters of the State of New York from the adverse impacts of stormwater runoff.

IV. Project Background Information

Project Description

This project involves the reconstruction and enhancement of approximately ±800 L.F. of the Genesee Riverway Trail in the High Falls Terrace Park and High Falls Terrace Platform. The proposed improvement includes: removal of existing worn asphalt surfaces and replacement with a new walking promenade, new plantings, lighting, drainage and revitalizing of the overlook view areas. Additionally, park amenities such as: benches, boulders, and recreational effects are proposed.

Project Location

High Falls Terrace Park is located on the south side of St. Paul Street and Cataract Street and north of the Inner Loop in the City of Rochester. The City of Rochester is a regulated MS4. To the west of the project boundary is a scarp to the Genesee River. The project location is along the eastern shore of the Genesee River.

Project Type

The project type is 'Trails' and will involve only stormwater and authorized non-stormwater discharges as allowed in the General Permit. The project's construction and/or post-construction operations are not required to obtain an individual SPDES permit or SPDES general permit. However, to be in compliance with the Permit, this project classification requires the preparation of a SWPPP that only includes erosion and sediment controls.

Project Size

The total limits of disturbance associated with the proposed project is 0.99 acres. The project is not part of an overall common plan of development. The development is not proposed to be phased.

Impervious Area

The existing impervious area within the limits of disturbance is 0.08 acres, this is comprised of mainly asphalt and gravel trail areas. The future impervious area within the disturbed area is 0.25 acres and will consists of asphalt trails.

Watershed

Runoff from the project is to the Genesee River via sheet flow over the scarp and through collection in an onsite storm sewer system that directly discharges to the River. The River conveys flows north approximately 6-miles to it's confluence with Lake Ontario. The portion of the Genesee River receiving project runoff is considered the Lower, Main Stem of the River (0401-0001) and is a fifth-order waterbody in this location. The Lower, Main Stem of the Genesee River is considered a 303(d)

impaired water and is not part of a TMDL. According to the "2016 New York State Section 303(d) List of Impaired/TMDL Waters" the major pollutants of concern are: priority organics (PCBs and dioxin) and pesticides (mirex). Minor pollutants are nutrients (phosphorus) and silt/sediment. The known and suspected source of pollutants are: urban runoff, toxic/contaminated sediment, municipal discharges, non-permitted sanitary discharges, and industrial discharges. The Brewery Trail project is not anticipated to discharge any of the major pollutants of concern. Appropriate Best Management Practices (BMP's) will be utilized during construction to control sedimentation and erosion. Those policies and practices are discussed in detail in this SWPPP.

V. Applicable Design Standards

Erosion and Sedimentation Control Standards

The erosion and sediment control measures described in this SWPPP are in accordance with the New York State Standards and Specifications for Erosion and Sediment Control (Bluebook), dated November 2016.

A copy of this standard may be found at: www.dec.ny.gov/chemical/29066.html.

The Contractor is responsible for ensuring all erosion and sediment control measures and practices described in this SWPPP are implemented and maintained in compliance with this standard.

Local Standards

The site is located within the City of Rochester, New York. According to the NYSDEC Stormwater Mapper, the City of Rochester is considered an MS4 Authority. All local code requirements that exceed the requirements of the Permit must be followed.

VI. Contractor Requirements for SWPPP Documentation

Document Updating

The Contractor shall mark-up, make notes in, and supplement the SWPPP with additional documentation as necessary so that at all times it accurately reflects the practices used, or intended to be used or constructed on the site. At a minimum, it is to be updated when;

- The current provisions are ineffective in meeting the Permit water quality requirements
- There is a change in the design, construction or operation that could effect the discharge of pollutants
- Issues or deficiencies are identified during a compliance inspection

Owner Documentation at Project Termination

At the termination of the project, the Contractor is to provide the owner with a complete SWPPP Binder containing all applicable items listed above. The owner is required to retain a copy of these documents for a period of 5-years after permit coverage is terminated.

VII. Contractor Requirements for General SWPPP Implementation

SWPPP Implementation

The general contractor and subcontractors performing any activity that involves soil disturbance are required to comply with the terms and conditions of this SWPPP as a condition of authorization to discharge stormwater. The provisions of this SWPPP are to be implemented from the

commencement of construction activity until Permit coverage is terminated. The SWPPP is meant to be a working document that shall be supplemented or altered as needed to accomplish the goals of the General Permit during construction.

Authorized Soil Disturbance

All construction site disturbances, staging areas, etc. must be kept within the 0.99 Acre limits of disturbance shown on the construction drawings. Stormwater discharges from only this area has Permit coverage.

Should the Contractor identify additional areas outside of the coverage limits that may need to be disturbed for the project (including topsoil and soil spoil areas) they are to notify the owner as soon as possible and prior to proceeding with these activities. The Owner will notify the Contractor when all requirements have been met for extending Permit coverage to the additional area and construction in that location may commence.

Allowed Discharge

Once the City of Rochester approves the SWPPP and all conditions for project commencement are met, the Contractor is permitted to discharge stormwater, groundwater from dewatering per Part I.B.1.c and non-stormwater expressly authorized in Part I.E.3 & F of the Permit. Prohibited discharges listed in Part I.B.1.e are not allowed.

Human/Archeological Finds

If any human or archeological remains are encountered during excavation, all construction activity in the area of the remains must immediately cease and the appropriate Regional Water Engineer must be notified. Construction activity may not resume until written permission to do so has been received.

VIII. Erosion and Sediment Control and Pollution Prevention Standards

Potential Sources of Pollution (Prohibited Discharges)

- Wastewater or leachate from concrete activities including washout of concrete equipment
- Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials
- Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance
- Soaps and solvents used in vehicle and equipment washing
- Toxic or hazardous substances from a spill or release
- Stormwater or snowmelt discharges mixed with sources of non-stormwater
- Sediment laden runoff from a large storm event or snow melt which would increase turbidity, suspended, colloidal or settleable solids to the receiving waterbody causing a substantial visible contrast to natural conditions, deposition or impairment of use.
- Discharges containing; residue from oil, floating substances, visible oil film, or grease.
- Non-sediment pollutants associated with general construction activity that may be stored, generated, or used on-site such as: fertilizers, pesticides, petroleum base chemicals, fuels, lubricants, sealers, paints, cleared woody vegetation, garbage, and sanitary wastes.
- Sediment laden runoff from disturbed areas, basins and impoundments

The 'minimum temporary erosion and sediment control practices and procedures to be used during construction' identified and described in Section XIII and XIV are specified to prevent these potential pollutants and illicit discharges from occurring.

Additional Potential Sources of Pollution Identified by Contractor

If the Contractor identifies any additional activities reasonably expected to occur, or occurring at the site, which may involve pollutants or pollutant constituents that could be exposed to rainfall or snowmelt and thus have the potential to be discharged from the site, they may identify them by completing the table below

Pollutant-Generating Activity	Pollutants or Pollutant Constituents (that could be discharged if exposed to rain/snow melt)	Location on Site & Preventive Measure (or reference SWPPP site map)

Minimum Standards

The Contractor is ultimately responsible for ensuring the site at all times complies with Part I.B.1.a of the Permit for minimizing the discharge of pollutants.

IX. Project Soils

According to the NRCS Web Soil Survey, the following soil types and hydrologic groups are present within the project area of disturbance;

Table I – Soil Types

Soil Symbol, Name, % Slope Range	Hydrologic Group (HSG)	Texture	Drainage Character	Erosion Hazard Potential	% of Project
Ub, Urban Soils	D *(assumed)*	N/A	Considered Poorly Drained	Unknown	100%

A copy of the NRCS Soil Map may be found in Appendix G.

According to the N.R.C.S. Web Soil Survey, the soils at the site are classified as Urban Soils (Ub). This soil classification is used to define soils in urban areas where the soils may no longer represent the original/native composition. These areas may have had significant material imported or become heavily compacted. Generally Urban Soils are considered to have low infiltration capacity and assumed to be poorly drained. Their erosion potential is unknown and is generally dependent on the imported subsoils. For the Brewery Trail Project site, the erosion potential is assumed to be medium due to the geotechnical consultation findings, discussed in further detail in the following

paragraph. However, it is important to note that even sites with a low erosion risk can have a high risk to water quality when located close to a water resource. For this reason, thorough and appropriate best management practices should be utilized to prevent erosion and sedimentation to the Genesee River.

A letter summarizing Geotechnical Consultation was prepared by Foundation Design, P.C. dated June 22, 2018. This letter addresses the soil boring and design analysis performed as part of the consultation. According to this letter, five soil borings and infiltration tests were performed. The boring logs showed approximately 6-7 inches of topsoil, 3-5 feet of loose to firm fill material, and native soil. The fill soils consisted of sand, silt, and trace organics. The native soils was silty sand/sandy silt with portions of gravel. Bedrock was encountered approximately 20 feet below grade. The letter indicates that historically mapping shows buildings may have once existed in the project area. The geotechnical consultation letter should be referenced for the specific construction recommendations it provides related to erosion control. Generally the letter recommends:

"From a slope stability perspective, our preference would be to limit groundwater movement towards the slope…deeper fills may settle if they are subject to large volume of water. For these reasons our preference would be to control runoff with surface features that will take the water away from the slope."

This recommendation can be complied with during construction by utilizing temporary diversion ditches to prevent runoff from the project area from sheet flowing over the slope. Temporary collection and diversion ditches should route runoff away from the slope and to a sediment collection practice and then to an existing storm sewer discharge point.

The geotechnical consultant should be consulted regarding the suitability of site soils as a resource material for topsoil, gravel, subbases, impoundments, etc. Refer to Appendix D for a copy of the Geotechnical Consultation letter.

<u>Infiltration Capacity</u>

As part of the Geotechnical Consultant, five infiltration tests were performed on June 6, 2018. Two of these tests had results which did not infiltrate at all, two of the tests results had to be discarded due to incorrect testing and one test resulted in an infiltration rate of 0.5 in/hr. Based on these results, the soils are considered to have low infiltration capacity. This, combined with the geotechnical recommendation to limit groundwater movement toward the slope, concludes that infiltration practices should not be employed for runoff control.

<u>Depth to Bedrock</u>

According to the Geotechnical Consultation Letter, bedrock was encountered as a depth of about 20-ft below grade. This depth to bedrock is not anticipated to impact erosion and sedimentation controls at the site.

<u>Depth to Groundwater</u>

According to the Geotechnical Consultation Letter, groundwater and/or saturated conditions was not encountered during the borings progressed to varying depths of 8-18 feet. This depth to groundwater is not anticipated to impact erosion and sedimentation controls at the site.

X. Construction Phasing

The following Sequence of Construction Activities is a suggested phasing sequence of major construction activities and associated the minimum erosion and sediment control practices to be installed for each activity resulting in soil disturbance. This list indicates when each erosion and sediment control practice should be installed and when it should be removed. While in-place, each practice should be inspected and maintained as described in Section XIII.

Sequence of Construction Activities

1. Install stabilized construction exit
2. Install inlet protection and site fence on the site (clear only those areas necessary to install silt fence).
3. Prepare staging and operations area (ie. Concrete wash-out, storage containers, trailers, parking areas, etc.).
4. Perform clearing, grubbing and topsoil stripping. Install silt fence around topsoil storage areas and seed piles as soon as possible.
5. Rough grade the site. Sediment tracked out of the delineated disturbed area should be removed or cleaned on a daily basis.
6. Install utilities. Installation of inlet protection to occur concurrent with storm sewer system construction and to remain in place until surrounding areas are fully stabilized with vegetation or complete subbase compaction.
7. Begin construction and installation of other foundations and structures. Concrete wash-out facility to be used during foundation pouring as necessary for cleaning. Concrete solvents shall not be allowed to mix with groundwater or soil. Follow proper dewatering procedures for excavations as necessary.
8. Maintain the temporary erosion control practices and procedures during construction.
9. Temporary seed, throughout construction, denuded areas that will be inactive for 7 days or more.
10. Prepare site for paving. Remove silt fence inlet protection on future asphalt areas and install silt fence on future pervious areas as necessary.
11. During site amenities construction monitor BMP's. Check stabilized construction entrance for required maintenance to maintain conformity with requirements, monitor stabilizing areas and encourage growth as necessary with watering, hay cover, etc. Control dust, garbage, material stockpiles, and other potential sources of pollutant that may leave the site.
12. Pave site where specified, permanently landscape or seed and topsoil disturbed areas. Remove construction entrance when necessary for paving. Wash down vehicle wheels as necessary to prevent sediment from being tracked offsite. Use clean wash water (solvent free) and capture water and direct to a sediment capturing practice. Use concrete washout facility as necessary.
13. All erosion and sediment control features shall be maintained until establishment of a substantial stand of grass (80% uniform density across all pervious areas).
14. Remove temporary sediment control practices including silt fence and inlet protection after receiving approval from the owner. Restore lawn area to original condition.

XI. Site Planning and Design

The project site has been assessed for suitability of the proposed project with respect to natural resources and watershed planning. The following natural resources has been investigated and either identified to be protected from erosion and sediment control, or determined not to be impacted by the project.

Threatened and Endangered Species (and critical habitat)

According to the NYSDEC Environmental Resource mapper, the project site is located within an endangered or threatened species screening area. Projects located within or near an area with a rare animal may be required to obtain a permit if the NYSDEC determines the action may be harmful to an endangered or threatened species or its habitat. Projects located within or near an area with rare plants and/or significant natural communities, environmental impacts may need to be addressed.

The owner is responsible for obtaining all necessary permits and approvals related to ensuring the project complies with applicable threatened and endangered species regulations before the Notice of Intent is filed. A copy of this map may be found in Appendix A. The NYSDEC's EAF Mapping Program was used to determine the species of concern in the vicinity of the project. This program noted the species as the Peregrine Falcon. According to The Cornell Lab, this bird perches or nests on skyscrapers, water towers, cliffs, power pylons and other tall structures. The project site does not contain any of these structures however if any nests are found in the structures to be removed, investigation should be conducted as to any potential impacts on this species.

Critical Environmental Areas

According to the NYSDEC EAF Mapper, the site is located in a critical environmental area. The basis for designation is listed as 'Environmentally sensitive' by the City of Rochester. The project team is aware of the locations sensitive features and the City is actively involved in the rehabilitation plans.

Historic Preservation

According to the New York State Office of Parks, Recreation and Historic Preservation (OPRHP), the project site is located within an archeologically sensitive area on the sensitivity map. A submittal for project impact determination was made to New York State Department of Parks, Recreation, and Historic Preservation (SHPO) by McCord Landscape Architecture, PLLC. A letter was received from SHPO in response to that submission indicating a finding that their opinion is that no properties, including archaeological and/or historic resources, listed in or eligible for the New York State and National Registers or Historic Places will be impacted by the project. SHPO's review does not consider potential environmental impacts to New York State Parklands. A copy of this letter may be found in Appendix D.

Quality Agricultural Land

The existing site does not currently contain or possess future potential for quality agricultural cropland

Scenic and Natural Beauty Areas

The project goals are to enhance and supplement the sites scenic and natural beauty areas. This is accomplished by carefully inventorying existing features for designation as to preservation and replacement. A thoughtful landscape plan has been prepared by McCord Landscape Architecture to address the sites vegetation. Consideration of the steep slopes have been accounted for in the layout of the new trails and the drainage and stormwater management design. The Construction

Sequence of Construction specifies best management practices and procedures for the protection of this area.

Wetlands

According to the New York State Department of Environmental Conservation's Environmental Resource Mapper, the site is not located with a state or federal wetland screening zone or state wetland buffer. Based on this, the project is assumed to not have a negative impact on jurisdictional wetlands.

Stream Corridors

The project site is a stream corridor for the Genesee River. The project goal is to enhance and supplement the benefits of this corridor. Careful consideration of that goal has led to all the decisions for the proposed project features and effects.

Floodplains

According to the FEMA Flood Insurance Rate Map for the City of Rochester (FIRM 36055C0211G) with effective date of August 28, 2008, the site is not located with a delineated floodway or 100-yr floodplain.

Natural Buffers / Wooded Areas

The site does not contain any dense or valued wooded areas. The site itself serves as a natural buffer for the Genesee River. The project will preserve and enhance the valued features of the site that serve as a natural buffer.

Steep Slopes / Aquifers / Karst Geology

The site is adjacent to a steep slope of the Genesee River bank. The project has addressed preservation of this bank by; employing a geotechnical engineer to consult on the project impacts to the slope, proposed new trails that are set back farther from the slope than existing conditions, divert surface runoff around and away from steep slopes toward stable vegetated areas, and employ best management practices during construction to prevent potentially erosive runoff. The site does not contain any principal aquifers. The site's karst geology is the escarpment/steep slope.

Critical Surface Waterbodies or Watershed

The section of the Genesee River adjacent to the project site is considered a critical surface waterbody. The pollutants of concern for this water are addressed in Section IV of this SWPPP. The project does not involve these pollutants. The construction sequence and best management practices and policies described in this SWPPP are designed to protect and prevent impacts to the River. The post-construction stormwater management practices will further protect the River from long-term impacts of the project.

XII. Temporary Practices to be Used During Construction

The following describes the minimum erosion and sediment control practices to be used during construction. The location of these practices is shown on the Erosion and Sediment Control Plans. Refer to the Bluebook (Referenced in VI. of this SWPPP) for complete practice specifications.

Practice	Description	Installation	Maintenance
Silt Fence	A temporary barrier of geotextile fabric installed on the contours across a slope used to intercept sediment laden runoff from small drainage areas of disturbed soil.	Install prior to upstream ground disturbances where possible. Install directly after grading areas to control sediment flow across site. Maintain until upstream area is stabilized.	Remove accumulated sediment behind fence prior to it reaching a maximum height of 1.5' or when bulges occur. Replace or repair if fabric tears, stakes become unsecure or fabric become un-embedded
Construction Entrance	A stabilized pad of aggregate underlain with geotextile located at a disturbance egress point to reduce or eliminate sediment tracked outside the limits of disturbance.	Install prior to mass grading and after asphalt demolition. Install prior to significant site disturbance. Maintain until the majority of grading is complete and pave areas are significantly compacted.	Maintain in a condition which will be effective in preventing sediment tracked offsite. Periodically top dress with additional aggregate as necessary.
Stone Check Dams *(Fiber Rolls may be substituted)*	Small barriers or dams constructed of stone across a drainage way used to reduce erosive velocities in channels.	Install concurrent with swale construction and prior to seeding measures. Maintain until swale and upstream drainage areas are fully stabilized.	Inspect after each runoff event. Remove accumulated sediment behind dam as necessary to allow channel to drain through the stone. Replace stones as needed to maintain integrity.
Sediment Trap/Basin	A temporary basin with a dam across a drainage way designed to intercept sediment laden runoff and reduce sediment from leaving the site.	Install when other control measures would be inadequate. Locate to obtain the maximum storage benefit, least interference with construction and where storm drains may outlet to.	Repair all damaged caused by erosion at the end of each workday. Remove sediment when capacity reduced by 50%. Inspect outfall is free of obstructions.
Inlet Protection	A temporary, somewhat permeable barrier installed around inlets to prevent heavily sediment laden water from entering a drainage system.	Install in a 4-inch trench on the slope contour and anchored by 2"x2", 3ft long posts driven on each side of the roll. Contain roll with 9-gauge non-galvanized wire or 1/8" thick braided nylon. Space anchor posts 4' o.c. on both sides of roll, staggered.	Inspect after each rainfall event for sloughs, trenches or breaks in the drainage pattern under or around roll. Repair or replace as needed when performance is compromised. Remove sediment accumulation and repair as necessary and dispose of properly within 24 hrs of discovery.
Temporary Stabilization	Temporary seedings to cover bare ground areas that exist as a result of construction.	Install in disturbed areas that will not worked for 14 days or greater.	Water, fertilize and/or mulch as necessary to encourage growth. Reseed bare or eroded areas.
Concrete Washout	A temporary excavated or above ground lined constructed pit where concrete truck mixers and equipment can be washed, to prevent highly alkaline runoff from entering storm system or leaching into soils	Install prior to any concrete pouring activities. Size to contain solids, wash water and rainfall. Locate min. 100' from swales, inlets, wetlands and streams. Prevent surface water, except road runoff from entering.	Inspect daily for damage or leaks and repair immediately. Pump excess rainwater to stabilized area. Remove accumulated hardened material. Dispose of properly. Replace liner with each cleaning.

XIII. Temporary Procedures to be Used During Construction

The following describes the minimum erosion and sediment control procedures to be used during construction. Refer to the Bluebook (Referenced in VI. of this SWPPP) for complete procedure specifications.

Practice	Description	Procedure & Implementation	Maintenance
Track-Out	Minimize the track-out of sediment onto streets or paved areas from vehicles existing the site.	Implement as necessary and perform daily inspection to monitor track-out. Remove by sweeping, shoveling, vacuuming or other effective measures. Hosing or sweeping sediment into a non-sediment trapping practice (ie. inlet) is prohibited.	Remove deposited sediment by the end of the same work day in which it occurred or by the end of the next work day if it occurs on a non-work day.
Dewatering	Permit compliance requirements for the discharge of stormwater removed from excavations, trenches, foundations, vaults, etc.	Only clean water, not mixed with cleaning solvents, fertilizer, or other pollutants may be allowed to discharge in a non-erosive manner.	Monitor for compliance.
Topsoil & Soil Stockpile Control	Controls to minimize discharge of sediment from soil stockpiles.	Install silt fence around stockpiles, minimum 10' from toe of slope. Locate stockpile away from or upstream of drainage flows and within permitted area. Temporary seed stockpiles.	Reseed bare areas in temporary stabilization, maintain surrounding silt fence. Hosing or sweeping sediment to a non-sediment trapping practice (ie. inlet) is prohibited.
Dust Control	Control surface and air movement of dust resulting from disturbed soil surfaced.	Implement dust control as needed, during dry conditions and periods of large, open disturbance.	Maintain vegetated buffer areas as long as possible and phase construction to minimize disturbed areas at a time. Use a control method that will not degrade the water quality of waters in the vicinity.
Soil Compaction	Controls to minimize compaction through the restriction of vehicle or equipment access across areas where final vegetative stabilization will occur or infiltration practices will be installed.	Delineate areas where future infiltration practices will be located with flagging. Create vehicle routes within site that align with future impervious areas.	To the greatest extent possible for grading, keep construction vehicles from traveling across non-compaction areas. Repair compacted areas as necessary by following soil restoration steps on plans.
Equipment and Vehicle Washing	Compliance for equipment and vehicle washing discharge	Soaps, detergents and solvents used for equipment and vehicle cleaning are not permitted to be discharged. Clean water may be used for equipment and vehicle washing, wheel wash water and other wash waters and allowed to discharge only if used in conjunction with a BMP to capture sediments and pollutants prior to discharge.	Monitor for compliance
Storage, Handling & Disposal of	Procedures for preventing potentially pollutant	Identify potential pollutants onsite and cover to protect from	Monitor for compliance

Products, Materials and Wastes	materials on-site from mixing with, or contaminating stormwater including: pesticides, herbicides, insecticides, fertilizers, landscape and building materials, construction and domestic waste, and sanitary wastes	stormwater exposure and potential for runoff.	***For Spill Prevention & Response procedures refer to later portion of this report.***
Pollutant & Chemical Treatment Control	Controls to identify and control any treatment chemicals or pollutants which may be or are used at the site.	Complete the Pollutant Identification Sheet included in Appendix B for chemicals and pollutants which can reasonably be expected to be used or stored at the site	Update the Pollutant Identification Sheet in Appendix B during construction if additional chemicals or pollutants are identified as needed. Follow all product specifications for storage, use and disposal.

XIV. Post-Construction Stormwater Management Practices

Soil Restoration

All disturbed areas of the site are to be restored in accordance with the Soil Restoration requirements in Table 5.3 of the Design Manual (Referenced in VI. of this SWPPP). Soil restoration is applied across acres of the site where soils have been disturbed and will be vegetated in order to recover the original properties and porosity of the soils. Restoration should be performed during the cleanup, restoration and landscaping phase of construction. As a general summary, soil restoration practices are most applicable in the following locations:

- Locations where existing impervious area will be converted to pervious area.
- Pervious areas where earthwork operations have been conducted and the soils are HSG C and D.
- Pervious areas that have been used as heavy traffic areas on the site. Especially in a zone 5-25 feet around a building.

Soil restoration should not be performed in the following locations:

- Within 5-ft of the perimeter of building foundations.
- Tilling compose into subsoil should not be performed within the drip line of any existing trees or over utility installations that are within 24-inches of the surface.
- Restoration is not required in future runoff reduction or infiltration practices areas. It may be applied to enhance the reduction so long as the process is careful to keep construction equipment from crossing these areas.

At the end of the project, the City of Rochester's project representative will determine if appropriate soil restoration has been applied by being able to successfully push a 3/8" metal bar 12-inches into the soil using just their own body weight.

Land Grading & Drainage

The proposed grading of the site, as depicted on the Site Development Plans, has been designed to properly and safely convey runoff and provide drainage across the project to controlled collection points. Surface runoff should not damage slopes or other graded areas. With the exception of specifically designed areas, the Contractor shall provide grading with adequate drainage in a non-erosive manner. Slopes shall be free of erosion ruts. All fills shall be compacted as required to reduce erosion, slippage, settlement, subsidence or other related problems. Fill intended to support

buildings, structures, or conduits, etc. shall be compacted in accordance with all applicable requirements.

XV. Spill Prevention & Reporting Requirements

Hazardous Waste Management and Spill Reporting

Any hazardous or potentially hazardous waste that is brought onto the construction site will be handled properly in order to reduce the potential for storm water pollution. All materials used on this construction site will be properly stored, handled and dispensed following any applicable label directions. Material Safety Data Sheets (MSDS) information will be kept on site for any and all applicable materials.

Hazardous Properties includes: *pesticides, petroleum products, fertilizers, detergents, construction chemicals, acids, paints, paint solvents, cleaning solvents, additives for soil stabilization, concrete, curing compounds and additives and any clean water or stormwater mixed with hazardous properties*

The reportable quantity for petroleum products is 5-gal.

Accidental Spill Response

Should an accidental spill occur, immediate action will be taken by the General Contractor to contain and remove the spilled material. *All hazardous materials will be disposed of by the Contractor in the manner specified by local, state, and federal regulations and by the manufacturer of such products.* As soon as possible, the spill will be reported to the owner and appropriate state and local agencies. As required under the provisions of the Clean Water Act, any spill or discharge entering the waters of the United States will be properly reported.

Hazardous Material Spill Reporting

Any spills of hazardous materials in quantities in excess of Reportable Quantities as defined by EPA or the State Agency regulations, shall be immediately reported to:

- EPA National Response Center……**1-800-424-8802**
- NYSDEC Div. of Environmental Remediation (NYS Spill Hotline)….**1-800-457-7362**

Refer to Exhibit 1.1-1 of the NYSDEC Division of Environmental Remediation Technical Field Guidance Spill Reporting and Initial Notification Requirements for hazardous materials spill reportable quantities and procedures.

Minimum Spill Prevention Procedures

The Contractor shall follow these minimum spill prevention procedures and supplement where they determine necessary:

- Store all materials with hazardous properties in a secure and covered location when not in use
- Store the minimum practical quantity of hazardous materials at the job site and schedule deliveries as close to the time of use as practical
- Store all products in, and use from, the original container with the original product label.
- All products are to be used in strict compliance with the product label.
- Maintain a spill control and containment kit at the storage site.
- All of the product should be used before disposing of container. Dispose of containers and wash water in compliance with regulations. Wash water is not allowed to mix with stormwater.
- Dispose of excess product and containers in strict compliance with product labels and state and federal regulations.

Recommended Spill Containment Kit

The spill control and containment kit stored at the site is recommended to contain: absorbents such as; kitty litter or sawdust, acid neutralizing agent, brooms, dust pans, mops, rags, gloves, goggles, plastic and metal trash containers, etc.

XVI. Inspection and Record Keeping

Trained Contractor Inspection Requirements

All Contractors and subcontractors that will be responsible for installing, constructing, repairing, replacing, inspecting and maintaining the erosion and sediment control practices included in the SWPPP; and the contractor(s) and subcontractor(s) that will be responsible for constructing the post-construction stormwater management practices included in the SWPPP shall meet the following Trained Contractor Requirements:

- They shall identify the person(s) meeting the Trained Contractor definition as defined in the Appendix A of the General Permit and shall include proof of that/those individual(s) having receiving four (4) hours of Department endorsed training within three years of the start of construction in Appendix B of this SWPPP.
- They shall complete and execute the Contractor Certification in Appendix B of this SWPPP and an executed copy shall be maintained in Appendix B. This Certification identifies the specific elements of the SWPPP that each contractor and subcontractor is responsible for, provides their contact information, and includes a certification to agree to the terms of the General Permit as required by Part III.A.5 of the General Permit.
- They shall ensure that a Trained Contractor is on site on a daily basis when soil disturbance activities are being performed.
- They shall inspect the erosion and sediment control practices and pollution prevention measures being implemented within the active work area to ensure that they are being maintained in effective operating condition at all times. If deficiencies are identified, the contractor shall begin implementing corrective actions within one business day and shall complete the corrective actions in a reasonable timeframe. For construction sites where there is active soil disturbance, and/or previous soil disturbance where temporary or permanent stabilization measures have not been applied to all disturbed areas, trained contractor inspections shall occur on a daily basis. Trained Contractor inspections shall conform with Part IV.B of the General Permit.
- They shall agree to implement any corrective actions identified by the Qualified Inspector.

Qualified Inspector Inspection Requirements

The owner or operator may choose to have a Qualified Inspector conduct site inspections in conformance with Part IV.C. of the General Permit. Where the owner/operator has designated this to be within the Contractor's responsibility, the Contractor must engage a Qualified Inspector meeting the requirements and performing inspections as detailed in Part IV.C. of the General Permit.

The Qualified Inspector would be responsible for inspecting all erosion and sediment control practices and pollution prevention measures to ensure integrity and effectiveness, all post-construction stormwater management practices under construction to ensure that they are constructed in conformance with the SWPPP, all areas of disturbance that have not achieved final stabilization, all points of discharge to natural surface waterbodies located within or immediately adjacent to, the property boundaries of the construction site, and all points of discharge from the construction site. The Qualified Inspector will prepare an inspection report subsequent to each and

every inspection in accordance with Part IV.C.4 of the General Permit. Within one business day of the completion of an inspection, the Qualified Inspector shall notify the owner or operator, SWPPP Preparer, and appropriate contractor or subcontractors identified in Appendix B of this SWPPP of any corrective actions that need to be taken. This is typically accomplished by e-mailing a copy of the inspection report to all parties. The contractor or subcontractor shall read the report and being implementing the corrective actions within one business day of this notification and shall complete the corrective actions in a reasonable timeframe. The Contractor or subcontractors are also responsible for printing a copy of the Qualified Inspection reports and inserting it into Appendix G of the copy of the SWPPP that is maintained at the site.

XVII. Final Maintenance Requirements

The Contractor is to complete the following maintenance requirements prior to turning over post-construction stormwater management facilities to the owner:

Facility	Requirements
Storm Sewer System	Remove any accumulated silt from inlets and pipes

XVIII. Termination of SWPPP Requirements

In order to terminate temporary erosion and sediment control requirements outlined in this SWPPP at project completion or for a planned shutdown with partial project completion, the following must be accomplished:

- All construction activity identified in the SWPPP has been completed (for project completion)
- All soil disturbance activities have ceased (for partial project completion)
- All disturbed areas have achieved final stabilization
- All temporary, structural erosion and sediment control measures have been removed
- As applicable, all post-construction stormwater management practices have been constructed *(for partial project completion, this requirement applies only to those practices required for the completed portion of the project)* in conformance with the SWPPP and are operational.

In order to ensure these requirements are met, the following sequence of procedures should be followed:

1. The owner should commission a qualified individual to complete a final SWPPP inspection. This person is typically either the Qualified Inspector or SWPPP Preparer. Whoever the individual is, they should be familiar with the SWPPP, as-built survey information (where applicable) and inspection reports generated during construction.
2. When the project is nearing completion, the Contractor should schedule a walk-through with the Qualified Inspector to understand remaining punch-list items that need to be addressed for project close-out. Typically, this meeting also serves as the Qualified Inspector's inspection and the items discussed at this meeting will be reflected in the follow-up Qualified Inspector's Inspection report.
3. BMP's shall remain in-place while permanent stabilization is reaching an 80% density across all previously disturbed portions of the site. The Qualified Inspector shall advise when this benchmark is considered to be reached.

4. Where applicable, the MS4 shall be notified and permission requested to remove BMP's.
5. BMP's shall be removed and any soil disturbance created from BMP removal shall be repaired and re-stabilized. BMP's shall be disposed of or repurposed in an approved manner.

APPENDIX A

Mapping

- Figure #1 – Location Map
- Figure #2 – U.S.G.S. Map
- Figure #3 – NYSDEC Environmental Resource Map

Figure 1 – Location Map

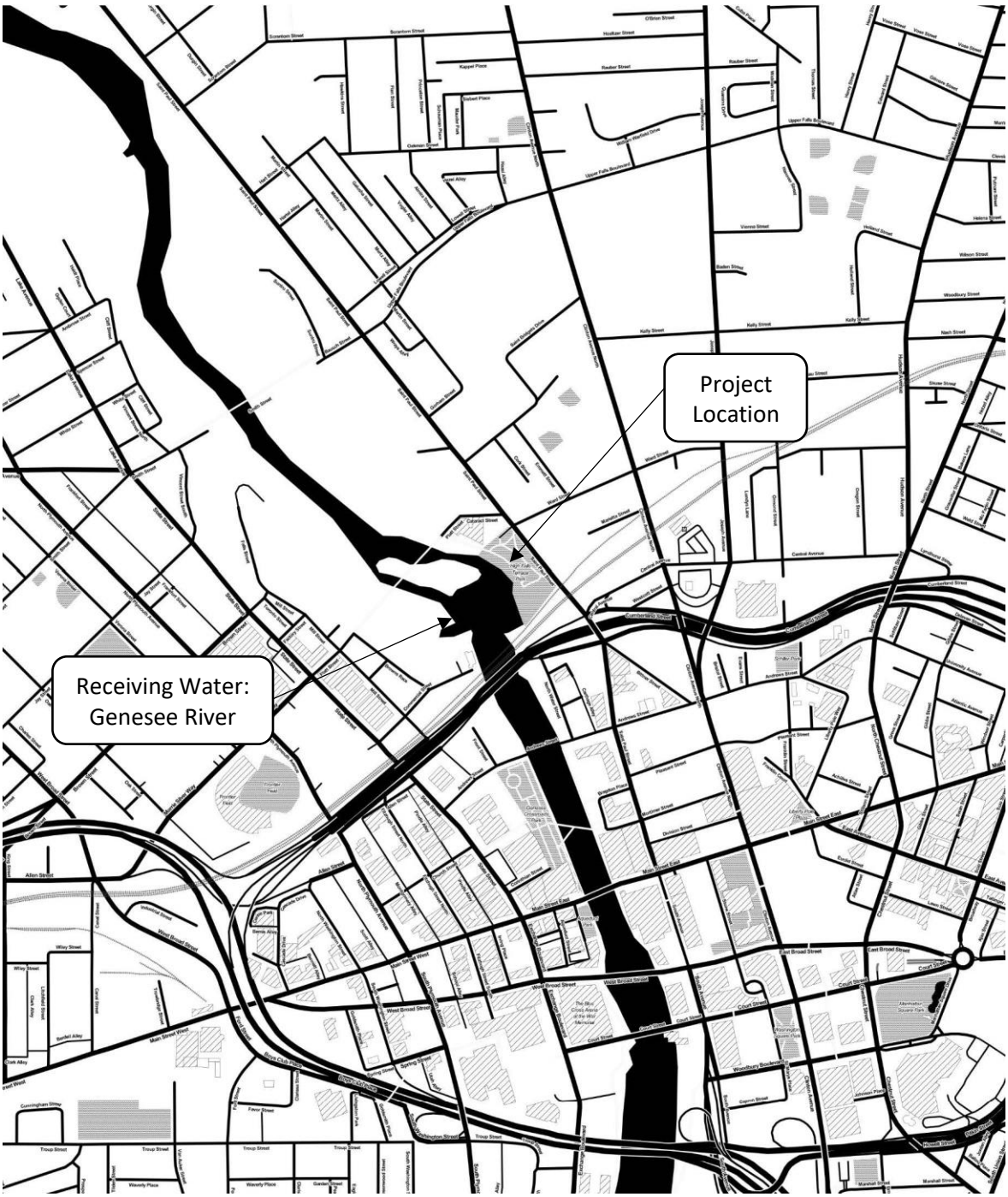
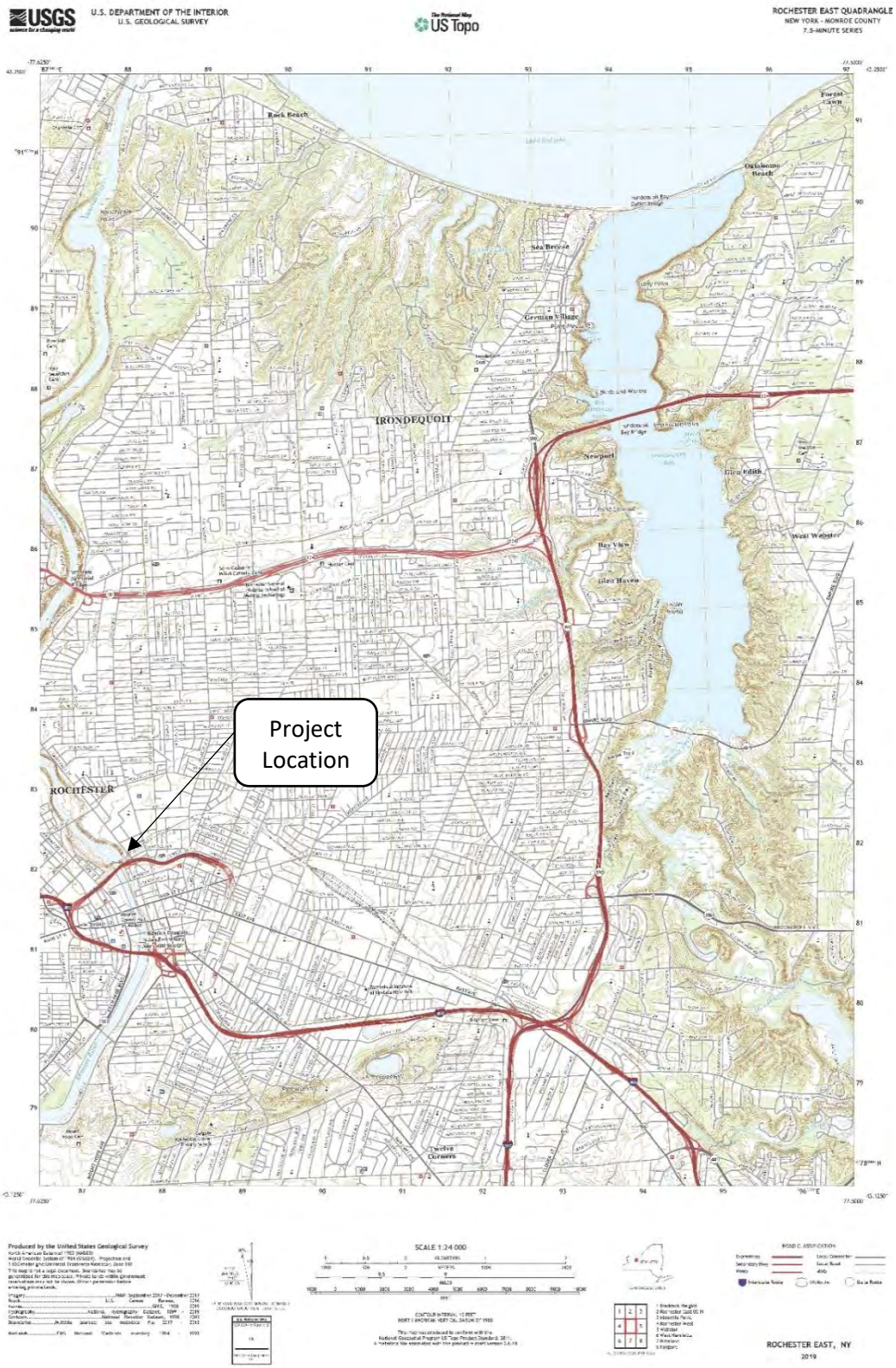


Figure 2 – U.S.G.S. Map



Brewery Line Trail

May 21, 2018

1:4,514

0 0.05 0.1 0.2 mi

0 0.075 0.15 0.3 km

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS User Community

Author: Pinewoods Engineering
Not a legal document

APPENDIX B

SWPPP Documents

- Contractor's Certification
- Trained Contractor's Training Certificate

CONTRACTOR IDENTIFICATION

Team responsible for implementing the SWPPP and ensuring Permit compliance

Operator(s)/Subcontractor(s)

Prior to the commencement of construction activity, all contractors and subcontractors that will be responsible for installing, constructing, repairing, replacing, inspecting and maintaining the erosion and sediment control practices or constructing the post-construction stormwater management practices ***must complete the Contractor Identification and Certification section below*** in order to comply with the Permit requirements. The completed forms must be made part of the SWPPP Report that is maintained at the construction site. If new or additional contractors are hired to implement measures identified in the SWPPP after construction has commenced, they must also sign the form.

Each contractor or subcontractor who meets the requirements above must identify at least one person from their company that will be responsible for implementation of the SWPPP.

At least one trained contractor must be on site on a daily basis when soil disturbance activities are being performed

---

CONTRACTOR IDENTIFICATION & CERTIFICATION

Operator (Prime Contractor)

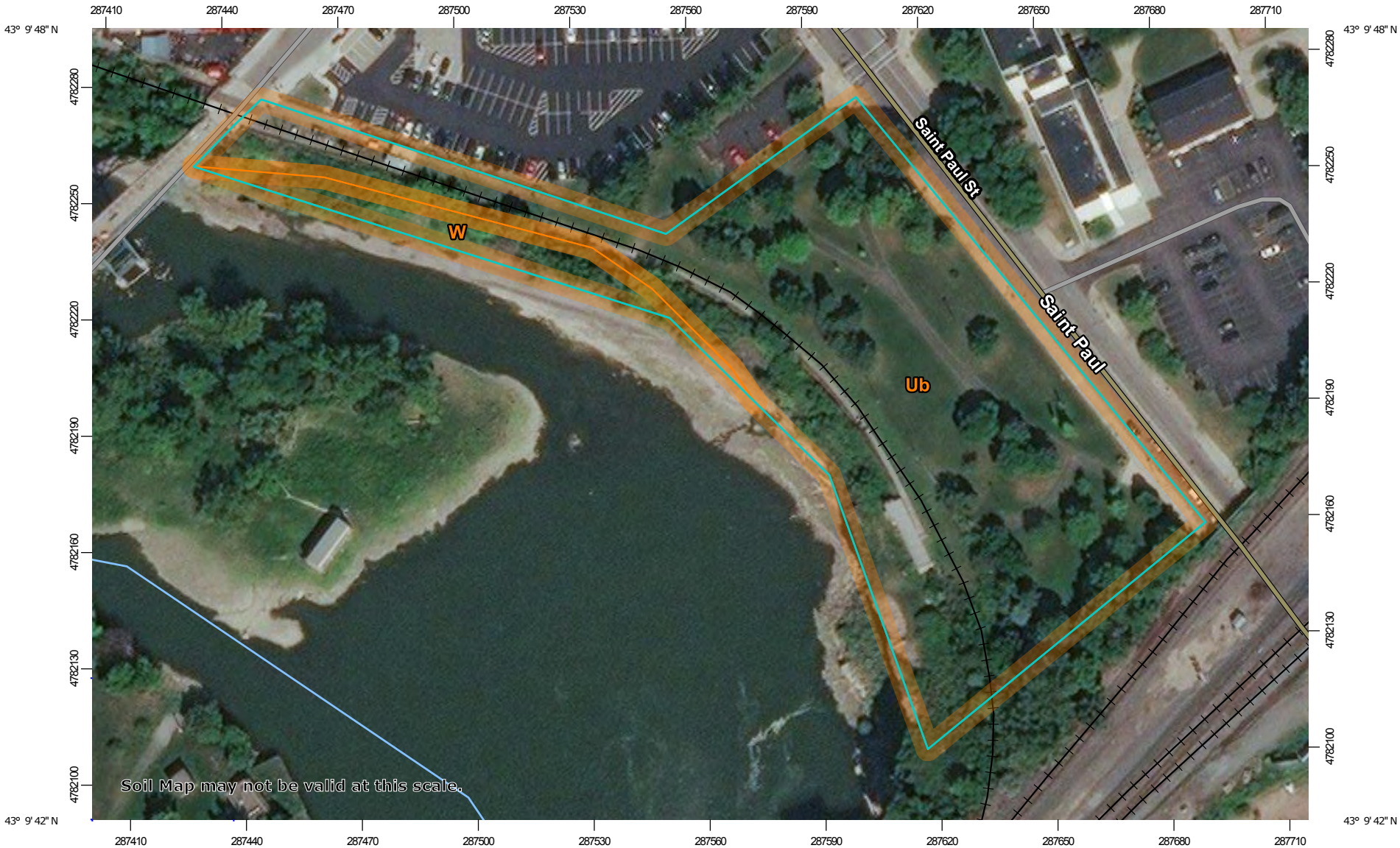
Company Name		
Address		
City, State, Zip Code		
Representative Name & Title:		
Telephone Number		
E-mail		
Emergency Contact?		
Area of Control		
Certification	*I hereby certify under penalty of law that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the qualified inspector during a site inspection. I also understand that the owner or operator must comply with the terms and conditions of the more current version of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards. Furthermore, I am aware that there are significant penalties for submitting false information that I do not believe to be true, including the possibility of fine and imprisonment for knowing violations*	
Signature indicating Review and Acceptance of Certification		

APPENDIX C

References

- N.R.C.S. Web Soil Survey
- Geotechnical Consultation Letter
- SHPO Historic Preservation No Impact Letter

Soil Map—Monroe County, New York
(Brewery Line Trail)



Map Scale: 1:1,440 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 20 40 80 120

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Monroe County, New York
Survey Area Data: Version 16, Feb 24, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 31, 2009—Oct 11, 2016

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Ub	Urban land	3.0	92.2%
W	Water	0.3	7.8%
Totals for Area of Interest		**3.3**	**100.0%**

Foundation Design, P.C.
SOIL • BEDROCK • GROUNDWATER

June 22, 2018

McCord Landscape Architecture
2129 Five Mile Line Road
Penfield, New York 14526

Attn: Douglas C. McCord, ASLA

Reference: Brewery Line Trail
St. Paul Street, Rochester, NY 14605
Geotechnical Consultation, 4450.0

Dear Mr. McCord:

This letter summarizes our Geotechnical Consultation for referenced project. It addresses the soil borings and our design analysis. We base this submission on the field data and our current understanding of the proposed redevelopment. In brief, setting the new trail back from the cliff face as proposed should provide relief from the ongoing slope erosive failure.

The existing trail was developed between a railroad alignment and the top of the slope over the Genesee River. The trail extends from Platt Street (at the Pont de Remmes Bridge) southward to the maintenance building north of the New York Central Railroad Bridge.

The existing park was constructed in 1977 and the parcel is to be redeveloped, also as a park. We envision that the updated park will have minimal re-grading associated with it. The intent is to incorporate "Green" design and construction practices. This will likely mean that new walk ways will be permeable to facilitate stormwater infiltration. The new trail will also be set back from the edge of the Genesee Valley river wall/slope.

We subcontracted with Target Drilling to perform five soil borings as well as infiltration tests. Target Drilling performed the soil borings on June 5, 2018. The borings at B18-1 and B18-4 were

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drilled to bedrock while the remaining locations were drilled to a depth of 10 feet. The boring logs are attached.

The boring logs showed topsoil, fill material, and native soil. Topsoil thickness varied from six to seven inches. The fill soils were loose to firm and mostly consisted of sand, silt, and trace organics. Fills were generally three to five feet deep except at boring B18-3, where they extend to nine feet below grade. Historical mapping shows that there were buildings in the areas around B18-3 and B18-5 at one time. This fill could be the remains of the associated demolition and backfill. Beneath this, the native soil was silty sand/sandy silt with portions of gravel. SPT N-values increased with depth, from loose to firm in the upper fills to compact to dense within five feet of the ground surface. Deeper soils transitioned to bedrock with associated refusal at about twenty feet below grade.

We installed pipes near the five soil boring locations for NYS DEC Stormwater Infiltration testing prior to backfilling. We performed infiltration testing on June 6, 2018. The infiltration test conducted at B18-1 infiltrated at a rate of 0.5-inches per hour. The infiltration test at B18-4 and B18-5 did not infiltrate at all (i.e. 0-inches per hour). We concluded that a tight seal around the pipes was not achieved at boring locations B18-2 and B18-3 due to problems encountered with their installation and eliminated them from this evaluation. All pipes were removed and backfilled upon completion.

Our broad conclusion is that the river gorge rockwall and overburden dense native soil are 'stable'. While the passage of time, seasonal, and climatic actions can change this, the trail project is not expected to. More detailed review and analysis of their respective long term behavior is not a part of this study.

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The upper loose fill soil and runoff from the existing asphalt trail are contributing to the erosion of the top of the slope. Setting the new trail back away from the top of slope as intended should relieve this condition. You should also take steps to limit surface water flow over the top of the slope. We recommend the following:

1. Cut the walkway areas to subgrade elevation. Note that the fill and native soils are loose to very dense with trace organics present in the fills. Proof roll the subgrade with a roller or large plate tamper. Undercut soft areas or areas that contain significant organic debris. With this, we expect that the fill will reasonably support new walkways. Keep in mind some long-term settlement is possible.

2. Use a new subbase of at least 12" of N.Y.S.D.O.T. Item 304.13. This will help bridge over the fill soil. Backfill utility trenches with crusher-run stone, N.Y.S.D.O.T. Item 304.13. Place the material in lifts and to at least 95% compaction based on ASTM D1557, modified proctor.

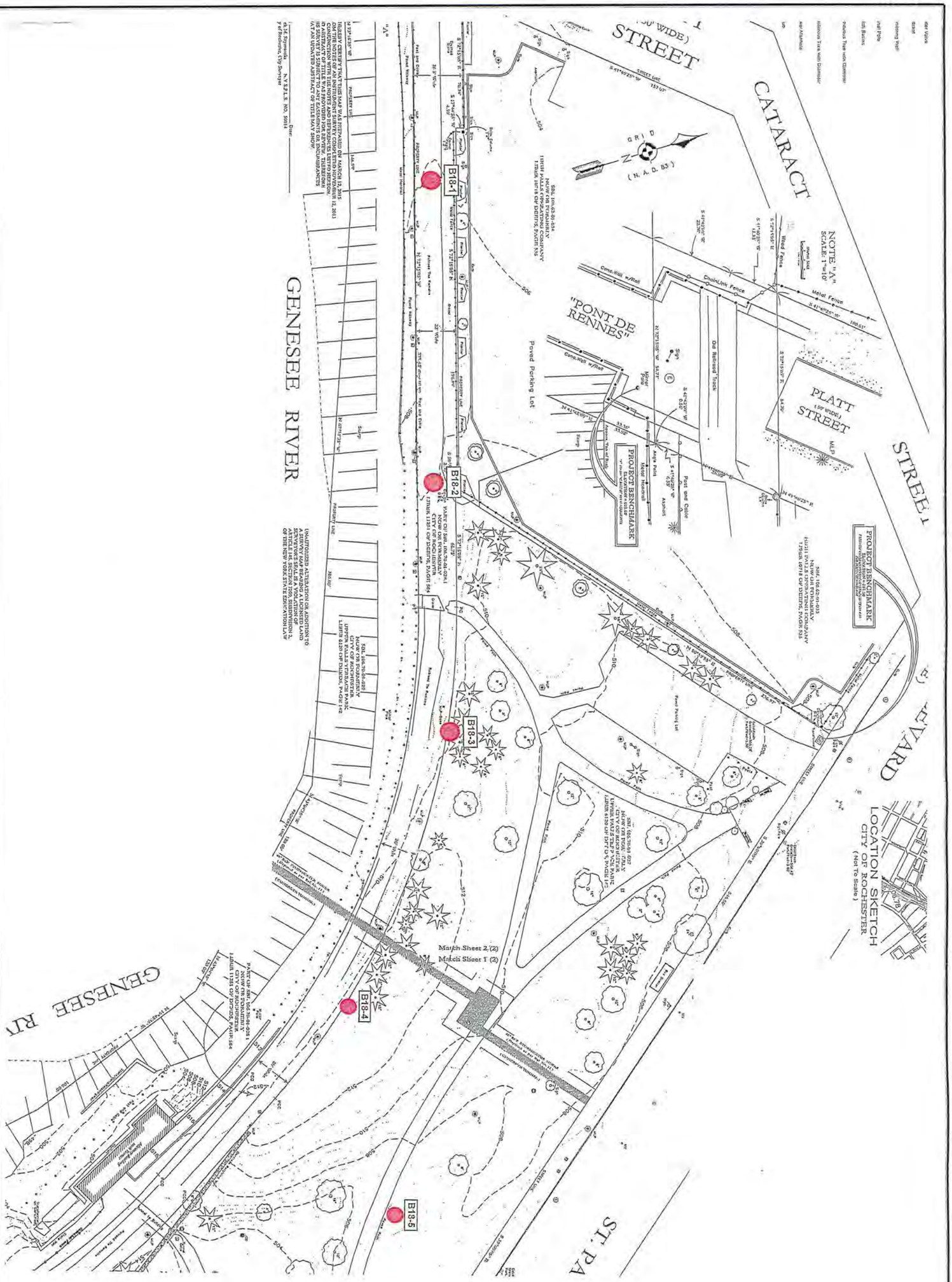
3. Infiltration testing showed very low rates. From a slope stability perspective, our preference would be to limit groundwater movement towards the slope. Lastly, the deeper fills may settle if they are subject to large volumes of water. For these reasons our preference would be to control runoff with surface features that will take the water away from the slope.

This concludes the main points of our review/consultation to date. Let us know if we can be of further assistance herein and schedule us to review the fill conditions as the work proceeds.

Very truly yours,

FOUNDATION DESIGN, P.C.

James M. Baker, P.E.
President
Enc.



Foundation Design, P.C.

46A SAGER DRIVE
ROCHESTER, NEW YORK 14607
Phone: (585) 458-0824
Fax: (585) 458-3323

PROJECT:	BREWERY LINE TRAIL ST PAUL STREET, ROCHESTER, NY 14605
TITLE: BORING LOCATION PLAN	
DRAWN BY: DWK	
CHK'D BY: JMB	
PROJECT NUMBER	DATE:6/12/2018
4450.0	1" = 50'

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SOIL DESCRIPTIONS

COHESIVE SOIL

Very fine grained soils. Plastic soils that can be rolled into a thin thread if moist. Clays and silty clays show cohesion.

DESCRIPTION	STP –BLOWS/FOOT
Very Soft	0-2
Soft	3-5
Medium	6-15
Stiff	16-25
Hard	26 or more

NON-COHESIVE SOIL

Soils composed of silt, sand and gravel, showing no cohesion or very slight cohesion

DESCRIPTION	STP –BLOWS/FOOT
Loose	0-10
Firm	11-25
Compact	26-40
Dense	41-50
Very Dense	51 or more

SOIL COMPOSITION

DESCRIPTION	ESTIMATED PERCENTAGE
and	50
some	30-49
little	11-29
trace	0-10

MOISTURE CONDITIONS Dry, Damp, Moist, Wet, Saturated
Groundwater measured in the boring or test pit may not have reached equilibrium

SOIL STRATA:

TERM	DESCRIPTION
layer	Soil deposit more than 6" thick
seam	Soil deposit less than 6" thick
parting	Soil deposit less than 1/8" thick
varved	Horizontal uniform layers or seams of soil

GRAIN SIZE

MATERIAL		SIEVE SIZE
Boulder		Larger than 12 inches
Cobble		3 inches to 12 inches
Gravel	- coarse	1 inch to 3 inches
	- medium	3/8 inch to 1 inch
	- fine	No. 4 to 3/8 inch
Sand	- coarse	No. 10 to No. 4
	- medium	No. 40 to No. 10
	- fine	No. 200 to No. 40
Silt and Clay		Less than No. 200

Standard Penetration Test: The number of blows required to drive a split spoon sampler into the soil with a 140 pound hammer dropped 30 inches. The number of blows required for each 6-inches of penetration is recorded. The total number of blows required for the second and third 6-inches of penetration is termed the penetration resistance, or the "N" value.

Split Spoon Sampler: Typically a 2-foot long, 2-inch diameter hollow steel tube that breaks apart or splits in two down the tube length.

Refusal: Depth in the boring where more than 100 blows per 5-inches are needed to advance the sample spoon.

Core Recovery (%): The total length of rock core recovered divided by the total core run.

RQD (%): Rock Quality Designation – the total length of all the pieces of the rock core longer than 4-inches divided by the total length of the rock core run.

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Boring Log

Project No.	4450.0	**Page** 1	**of** 1	**Test Boring No.**	B18-1
Project Name	Brewery Line Trail				
Client	MLA/McCord Landscape Architecture, PLLC 2129 Five Mile Line Rd, Penfield, NY 14526				
Elevation	506.4	**Weather**	Cloudy / 60s	**Engineer**	Deniz Kaya
Date Started	06/5/18	**Completed**	06/5/18	**Driller**	S. Kahn
Drilling Company: Target Drilling				**Drilling Equipment**	Truck Mounted CME 75

Ft.	Blows Per Six Inches 0"/6"	6"/12"	12"/18"	18"/24"	N Value	Sample No.	Depth	Visual Soil and Rock Classifications / Remarks
	2	7						TOPSOIL 0'6"
			8	7	15	S-1	0'-2'	FILL: Firm brown damp SILT, some sand, little clay, trace organics
	6	5						3'6"
			7	8	12	S-2	2'-4'	Firm red-brown, moist, mf SAND, some silt, trace gravel
5	6	12						
			14	13	26	S-3	4'-6'	S-3: SAME Compact
	17	22						
			27	45	49	S-4	6'-8'	S-4: SAME, Dense
	30	52						
10			32	41	84	S-5	8'-10'	S-5: SAME, Very dense, 2" sand and gravel seam noted at 9'7"
	44	50/5"			50/5"	S-6	13'-13'11"	S-6: SAME, Very dense, rock fragments, little silt
15								
	19	50/5"			50/5"	S-7	18'-18'11"	S-7: SAME, Very dense, sandstone noted
20								
								21'0"
								Refusal at 21'0" on Bedrock
25								
								Notes:
								1. Dry upon completion.
								2. Bore hole backfilled using auger spoils.
30								

N=No. of blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea. Blow

Foundation Design, P.C.

Boring Log

Project No.	4450.0	**Page** 1	**of** 1	**Test Boring No.**	B18-2
Project Name	Brewery Line Trail				
Client	MLA/McCord Landscape Architecture, PLLC 2129 Five Mile Line Rd, Penfield, NY 14526				
Elevation	508.2	**Weather**	Cloudy / 60s	**Engineer**	Deniz Kaya
Date Started	06/5/18	**Completed**	06/5/18	**Driller**	S. Kahn
Drilling Company: Target Drilling				**Drilling Equipment**	Truck Mounted CME 75

Ft.	Blows Per Six Inches 0"/6"	6"/12"	12"/18"	18"/24"	N Value	Sample No.	Depth	Visual Soil and Rock Classifications / Remarks
	5	10						TOPSOIL 0'8"
			11	10	21	S-1	0'-2'	FILL: Firm brown-black damp SAND, some asphalt, some charcoal 2'0"
	9	9						
			10	16	19	S-2	2'-4'	FILL: Firm red-brown, moist, mf SAND, some silt, trace organics 5'0"
5	11	15						
			31	30	46	S-3	4'-6'	Dense red-brown moist cmf SAND, some silt, trace gravel
	28	24						
			21	22	45	S-4	6'-8'	
	15	16						
10			19	22	25	S-5	8'-10'	S-5: SAME, firm 10'0"
								Boring Terminated at 10'0"
15								
20								
25								
30								Notes: 1. Dry upon completion. 2. Bore hole backfilled using auger spoils.

N=No. of blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea. Blow

Foundation Design, P.C.

Boring Log

Project No.	4450.0	**Page** 1	**of** 1	**Test Boring No.**	B18-3
Project Name	Brewery Line Trail				
Client	MLA/McCord Landscape Architecture, PLLC 2129 Five Mile Line Rd, Penfield, NY 14526				
Elevation	509.1	**Weather**	Cloudy / 60s	**Engineer**	Deniz Kaya
Date Started	06/5/18	**Completed**	06/5/18	**Driller**	S. Kahn
Drilling Company: Target Drilling				**Drilling Equipment**	Truck Mounted CME 75

Ft.	Blows Per Six Inches 0"/6"	6"/12"	12"/18"	18"/24"	N Value	Sample No.	Depth	Visual Soil and Rock Classifications / Remarks
	2	7						TOPSOIL 0'6"
			9	6	16	S-1	0'-2'	FILL: Firm red-brown moist SAND, some silt, some organics, trace gravel
	5	6						
			7	11	13	S-2	2'-4'	S-2: SAME, red-tan
5	8	10						
			9	25	19	S-3	4'-6'	
	17	16						
			14	12	30	S-4	6'-8'	S-4: NO RECOVERY 9'0"
	15	16						
10			23	29	39	S-5	8'-10'	S-5: Compact brown-tan SAND, some silt, little clay 10'0"
								Boring terminated at 10'0"
15								
20								
25								
30								Notes: 1. Dry upon completion. 2. Bore hole backfilled using auger spoils.

N=No. of blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea. Blow

Foundation Design, P.C.

Boring Log

Project No.	4450.0	**Page** 1	**of** 1	**Test Boring No.**	B18-4
Project Name	Brewery Line Trail				
Client	MLA/McCord Landscape Architecture, PLLC 2129 Five Mile Line Rd, Penfield, NY 14526				
Elevation	511.2	**Weather**	Cloudy / 60s	**Engineer**	Deniz Kaya
Date Started	06/5/18	**Completed**	06/5/18	**Driller**	S. Kahn
Drilling Company: Target Drilling				**Drilling Equipment**	Truck Mounted CME 75

Ft.	Blows Per Six Inches 0"/6"	6"/12"	12"/18"	18"/24"	N Value	Sample No.	Depth
	2	7					
			10	10	17	S-1	0'-2'
	7	8					
			14	18	22	S-2	2'-4'
5	5	4					
			9	18	13	S-3	4'-6'
	16	15					
			19	24	34	S-4	6'-8'
	14	9					
10			17	21	26	S-5	8'-10'
	37	50/3"			50/3"	S-6	13'-13'9"
15							
	50/4"				50/4"	S-7	18'-18'4"
20							
25							
30							

Visual Soil and Rock Classifications

Remarks

TOPSOIL 0'6"

FILL: Firm red-brown moist SAND, some silt, trace organics

4'0"

Firm brown wet mf SAND, some silt, trace gravel, trace sandstone

S-4: SAME, Compact, moist

S-5: SAME, Compact

10'0"

Very dense grey-brown damp cmf SAND, some silt, some gravel, rock fragments noted

13'9"

Very dense grey moist SAND, weathered rock

20'7"

Auger Refusal at 20'7"

Notes:

1. Dry upon completion.
2. Bore hole backfilled using auger spoils.

N=No. of blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea. Blow

Foundation Design, P.C.

Boring Log

Project No.	4450.0	**Page** 1	**of** 1	**Test Boring No.**	B18-5
Project Name	Brewery Line Trail				
Client	MLA/McCord Landscape Architecture, PLLC 2129 Five Mile Line Rd, Penfield, NY 14526				
Elevation	507.9	**Weather**	Cloudy / 60s	**Engineer**	Deniz Kaya
Date Started	06/5/18	**Completed**	06/5/18	**Driller**	S. Kahn
Drilling Company: Target Drilling				**Drilling Equipment**	Truck Mounted CME 75

Ft.	Blows Per Six Inches 0"/6"	6"/12"	12"/18"	18"/24"	N Value	Sample No.	Depth	Visual Soil and Rock Classifications / Remarks
	1	3						TOPSOIL 0'6"
			5	4	8	S-1	0'-2'	FILL: Loose brown moist mf SAND, some silt, little gravel, trace organics
	8	12						
			19	14	31	S-2	2'-4'	S-2: SAME, Compact
5	15	15						4'6"
			14	13	29	S-3	4'-6'	FILL: Compact tan-red-brown moist mf SAND, some silt, little gravel
	10	11						
			11	12	22	S-4	6'-8'	S-4: SAME, Firm, oil odor (at around 7')
	8	6						
10			4	8	10	S-5	8'-10'	S-5: SAME, Loose, oil odor (8'-10')
								10'0"
								Boring Terminated at 10'0"
15								
20								
25								
30								Notes: 1. Dry upon completion. 2. Bore hole backfilled using auger spoils.

N=No. of blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea. Blow

NEW YORK STATE OF OPPORTUNITY. | Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO
Governor

ERIK KULLESEID
Commissioner

December 13, 2019

DOUGLAS MCCORD
Project Manager
McCord Landscape Architecture, PLLC
2129 Five Mile Line Road
Penfield, NY 14526

Re: DOT
Brewery Line Trail Refurbishment Project
305 St Paul St, Rochester, Monroe County, NY
19PR08314

Dear DOUGLAS MCCORD:

Thank you for requesting the comments of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the project in accordance with the New York State Historic Preservation Act of 1980 (Section 14.09 of the New York Parks, Recreation and Historic Preservation Law). These comments are those of the OPRHP and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8) and its implementing regulations (6 NYCRR Part 617).

Based upon this review, it is the opinion of OPRHP that no properties, including archaeological and/or historic resources, listed in or eligible for the New York State and National Registers of Historic Places will be impacted by this project.

If further correspondence is required regarding this project, please be sure to refer to the OPRHP Project Review (PR) number noted above.

Sincerely,

R. Daniel Mackay

Deputy Commissioner for Historic Preservation
Division for Historic Preservation

APPENDIX D

Qualified Inspection Reports

APPENDIX B: STORMWATER MANAGEMENT REPORT

STORMWATER MANAGEMENT REPORT

Brewery Line Trail

City of Rochester, Monroe County, New York

Original Date: September 25, 2019

Last Revised: August 23, 2021

Prepared For:

City of Rochester
30 Church Street
Rochester, New York 14614

Prepared By:

PINEWOODS ENGINEERING, P.C.

Stormwater Management Report (SMP)

For Construction Activities At:

High Falls Terrace Park
St. Paul Street
City of Rochester
Monroe County, New York 14605

Prepared By:

Pinewoods Engineering, P.C.
Representative: Sara Gilbert, P.E. 087296
42 Aston Villa, North Chili, NY 14514
P. 585-261-7852
sgilbert@pinewoodseng.com

Regulatory Review By:

City of Rochester
30 Church Street
Rochester, New York 14614

Preparation Date: September 24, 2019

Last Revision Date: August 23, 2021

TABLE OF CONTENTS

INTRODUCTION

Outline of the Project, Permit and Primary Compliance Concerns

Project Description

This project involves the reconstruction and enhancement of approximately ±800 L.F. of the Genesee Riverway Trail in the High Falls Terrace Park and High Falls Terrace Platform. The Park is located on the south side of St. Paul Street and Cataract Street and north of the Inner Loop in the City of Rochester. To the west of the project boundary is a scarp to the Genesee River. The project location is along the eastern shore of the Genesee River where the River is a fifth-order waterbody and flows north approximately 6-miles to Lake Ontario. The proposed improvements include: removal of existing worn asphalt surfaces and replacement with a new walking promenade, new plantings, lighting, drainage, and revitalizing of overlook view areas. Additionally, park amenities such as: benches, boulders, and recreational effects are proposed.

The total limits of disturbance will be 0.99 Acres and consist of both new development and redevelopment areas. Overall the project will result in approximately a 34% increase in new impervious areas.

Stormwater Management Permitting Requirements & Regulatory Compliance

NYSDEC

The project disturbance is less than an acre therefore it is not required to obtain coverage under the New York State Department of Environmental Conservation (NYSDEC) SPDES General Permit for Stormwater Discharge from Construction Activity (Permit No. GP-0-20-001).

City of Rochester

The City of Rochester requires land disturbing activities that meet one of the following conditions to include water quantity and water quality controls in the stormwater management design:

- Projects that will discharge a pollutant of concern to either an impaired water identified on the Department's 303(d) list of impaired waters or a total maximum daily load (TMDL) designated watershed for which pollutants in stormwater have been identified as a source of the impairment.

  The project will discharge runoff to the Lower, Main Stem of the Genesee River (0401-0001) which is a 303(d) impaired water and is not located with a TMDL. According to the "2016 New York State Section 303(d) List of Impaired/TMDL Waters" the major pollutants of concern are: priority organics (PCBs and dioxin) and pesticides (mirex). Minor pollutants are nutrients (phosphorus) and silt/sediment. The known and suspected source of pollutants are: urban runoff, toxic/contaminated sediment, municipal discharges, non-permitted sanitary discharges, and industrial discharges. Refer to Appendix C for this reference. The project will not discharge any of the major pollutants of concern to the projects. The proposed drainage system is designed to collect any minor amounts of silt/sediment in runoff prior to discharge. The project also does not involve activities from the known and suspected pollutant sources. For these reasons, the project is not considered to discharge pollutants of concern to the River.

- Stormwater runoff from land disturbing activities disturbing five or more acres.

  The project will disturb less than five acres and does not meet this criteria.

- Land disturbing activities disturbing between one acre and five acres, exclusive of single-family residences and agricultural construction activities.

  The project will disturb 0.99 acres.

- Land disturbing activities that are small than one-acre of disturbance and part of a larger common plan of development.

  This project is not part of an overall larger common plan of development.

Based on this criteria, the project is not required to have a SWPPP prepared however since the limits of disturbance is so close to one acre, a SWPPP was prepared. The project is classified as a "trails" project, therefore the SWPPP only needs to include Erosion and Sedimentation control measures and not post-construction water quality practices.

FEMA

The site is not located within an area subject to flooding during the 100-year storm event according to the FIRM map for the City of Rochester, Community Panel Number 36055C0211G, last revised August 28, 2008 and therefore is not subject to FEMA regulations. Refer to Appendix A for a copy of the FEMA map. As a general practice, a discussion on the viability of the development with respect to extreme flood scenarios and climate change is included due to the project's location at the bottom of watershed and proximity to the Genesee River.

This report will analyze the proposed project impacts and associated stormwater management mitigation measures with respect to: drainage and erosion control, water quality, runoff peak rate and volume to demonstrate compliance with, or exceedance of, applicable regulations.

DRAINAGE & EROSION CONTROL

Runoff Collection, Conveyance and Erosion Control

Temporary Erosion and Sediment Control During Construction

Temporary Erosion and Sediment Control practices and procedures should be utilized during construction to prevent erosion, retain sediment within the project limits and prevent pollutants from discharging to the Lake. Temporary practices and procedures shall be incompliance with the New York State Standards and Specifications for Erosion Control, last revised November 2016 "Bluebook".

A copy of this document is available at: http://www.dec.ny.gov/chemical/29066.html.

All measures necessary shall be employed to ensure the following for the Genesee River during construction:

1. There shall be no increase in turbidity that will cause a visible contrast to natural conditions;
2. There shall be no increase in suspended, colloidal or settleable solids that will cause deposition;
3. There shall be no residue from oil or floating substances, nor visible oil film.

The following minimum erosion and sediment control practices are shown on the plans and should be installed and maintained per the specifications in the Bluebook.

Practice	Description	Installation	Maintenance
Silt Fence	A temporary barrier of geotextile fabric installed on the contours across a slope used to intercept sediment laden runoff from small drainage areas of disturbed soil.	Install prior to upstream ground disturbances where possible. Install directly after grading areas to control sediment flow across site. Maintain until upstream area is stabilized.	Remove accumulated sediment behind fence prior to it reaching a maximum height of 1.5' or when buldges occur. Replace or repair if fabric tears, stakes become unsecure or fabric become un-imbedded
Construction Entrance *(existing gravel entrance to be used)*	A stabilized pad of aggregate underlain with geotextile located at a disturbance egress point to reduce or eliminate sediment tracked outside the limits of disturbance.	Install prior to mass grading and after asphalt demolition. Install prior to significant site disturbance. Maintain until the majority of grading is complete and pave areas are significantly compacted.	Maintain in a condition which will be effective in preventing sediment tracked offsite. Periodically top dress with additional aggregate as necessary.
Fiber Rolls *(may be used in place of silt fence)*	Coirs (coconut fiber), straw or excelsior woven roll encased in netting of jute, nylon or burlap to dissipate energy along streambanks, channels and bodies of water and reduce sheet flow on slopes.	Install concurrent with swale construction and prior to seeding measures. Maintain until swale and upstream drainage areas are fully stabilized.	Inspect after each runoff event. Remove accumulated sediment behind dam as necessary to allow channel to drain through the stone. Replace stones as needed to maintain integrity.
Fabric Drop Inlet Protection *(Excavated Inlet Protection may be used as a substitute)*	A temporary, somewhat permeable barrier installed around inlets (including rain garden outlet structure) to prevent heavily sediment laden water from entering a drainage system.	Install in a 4-inch trench on the slope contour and anchored by 2"x2", 3ft long posts driven on each side of the roll. Contain roll with 9-gauge non-galvanized wire or 1/8" thick braided nylon. Space anchor posts 4' o.c. on both sides of roll, staggered.	Inspect after each rainfall event for sloughs, trenches or breaks in the drainage pattern under or around roll. Repair or replace as needed when performance is compromised. Remove sediment accumulation and repair as necessary and dispose of properly within 24 hrs of discovery.
Temporary Stabilization	Temporary seedings to cover bare ground areas that exist as a result of construction.	Install in disturbed areas that will not worked for 14 days or greater.	Water, fertilize and/or mulch as necessary to encourage growth. Reseed bare or eroded areas.

The following minimum erosion and sediment control procedures should be used as specified in the Bluebook.

Practice	Description	Procedure & Implementation	Maintenance
Track-Out	Minimize the track-out of sediment onto streets or paved areas from vehicles existing the site.	Implement as necessary and perform daily inspection to monitor track-out. Remove by sweeping, shoveling, vacuuming or other effective measures. Hosing or sweeping sediment into a non-sediment trapping practice (ie. inlet) is prohibited.	Remove deposited sediment by the end of the same work day in which it occurred or by the end of the next work day if it occurs on a non-work day.
Dewatering	Permit compliance requirements for the discharge of stormwater removed from excavations, trenches, foundations, vaults, etc.	Only clean water, not mixed with cleaning solvents, fertilizer, or other pollutants	Monitor for compliance.

		may be allowed to discharge in a non-erosive manner.	
Topsoil & Soil Stockpile Control	Controls to minimize discharge of sediment from soil stockpiles.	Install silt fence around stockpiles, minimum 10' from toe of slope. Locate stockpile away from or upstream of drainage flows. Temporary seed stockpiles.	Reseed bare areas in temporary stabilization, maintain surrounding silt fence. Hosing or sweeping sediment to a non-sediment trapping practice (ie. inlet) is prohibited.
Dust Control	Control surface and air movement of dust resulting from disturbed soil surfaced.	Implement dust control as needed, during dry conditions and periods of large, open disturbance.	Maintain vegetated buffer areas as long as possible and phase construction to minimize disturbed areas at a time. Use a control method that will not degrade the water quality of waters in the vicinity.
Soil Compaction	Controls to minimize compaction through the restriction of vehicle or equipment access across areas where final vegetative stabilization will occur or infiltration practices will be installed.	Delineate areas where future infiltration practices will be located with flagging. Create vehicle routes within site that align with future impervious areas.	To the greatest extent possible for grading, keep construction vehicles from traveling across non-compaction areas. Repair compacted areas as necessary by following soil restoration steps on plans.
Equipment and Vehicle Washing	Compliance for equipment and vehicle washing discharge	Soaps, detergents and solvents used for equipment and vehicle cleaning are not permitted to be discharged. Clean water may be used for equipment and vehicle washing, wheel wash water and other wash waters and allowed to discharge only if used in conjunction with a BMP to capture sediments and pollutants prior to discharge.	Monitor for compliance
Storage, Handling & Disposal of Products, Materials and Wastes	Procedures for preventing potentially pollutant materials on-site from mixing with, or contaminating stormwater including: pesticides, herbicides, insecticides, fertilizers, landscape and building materials, construction and domestic waste, and sanitary wastes	Identify potential pollutants onsite and cover to protect from stormwater exposure and potential for runoff.	Monitor for compliance ***For Spill Prevention & Response procedures refer to later portion of this report.***
Pollutant & Chemical Treatment Control	Controls to identify and control any treatment chemicals or pollutants which may be or are used at the site.	Any hazardous waste on the construction site is to be properly handled and all materials to be stored, handled and disposed of according to the manufacturer's directions.	Should a spill occur, take immediate action to contain and remove the spill. In accordance with the Clean Water Act, any spill or discharge entering the Lake must be properly reported.

Existing Drainage

The existing site topography generally slopes from the northeast to the southwest towards the east bank/scarp of the Genesee River. The western portion of the Park generally sheet drains towards the River

scarp. Record drawings indicate various receiving inlets/drop systems may be employed to convey runoff to the bottom of the scarp however these systems could not be located in the field. The eastern side of the site drains to the north to an existing storm sewer system in the Park consisting of two catch basins and a 12" VT pipe that conveys runoff to a large drainage system that runs linearly north-to-south through the Park. According to record plans, the large drainage system consists of a 48-inch diameter RCP pipe that connects to a drop structure chamber. The 48-inch pipe is approximately 10-12 ft below grade at the entrance of the drop structure and exits it approximately 110-ft below grade. The conveyance system leaving the drop structure is a tunnel out to the Genesee River, the dimensions of which are unknown. Northern portions of the site sheet drain to the north and eventually enter the storm sewer system in St. Paul Street. This system is assumed to eventually reach the Genesee River. The overall drainage area to the project limits is 1.37-acres and the receiving waterbody is the Genesee River.

Proposed Drainage

In order to protect the scarp from erosion and also to collect and control runoff, the drainage of the site is proposed to be slightly modified from existing conditions. The southern portion of the project from the top edge of the scarp to the north edge of the trail will be sloped to the north. Runoff from the majority of the trail relocation portion of the project will be directed to a closed-conduit storm sewer system. The proposed storm sewer system will connect to the existing 48-inch diameter RCP pipe that passes through the drop structure and tunnel to the Genesee River. The eastern portion of the project will continue to be collected in the existing storm sewer system. The northern portion of the project will continue to sheet drain towards St. Paul Street.

Hydrologic Analysis

Post-Construction Hydrology Comparison and Drainage Design

Sub-Surface Conditions

According to the Natural Resources Conservation Service (NRCS) web soil survey, the soils at the site are classified as 'Urban' (Ub). This classification is used in highly urban areas where the native soils have been substantially replaced with imported fill and soils that may not reflect the natural soil conditions.

A sub-surface investigation and geotechnical report was prepared by Foundation Design, P.C. dated June 22, 2018. The report indicated; 6-7 inches of topsoil, followed by generally 3-5 ft of fill consisting of; sand, silt and trace organics, and then native soil consisting of silty sand/sandy silt with portions of gravel. Bedrock was encountered at a depth of abut 20-ft below grade. None of the borings encounter groundwater or saturated conditions when progressed to varying depths of 8-ft to 18-ft

As part of this investigation, five infiltration tests were performed on June 6, 2018. Two of these tests had results which did not infiltrate at all, two of the tests results had to be discarded due to incorrect testing and one test resulted in an infiltration rate of 0.5-in/hr.

The report recommends that from a slope stability perspective, the preference would be to limit groundwater movement towards the slope. This will also avoid deeper fills potentially settling due to large volumes of water. The report recommends controlling runoff with surface features that will take water away from the slope.

The table below summarizes the subsurface parameters concluded from the investigation and used in the hydrologic analysis.

HSG	Depth to Restrictive Feature	Depth to Water Table	Capacity of the most limiting layer to transmit water
D	20-ft	>18-ft	0.0-0.5 in/hr

Existing Hydrology

The existing overall drainage area to the limits of disturbance is 1.37-acres. This area has been divided into three sub-areas.

Subarea #1Ae is 0.70-acres and consists of the western and southern portion of the project comprised of the existing asphalt trail along the River. This area sheet drains to the south and directly into the River.

Subarea #1Be is 0.60-acres and consist of the eastern portion of the project comprised of portions of the existing trail. This area sheet drains to two existing storm sewer catch basins. This storm sewer system conveys runoff to the River via the 48-inch pipe and tunnel system.

The total runoff to the Genesee River (Discharge Point #1) is comprised of the combination of Subarea #1Ae and Subarea #1Be.

Subarea #2 is 0.07-acres and consists of the northern portion of the project comprised of mainly lawn areas and minor amount of impervious area. This area sheet drains to the St. Paul Street right-of-way where it enters the public storm sewer system in St. Paul Street. The storm sewer system in St. Paul Street is considered Discharge Point #2.

Refer to Appendix A for the Existing Conditions Drainage Area Map (DR-1)

A hydrologic analysis was conducted using HydroCAD and the TR-55 method. Rainfall depths were taken from the Cornell Extreme Precipitation Study. Refer to Appendix B for the CN calculations and the Existing Conditions HydroCAD Report. The following table summarizes the Existing Hydrology conditions at the site.

Drainage Area	Area (Ac)	CN	Tc (min)	Peak Runoff Rate				
				1-Yr (cfs)	2-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	100-Yr (cfs)
DA #1Ae	0.70	83	11.9	0.56	0.78	1.50	2.07	3.25
DA #1Be	0.60	82	13.2	0.43	0.60	1.19	1.66	2.64
DA #1 Total *(To Discharge Pt. #1)*	1.30	-	-	0.99	1.38	2.68	3.73	5.88
DA #2 *(To Discharge Pt. #2)*	0.07	81	12.3	0.05	0.07	0.13	0.19	0.30
Total Runoff Offsite	1.37	-	-	1.04	1.45	2.81	3.91	6.18

Proposed Hydrology

The proposed overall drainage area to the limits of disturbance is 1.37-acres. This area has been divided into three sub-areas.

Subarea #1A is 0.08-acres and consists of the western portion of the project comprised of mainly vegetated areas south of the trail to the scarp. This area sheet drains to the south and directly into the River.

Subarea #1B is 1.06-acres and consists of the central and eastern portion of the project comprised of the majority of the new and existing trails and park amenities. This area both sheet drains and is collected in a new storm sewer system that is an extension of the exiting storm sewer system that connects to the 48-inch pipe and tunnel system and to the River.

The total runoff to the Genesee River (Discharge Point #1) is comprised of the combination of Subarea #1A and Subareas #1B.

Subarea #2 is 0.23-acres and consists of the northern portion of the project comprised of mainly lawn areas and minor amount of impervious area. This area sheet drains to the St. Paul Street right-of-way where it enters the public storm sewer system in St. Paul Street.

Refer to Appendix A for the Proposed Conditions Drainage Area Map (DR-2)

A hydrologic analysis was conducted using HydroCAD and the TR-55 method. Rainfall depths were taken from the Cornell Extreme Precipitation Study. Refer to Appendix B for the CN calculations and the Existing Conditions HydroCAD Report. The following table summarizes the Proposed Hydrology conditions at the site.

Drainage Area	Area (Ac)	CN	Tc (min)	Peak Runoff Rate (Undetained)				
				1-Yr (cfs)	2-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	100-Yr (cfs)
DA #1A	0.08	85	6.0	0.10	0.13	0.24	0.32	0.49
DA #1B	1.06	84	13.2	0.90	1.22	2.30	3.16	4.91
DA #1 Total	1.14	-	-	0.95	1.30	2.45	3.36	5.22
DA #2	0.23	81	14.4	0.14	0.21	0.42	0.59	0.95
Total	1.37	-	-	1.09	1.50	2.85	3.94	6.15

Per TR-55 Standards, a minimum Time of Concentration (Tc) value of 6 minutes was used.

Comparison of Peak Runoff Rates

An analysis of the site's pre- and post-development peak runoff rates was performed using the software program HydroCAD and a SCS TR-55 method. Rainfall amounts were taken from the Cornell Extreme Precipitation Study. A minimum Time of Concentration (Tc) value of 6 minutes was used.

A comparison of the existing and proposed drainage conditions analysis is included below.

Discharge Point #1 - Existing/Proposed Conditions Peak Rate Comparison (cfs)

Genesee River	1-Yr	2-Yr	10-Yr	25-Yr	100-Yr
Existing	0.99	1.38	2.68	3.73	5.88
Proposed	0.95	1.30	2.45	3.36	5.22
Difference	-0.04 (4% red.)	-0.08 (6% red.)	-0.23 (9% red.)	-0.37 (10% red.)	-0.66 (11% red.)

Discharge Point #2 - Existing/Proposed Conditions Peak Rate Comparison (cfs)

St. Paul St. Strm. Swr.	1-Yr	2-Yr	10-Yr	25-Yr	100-Yr
Existing	0.05	0.07	0.13	0.19	0.30
Proposed	0.14	0.21	0.42	0.59	0.95
Difference	+0.09 (26% inc.)	+0.14 (23% inc.)	+0.29 (15% inc.)	+0.40 (14% inc.)	+0.65 (10% inc.)

Total Offsite - Existing/Proposed Conditions Peak Rate Comparison (cfs)

Total Offsite	1-Yr	2-Yr	10-Yr	25-Yr	100-Yr
Existing	1.04	1.45	2.81	3.91	6.18
Proposed	1.09	1.50	2.85	3.94	6.15
Difference	+0.05 (5% inc.)	+0.05 (3% inc.)	+0.04 (1% inc.)	+0.03 (0% inc.)	+0.03 (0% inc.)

Refer to Appendix B for the HydroCAD hydrologic modeling reports.

Peak Rate Comparison - Results Summary

The results of the hydrologic analysis show that there will be a very minor increase in the post-development peak runoff rates as compared with existing condition for each of the analyzed storm events. There is a slight decrease in the peak runoff rate to the Genesee River and very minor rate increase to the St. Paul Street system. The very small increase proposed by this project should not have an impact on the capacity of downstream storm sewer systems to convey runoff or receiving systems.

Storm Sewer Conveyance

A closed-conduit storm sewer conveyance system has been designed to convey stormwater on the site. The proposed system routes runoff from the project area to the 48-inch diameter storm sewer system that goes to the tunnel and ultimately the River.

The system was analyzed using the 'Rational method' in HydroCAD software. Intensity-Duration-Frequency (IDF) curves were taken from the Cornell Extreme Precipitation data studies. Refer to Appendix B for detailed calculations and hydrologic analysis report print-outs.

OPERATION & MAINTENANCE

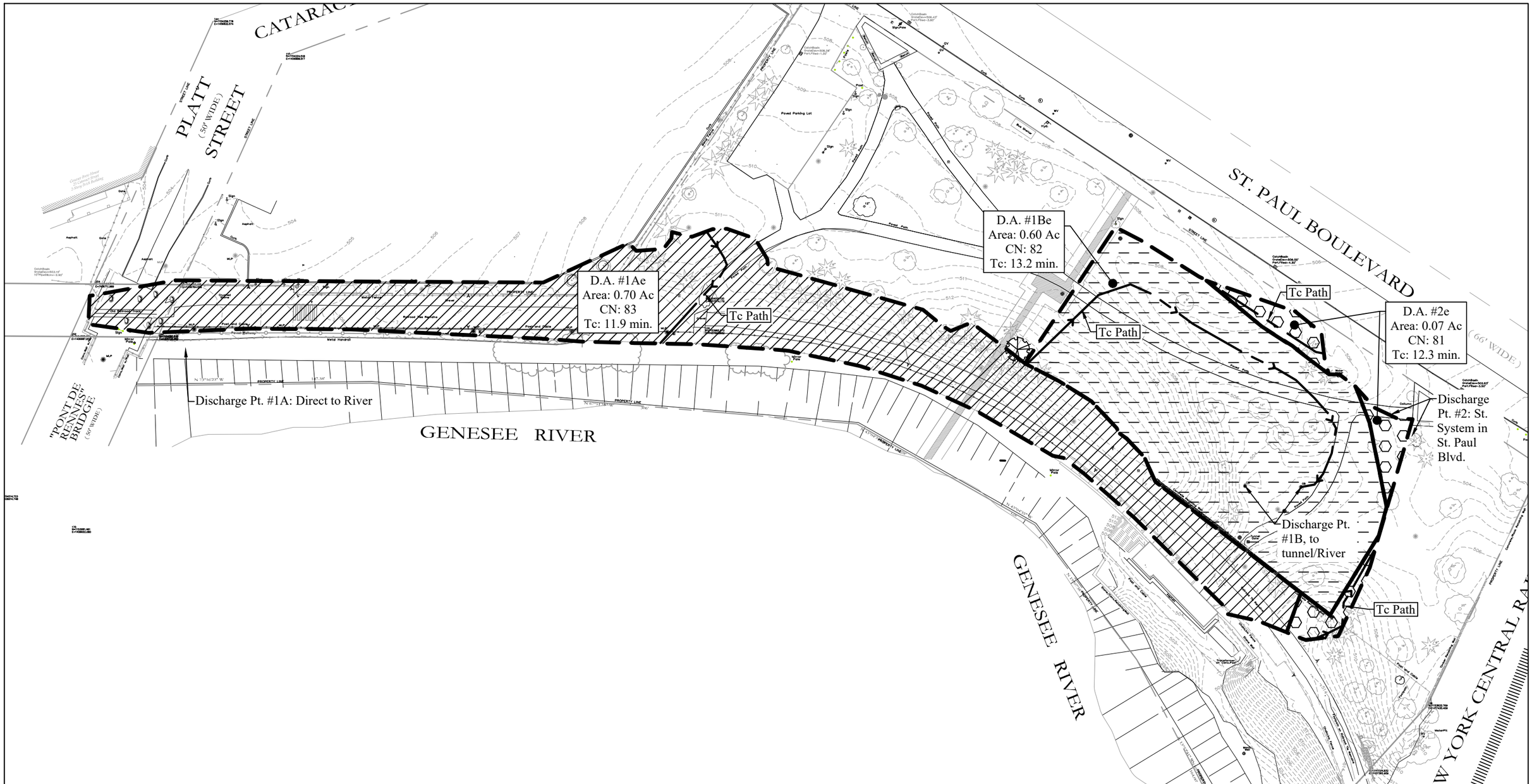
Maintenance practices to maintain the design and function of the post-construction stormwater management practices incorporated into the design.

Regular Required Maintenance (Perform As Needed)	Following Rainfall Events of 0.5" or More	Semi-Annual & Seasonal Inspections	Annual Inspections
Storm Sewer System			
-Remove accumulated silt in catch basins	Inspect catch basin inlets and piping (as visible from surface) for clogging, debris or floatables	Inspect prior to anticipated large snow melt events and in the spring prior to anticipated rainy season and following spring melts.	Sub-surface viewing may be occasionally needed to check for blockages or pipe failures.

APPENDIX A

Mapping

Contents



60 30 0 60 120
Scale: 1"=60'

BASE MAPPING FROM SITE DEVELOPMENT PLANS PREPARED BY:

McCord
Landscape Architecture, PLLC
2129 Five Mile Line Road, Penfield, New York 14526

PREPARED BY:

Pinewoods Engineering, PC
42 Aston Villa, North Chili, New York 14514
www.pinewoodsengineering.com
(585) 261-7852

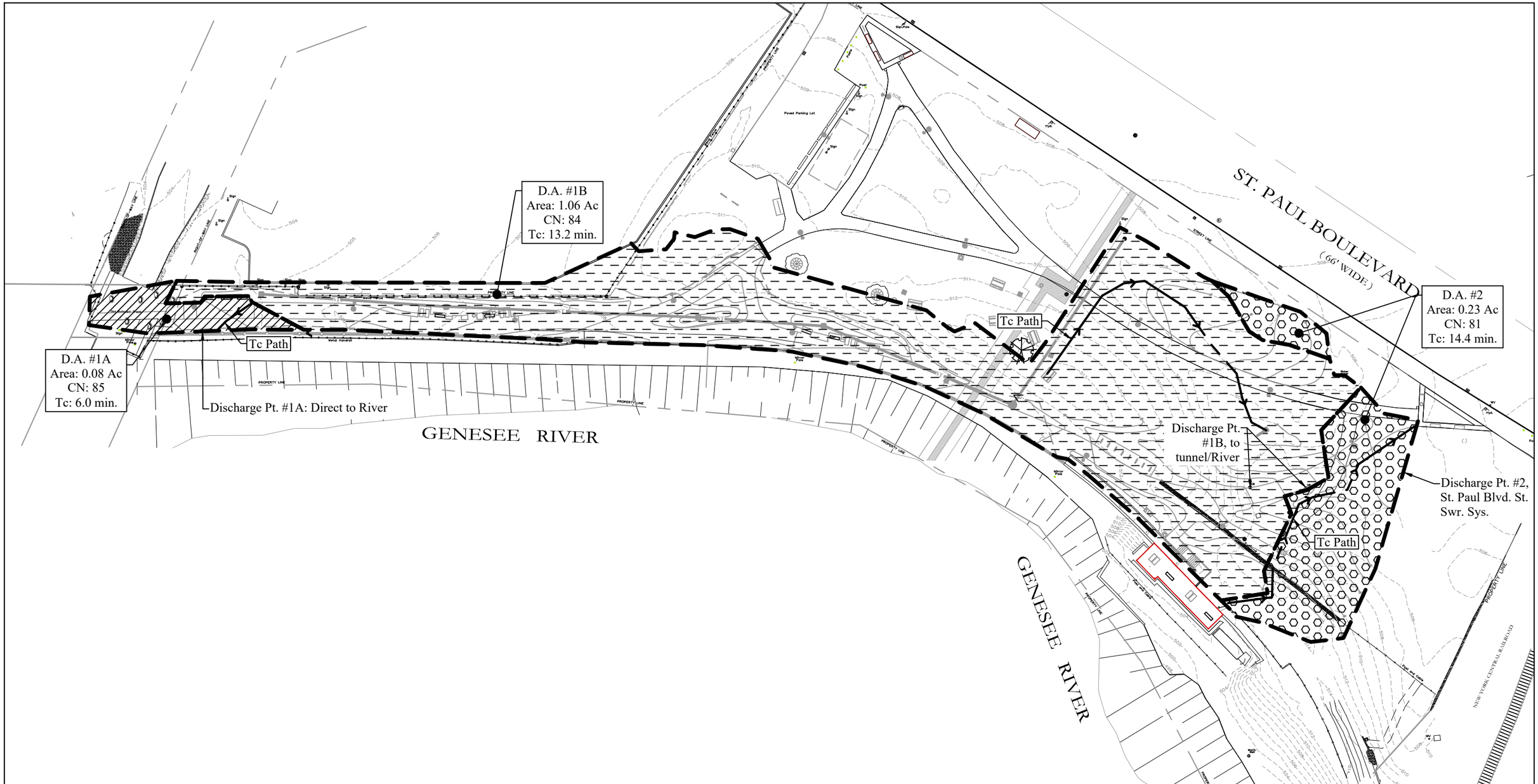
OWNER:

City of Rochester
30 Church Street
Rochester, New York 14614

EXISTING CONDITIONS DRAINAGE PLAN
'DR-1'

BREWERY LINE TRAIL
City of Rochester
Monroe County, New York

DATE: 8/20/2021
SCALE: 1"=60'
DRAWING NO.: 1 of 2



60 30 0 60 120

Scale: 1"=60'

BASE MAPPING FROM SITE DEVELOPMENT PLANS PREPARED BY:

McCord

Landscape Architecture, PLLC

2129 Five Mile Line Road, Penfield, New York 14526

PREPARED BY:

PINEWOODS ENGINEERING, PC

42 Aston Villa, North Chili, New York 14514

www.pinewoodsengineering.com

(585) 261-7852

OWNER:

City of Rochester
30 Church Street
Rochester, New York 14614

PROPOSED CONDITIONS DRAINAGE PLAN
'DR-2'

BREWERY LINE TRAIL
City of Rochester
Monroe County, New York

DATE: 8/20/2021

SCALE: 1"=60'

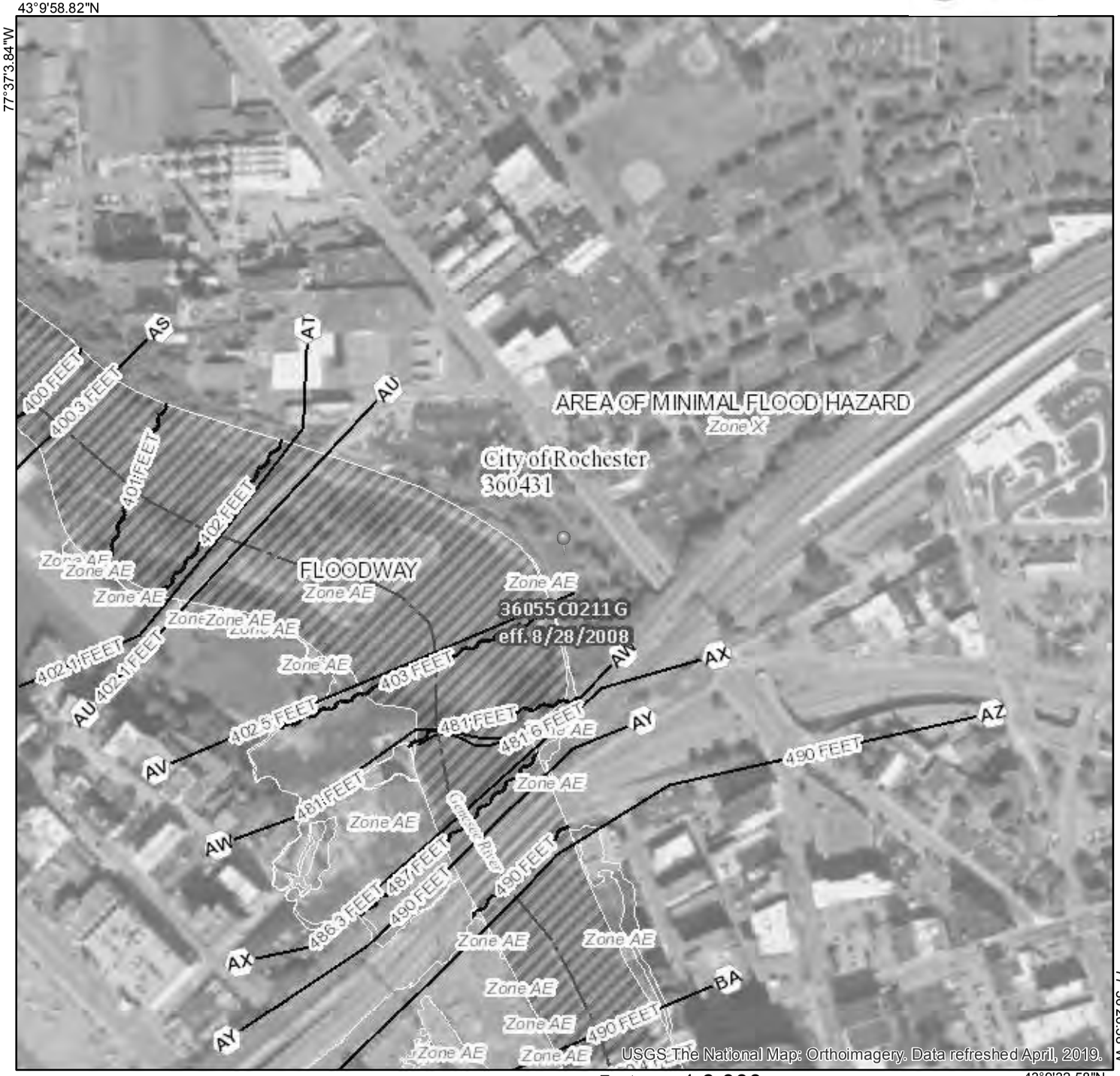
DRAWING NO.: 2 of 2

National Flood Hazard Layer FIRMette

FEMA

43°9'58.82"N

77°37'3.84"W



43°9'32.58"N

77°36'26.38"W

Feet 1:6,000

0 250 500 1,000 1,500 2,000

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- B 20.2 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
- 8 Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

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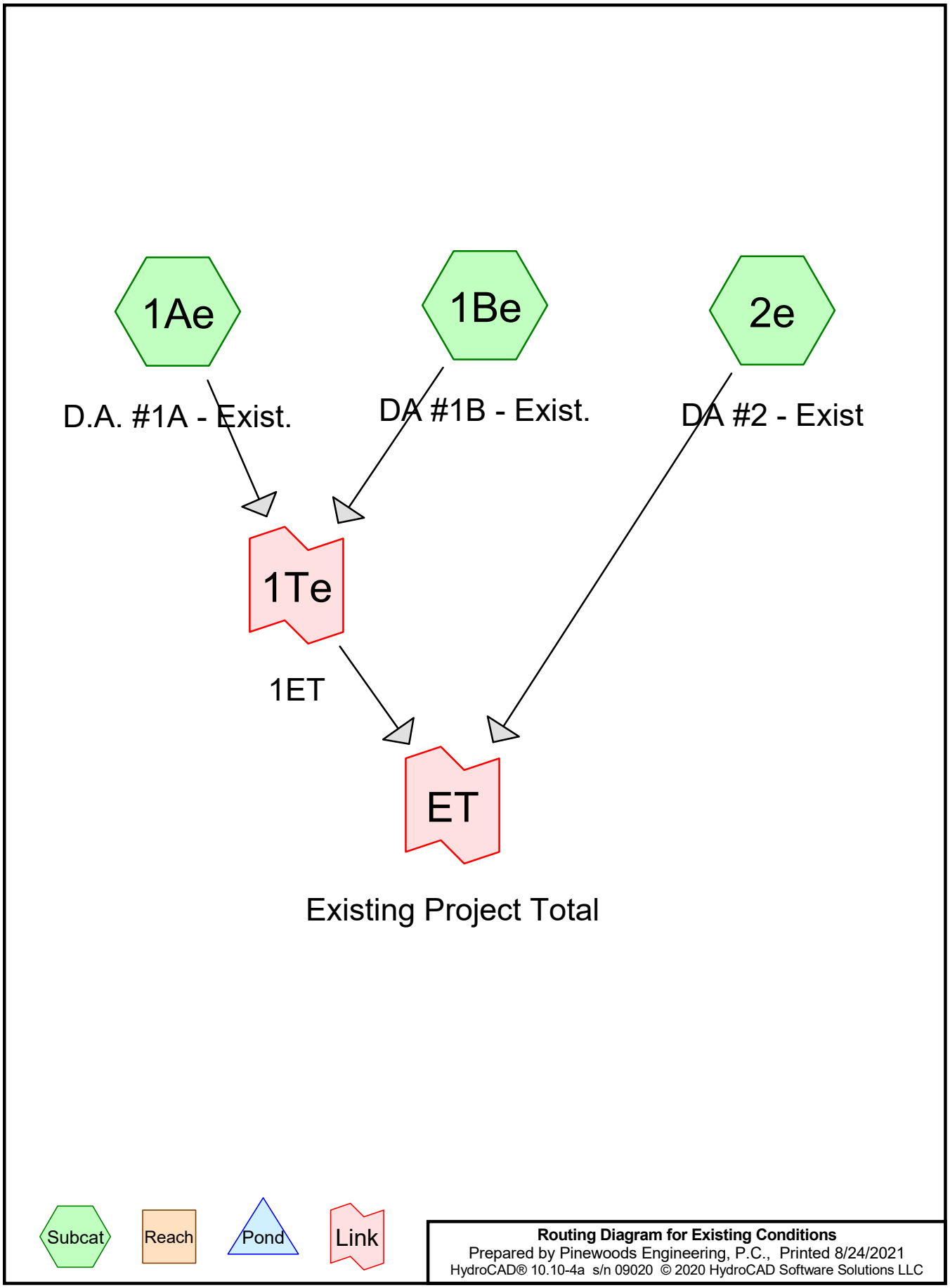
APPENDIX B

Hydrologic & Hydraulic Calculations & References

Contents



Routing Diagram for Existing Conditions
Prepared by Pinewoods Engineering, P.C., Printed 8/24/2021
HydroCAD® 10.10-4a s/n 09020 © 2020 HydroCAD Software Solutions LLC

Summary for Subcatchment 1Ae: D.A. #1A - Exist.

Runoff = 0.56 cfs @ 12.05 hrs, Volume= 0.034 af, Depth= 0.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Type II 24-hr 1-yr Rainfall=1.84"

Area (ac)	CN	Description
0.070	98	Paved parking, HSG D
0.571	80	>75% Grass, Good, HSG D
0.054	96	Gravel Surface, HSG D
0.695	83	Weighted Average
0.625		89.93% Pervious Area
0.070		10.07% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.5	25	0.0360	0.09		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"
0.4	28	0.0410	1.16		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.15"
7.0	35	0.0240	0.08		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"
11.9	88	Total			

Summary for Subcatchment 1Be: DA #1B - Exist.

Runoff = 0.43 cfs @ 12.06 hrs, Volume= 0.027 af, Depth= 0.55"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Type II 24-hr 1-yr Rainfall=1.84"

Area (ac)	CN	Description
0.056	98	Paved parking, HSG D
0.548	80	>75% Grass, Good, HSG D
0.604	82	Weighted Average
0.548		90.73% Pervious Area
0.056		9.27% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.3	53	0.0710	0.14		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"
0.2	7	0.0200	0.66		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.15"
5.5	40	0.0560	0.12		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"
1.2	188	0.0270	2.65		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
13.2	288	Total			

Summary for Subcatchment 2e: DA #2 - Exist

Runoff = 0.05 cfs @ 12.06 hrs, Volume= 0.003 af, Depth= 0.51"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Type II 24-hr 1-yr Rainfall=1.84"

Area (ac)	CN	Description
0.002	98	Paved parking, HSG D
0.067	80	>75% Grass, Good, HSG D
0.069	81	Weighted Average
0.067		97.10% Pervious Area
0.002		2.90% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.3	75	0.0270	0.10		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"

Summary for Link 1Te: 1ET

Inflow Area = 1.299 ac, 9.70% Impervious, Inflow Depth = 0.57" for 1-yr event
Inflow = 0.99 cfs @ 12.05 hrs, Volume= 0.062 af
Primary = 0.99 cfs @ 12.05 hrs, Volume= 0.062 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Summary for Link ET: Existing Project Total

Inflow Area = 1.368 ac, 9.36% Impervious, Inflow Depth = 0.57" for 1-yr event
Inflow = 1.04 cfs @ 12.05 hrs, Volume= 0.064 af
Primary = 1.04 cfs @ 12.05 hrs, Volume= 0.064 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Summary for Subcatchment 1Ae: D.A. #1A - Exist.

Runoff = 0.78 cfs @ 12.04 hrs, Volume= 0.046 af, Depth= 0.80"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.15"

Area (ac)	CN	Description
0.070	98	Paved parking, HSG D
0.571	80	>75% Grass, Good, HSG D
0.054	96	Gravel Surface, HSG D
0.695	83	Weighted Average
0.625		89.93% Pervious Area
0.070		10.07% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.5	25	0.0360	0.09		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"
0.4	28	0.0410	1.16		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.15"
7.0	35	0.0240	0.08		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"
11.9	88	Total			

Summary for Subcatchment 1Be: DA #1B - Exist.

Runoff = 0.60 cfs @ 12.06 hrs, Volume= 0.038 af, Depth= 0.75"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.15"

Area (ac)	CN	Description
0.056	98	Paved parking, HSG D
0.548	80	>75% Grass, Good, HSG D
0.604	82	Weighted Average
0.548		90.73% Pervious Area
0.056		9.27% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.3	53	0.0710	0.14		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"
0.2	7	0.0200	0.66		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.15"
5.5	40	0.0560	0.12		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"
1.2	188	0.0270	2.65		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
13.2	288	Total			

Summary for Subcatchment 2e: DA #2 - Exist

Runoff = 0.07 cfs @ 12.05 hrs, Volume= 0.004 af, Depth= 0.70"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.15"

Area (ac)	CN	Description
0.002	98	Paved parking, HSG D
0.067	80	>75% Grass, Good, HSG D
0.069	81	Weighted Average
0.067		97.10% Pervious Area
0.002		2.90% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.3	75	0.0270	0.10		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"

Summary for Link 1Te: 1ET

Inflow Area = 1.299 ac, 9.70% Impervious, Inflow Depth = 0.78" for 2-yr event
Inflow = 1.38 cfs @ 12.05 hrs, Volume= 0.084 af
Primary = 1.38 cfs @ 12.05 hrs, Volume= 0.084 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Summary for Link ET: Existing Project Total

Inflow Area = 1.368 ac, 9.36% Impervious, Inflow Depth = 0.77" for 2-yr event
Inflow = 1.45 cfs @ 12.05 hrs, Volume= 0.088 af
Primary = 1.45 cfs @ 12.05 hrs, Volume= 0.088 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Summary for Subcatchment 1Ae: D.A. #1A - Exist.

Runoff = 1.50 cfs @ 12.04 hrs, Volume= 0.088 af, Depth= 1.51"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.08"

Area (ac)	CN	Description
0.070	98	Paved parking, HSG D
0.571	80	>75% Grass, Good, HSG D
0.054	96	Gravel Surface, HSG D
0.695	83	Weighted Average
0.625		89.93% Pervious Area
0.070		10.07% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.5	25	0.0360	0.09		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"
0.4	28	0.0410	1.16		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.15"
7.0	35	0.0240	0.08		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"
11.9	88	Total			

Summary for Subcatchment 1Be: DA #1B - Exist.

Runoff = 1.19 cfs @ 12.05 hrs, Volume= 0.073 af, Depth= 1.44"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.08"

Area (ac)	CN	Description
0.056	98	Paved parking, HSG D
0.548	80	>75% Grass, Good, HSG D
0.604	82	Weighted Average
0.548		90.73% Pervious Area
0.056		9.27% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.3	53	0.0710	0.14		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"
0.2	7	0.0200	0.66		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.15"
5.5	40	0.0560	0.12		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"
1.2	188	0.0270	2.65		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
13.2	288	Total			

Summary for Subcatchment 2e: DA #2 - Exist

Runoff = 0.13 cfs @ 12.05 hrs, Volume= 0.008 af, Depth= 1.38"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.08"

Area (ac)	CN	Description
0.002	98	Paved parking, HSG D
0.067	80	>75% Grass, Good, HSG D
0.069	81	Weighted Average
0.067		97.10% Pervious Area
0.002		2.90% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.3	75	0.0270	0.10		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"

Summary for Link 1Te: 1ET

Inflow Area = 1.299 ac, 9.70% Impervious, Inflow Depth = 1.48" for 10-yr event
Inflow = 2.68 cfs @ 12.05 hrs, Volume= 0.160 af
Primary = 2.68 cfs @ 12.05 hrs, Volume= 0.160 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Summary for Link ET: Existing Project Total

Inflow Area = 1.368 ac, 9.36% Impervious, Inflow Depth = 1.47" for 10-yr event
Inflow = 2.81 cfs @ 12.05 hrs, Volume= 0.168 af
Primary = 2.81 cfs @ 12.05 hrs, Volume= 0.168 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Summary for Subcatchment 1Ae: D.A. #1A - Exist.

Runoff = 2.07 cfs @ 12.04 hrs, Volume= 0.121 af, Depth= 2.10"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=3.78"

Area (ac)	CN	Description
0.070	98	Paved parking, HSG D
0.571	80	>75% Grass, Good, HSG D
0.054	96	Gravel Surface, HSG D
0.695	83	Weighted Average
0.625		89.93% Pervious Area
0.070		10.07% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.5	25	0.0360	0.09		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"
0.4	28	0.0410	1.16		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.15"
7.0	35	0.0240	0.08		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"
11.9	88	Total			

Summary for Subcatchment 1Be: DA #1B - Exist.

Runoff = 1.66 cfs @ 12.05 hrs, Volume= 0.101 af, Depth= 2.02"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=3.78"

Area (ac)	CN	Description
0.056	98	Paved parking, HSG D
0.548	80	>75% Grass, Good, HSG D
0.604	82	Weighted Average
0.548		90.73% Pervious Area
0.056		9.27% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.3	53	0.0710	0.14		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"
0.2	7	0.0200	0.66		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.15"
5.5	40	0.0560	0.12		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"
1.2	188	0.0270	2.65		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
13.2	288	Total			

Summary for Subcatchment 2e: DA #2 - Exist

Runoff = 0.19 cfs @ 12.04 hrs, Volume= 0.011 af, Depth= 1.94"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=3.78"

Area (ac)	CN	Description
0.002	98	Paved parking, HSG D
0.067	80	>75% Grass, Good, HSG D
0.069	81	Weighted Average
0.067		97.10% Pervious Area
0.002		2.90% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.3	75	0.0270	0.10		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"

Summary for Link 1Te: 1ET

Inflow Area = 1.299 ac, 9.70% Impervious, Inflow Depth = 2.06" for 25-yr event
Inflow = 3.73 cfs @ 12.04 hrs, Volume= 0.223 af
Primary = 3.73 cfs @ 12.04 hrs, Volume= 0.223 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Summary for Link ET: Existing Project Total

Inflow Area = 1.368 ac, 9.36% Impervious, Inflow Depth = 2.05" for 25-yr event
Inflow = 3.91 cfs @ 12.04 hrs, Volume= 0.234 af
Primary = 3.91 cfs @ 12.04 hrs, Volume= 0.234 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Summary for Subcatchment 1Ae: D.A. #1A - Exist.

Runoff = 3.25 cfs @ 12.04 hrs, Volume= 0.193 af, Depth= 3.33"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-yr Rainfall=5.17"

Area (ac)	CN	Description
0.070	98	Paved parking, HSG D
0.571	80	>75% Grass, Good, HSG D
0.054	96	Gravel Surface, HSG D
0.695	83	Weighted Average
0.625		89.93% Pervious Area
0.070		10.07% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.5	25	0.0360	0.09		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"
0.4	28	0.0410	1.16		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.15"
7.0	35	0.0240	0.08		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"
11.9	88	Total			

Summary for Subcatchment 1Be: DA #1B - Exist.

Runoff = 2.64 cfs @ 12.05 hrs, Volume= 0.163 af, Depth= 3.23"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-yr Rainfall=5.17"

Area (ac)	CN	Description
0.056	98	Paved parking, HSG D
0.548	80	>75% Grass, Good, HSG D
0.604	82	Weighted Average
0.548		90.73% Pervious Area
0.056		9.27% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.3	53	0.0710	0.14		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"
0.2	7	0.0200	0.66		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.15"
5.5	40	0.0560	0.12		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"
1.2	188	0.0270	2.65		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
13.2	288	Total			

Summary for Subcatchment 2e: DA #2 - Exist

Runoff = 0.30 cfs @ 12.04 hrs, Volume= 0.018 af, Depth= 3.14"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-yr Rainfall=5.17"

Area (ac)	CN	Description
0.002	98	Paved parking, HSG D
0.067	80	>75% Grass, Good, HSG D
0.069	81	Weighted Average
0.067		97.10% Pervious Area
0.002		2.90% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.3	75	0.0270	0.10		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"

Summary for Link 1Te: 1ET

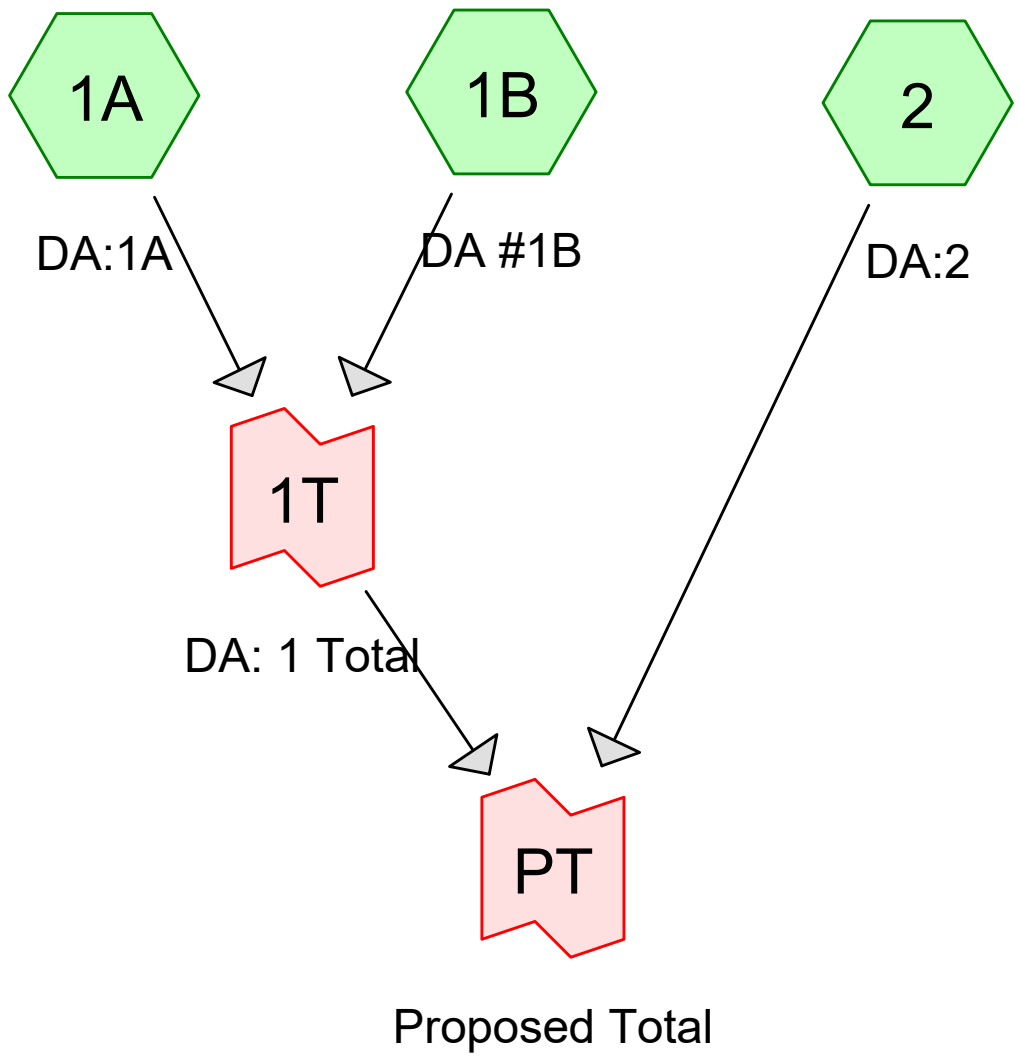
Inflow Area = 1.299 ac, 9.70% Impervious, Inflow Depth = 3.28" for 100-yr event
Inflow = 5.88 cfs @ 12.04 hrs, Volume= 0.355 af
Primary = 5.88 cfs @ 12.04 hrs, Volume= 0.355 af, Atten= 0%, Lag= 0.0 min

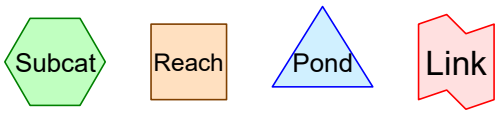
Primary outflow = Inflow, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Summary for Link ET: Existing Project Total

Inflow Area = 1.368 ac, 9.36% Impervious, Inflow Depth = 3.28" for 100-yr event
Inflow = 6.18 cfs @ 12.04 hrs, Volume= 0.373 af
Primary = 6.18 cfs @ 12.04 hrs, Volume= 0.373 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs





Routing Diagram for Proposed Conditions
Prepared by Pinewoods Engineering, P.C., Printed 8/24/2021
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Summary for Subcatchment 1A: DA:1A

Runoff = 0.10 cfs @ 11.98 hrs, Volume= 0.005 af, Depth= 0.68"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-yr Rainfall=1.84"

Area (ac)	CN	Description
0.024	98	Paved parking, HSG D
0.057	80	>75% Grass, Good, HSG D
0.081	85	Weighted Average
0.057		70.37% Pervious Area
0.024		29.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.7	25	0.0200	0.07		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"
5.7	25	Total, Increased to minimum Tc = 6.0 min			

Summary for Subcatchment 1B: DA #1B

Runoff = 0.90 cfs @ 12.06 hrs, Volume= 0.056 af, Depth= 0.63"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-yr Rainfall=1.84"

Area (ac)	CN	Description
0.249	98	Paved parking, HSG D
0.807	80	>75% Grass, Good, HSG D
1.056	84	Weighted Average
0.807		76.42% Pervious Area
0.249		23.58% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.3	53	0.0710	0.14		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"
0.2	7	0.0200	0.66		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.15"
5.5	40	0.0560	0.12		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"
1.2	188	0.0270	2.65		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
13.2	288	Total			

Summary for Subcatchment 2: DA:2

Runoff = 0.14 cfs @ 12.08 hrs, Volume= 0.010 af, Depth= 0.51"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-yr Rainfall=1.84"

Area (ac)	CN	Description
0.019	98	Paved parking, HSG D
0.212	80	>75% Grass, Good, HSG D
0.231	81	Weighted Average
0.212		91.77% Pervious Area
0.019		8.23% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.9	100	0.0350	0.12		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"
0.5	80	0.0300	2.79		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
14.4	180	Total			

Summary for Link 1T: DA: 1 Total

Inflow Area = 1.137 ac, 24.01% Impervious, Inflow Depth = 0.64" for 1-yr event
Inflow = 0.95 cfs @ 12.05 hrs, Volume= 0.060 af
Primary = 0.95 cfs @ 12.05 hrs, Volume= 0.060 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-80.00 hrs, dt= 0.01 hrs

Summary for Link PT: Proposed Total

Inflow Area = 1.368 ac, 21.35% Impervious, Inflow Depth = 0.61" for 1-yr event
Inflow = 1.09 cfs @ 12.05 hrs, Volume= 0.070 af
Primary = 1.09 cfs @ 12.05 hrs, Volume= 0.070 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-80.00 hrs, dt= 0.01 hrs

Summary for Subcatchment 1A: DA:1A

Runoff = 0.13 cfs @ 11.98 hrs, Volume= 0.006 af, Depth= 0.91"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.01 hrs
Type II 24-hr 2-yr Rainfall=2.15"

Area (ac)	CN	Description
0.024	98	Paved parking, HSG D
0.057	80	>75% Grass, Good, HSG D
0.081	85	Weighted Average
0.057		70.37% Pervious Area
0.024		29.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.7	25	0.0200	0.07		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"
5.7	25	Total, Increased to minimum Tc = 6.0 min			

Summary for Subcatchment 1B: DA #1B

Runoff = 1.22 cfs @ 12.06 hrs, Volume= 0.075 af, Depth= 0.85"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.01 hrs
Type II 24-hr 2-yr Rainfall=2.15"

Area (ac)	CN	Description
0.249	98	Paved parking, HSG D
0.807	80	>75% Grass, Good, HSG D
1.056	84	Weighted Average
0.807		76.42% Pervious Area
0.249		23.58% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.3	53	0.0710	0.14		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"
0.2	7	0.0200	0.66		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.15"
5.5	40	0.0560	0.12		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"
1.2	188	0.0270	2.65		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
13.2	288	Total			

Summary for Subcatchment 2: DA:2

Runoff = 0.21 cfs @ 12.08 hrs, Volume= 0.014 af, Depth= 0.70"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.01 hrs
Type II 24-hr 2-yr Rainfall=2.15"

Area (ac)	CN	Description
0.019	98	Paved parking, HSG D
0.212	80	>75% Grass, Good, HSG D
0.231	81	Weighted Average
0.212		91.77% Pervious Area
0.019		8.23% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.9	100	0.0350	0.12		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"
0.5	80	0.0300	2.79		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
14.4	180	Total			

Summary for Link 1T: DA: 1 Total

Inflow Area = 1.137 ac, 24.01% Impervious, Inflow Depth = 0.86" for 2-yr event
Inflow = 1.30 cfs @ 12.05 hrs, Volume= 0.081 af
Primary = 1.30 cfs @ 12.05 hrs, Volume= 0.081 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-80.00 hrs, dt= 0.01 hrs

Summary for Link PT: Proposed Total

Inflow Area = 1.368 ac, 21.35% Impervious, Inflow Depth = 0.83" for 2-yr event
Inflow = 1.50 cfs @ 12.05 hrs, Volume= 0.095 af
Primary = 1.50 cfs @ 12.05 hrs, Volume= 0.095 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-80.00 hrs, dt= 0.01 hrs

Summary for Subcatchment 1A: DA:1A

Runoff = 0.24 cfs @ 11.97 hrs, Volume= 0.011 af, Depth= 1.66"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-yr Rainfall=3.08"

Area (ac)	CN	Description
0.024	98	Paved parking, HSG D
0.057	80	>75% Grass, Good, HSG D
0.081	85	Weighted Average
0.057		70.37% Pervious Area
0.024		29.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.7	25	0.0200	0.07		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"
5.7	25	Total, Increased to minimum Tc = 6.0 min			

Summary for Subcatchment 1B: DA #1B

Runoff = 2.30 cfs @ 12.05 hrs, Volume= 0.139 af, Depth= 1.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-yr Rainfall=3.08"

Area (ac)	CN	Description
0.249	98	Paved parking, HSG D
0.807	80	>75% Grass, Good, HSG D
1.056	84	Weighted Average
0.807		76.42% Pervious Area
0.249		23.58% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.3	53	0.0710	0.14		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"
0.2	7	0.0200	0.66		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.15"
5.5	40	0.0560	0.12		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"
1.2	188	0.0270	2.65		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
13.2	288	Total			

Summary for Subcatchment 2: DA:2

Runoff = 0.42 cfs @ 12.07 hrs, Volume= 0.026 af, Depth= 1.38"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-yr Rainfall=3.08"

Area (ac)	CN	Description
0.019	98	Paved parking, HSG D
0.212	80	>75% Grass, Good, HSG D
0.231	81	Weighted Average
0.212		91.77% Pervious Area
0.019		8.23% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.9	100	0.0350	0.12		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"
0.5	80	0.0300	2.79		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
14.4	180	Total			

Summary for Link 1T: DA: 1 Total

Inflow Area = 1.137 ac, 24.01% Impervious, Inflow Depth = 1.59" for 10-yr event
Inflow = 2.45 cfs @ 12.04 hrs, Volume= 0.150 af
Primary = 2.45 cfs @ 12.04 hrs, Volume= 0.150 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-80.00 hrs, dt= 0.01 hrs

Summary for Link PT: Proposed Total

Inflow Area = 1.368 ac, 21.35% Impervious, Inflow Depth = 1.55" for 10-yr event
Inflow = 2.85 cfs @ 12.05 hrs, Volume= 0.177 af
Primary = 2.85 cfs @ 12.05 hrs, Volume= 0.177 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-80.00 hrs, dt= 0.01 hrs

Summary for Subcatchment 1A: DA:1A

Runoff = 0.32 cfs @ 11.97 hrs, Volume= 0.015 af, Depth= 2.26"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.01 hrs
Type II 24-hr 25-yr Rainfall=3.78"

Area (ac)	CN	Description
0.024	98	Paved parking, HSG D
0.057	80	>75% Grass, Good, HSG D
0.081	85	Weighted Average
0.057		70.37% Pervious Area
0.024		29.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.7	25	0.0200	0.07		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"
5.7	25	Total, Increased to minimum Tc = 6.0 min			

Summary for Subcatchment 1B: DA #1B

Runoff = 3.16 cfs @ 12.05 hrs, Volume= 0.192 af, Depth= 2.18"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.01 hrs
Type II 24-hr 25-yr Rainfall=3.78"

Area (ac)	CN	Description
0.249	98	Paved parking, HSG D
0.807	80	>75% Grass, Good, HSG D
1.056	84	Weighted Average
0.807		76.42% Pervious Area
0.249		23.58% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.3	53	0.0710	0.14		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"
0.2	7	0.0200	0.66		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.15"
5.5	40	0.0560	0.12		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"
1.2	188	0.0270	2.65		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
13.2	288	Total			

Summary for Subcatchment 2: DA:2

Runoff = 0.59 cfs @ 12.07 hrs, Volume= 0.037 af, Depth= 1.94"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.01 hrs
Type II 24-hr 25-yr Rainfall=3.78"

Area (ac)	CN	Description
0.019	98	Paved parking, HSG D
0.212	80	>75% Grass, Good, HSG D
0.231	81	Weighted Average
0.212		91.77% Pervious Area
0.019		8.23% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.9	100	0.0350	0.12		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"
0.5	80	0.0300	2.79		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
14.4	180	Total			

Summary for Link 1T: DA: 1 Total

Inflow Area = 1.137 ac, 24.01% Impervious, Inflow Depth = 2.18" for 25-yr event
Inflow = 3.36 cfs @ 12.04 hrs, Volume= 0.207 af
Primary = 3.36 cfs @ 12.04 hrs, Volume= 0.207 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-80.00 hrs, dt= 0.01 hrs

Summary for Link PT: Proposed Total

Inflow Area = 1.368 ac, 21.35% Impervious, Inflow Depth = 2.14" for 25-yr event
Inflow = 3.94 cfs @ 12.04 hrs, Volume= 0.244 af
Primary = 3.94 cfs @ 12.04 hrs, Volume= 0.244 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-80.00 hrs, dt= 0.01 hrs

Summary for Subcatchment 1A: DA:1A

Runoff = 0.49 cfs @ 11.97 hrs, Volume= 0.024 af, Depth= 3.53"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-yr Rainfall=5.17"

Area (ac)	CN	Description
0.024	98	Paved parking, HSG D
0.057	80	>75% Grass, Good, HSG D
0.081	85	Weighted Average
0.057		70.37% Pervious Area
0.024		29.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.7	25	0.0200	0.07		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"
5.7	25	Total, Increased to minimum Tc = 6.0 min			

Summary for Subcatchment 1B: DA #1B

Runoff = 4.91 cfs @ 12.05 hrs, Volume= 0.302 af, Depth= 3.43"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-yr Rainfall=5.17"

Area (ac)	CN	Description
0.249	98	Paved parking, HSG D
0.807	80	>75% Grass, Good, HSG D
1.056	84	Weighted Average
0.807		76.42% Pervious Area
0.249		23.58% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.3	53	0.0710	0.14		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"
0.2	7	0.0200	0.66		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.15"
5.5	40	0.0560	0.12		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"
1.2	188	0.0270	2.65		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
13.2	288	Total			

Summary for Subcatchment 2: DA:2

Runoff = 0.95 cfs @ 12.06 hrs, Volume= 0.060 af, Depth= 3.14"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-yr Rainfall=5.17"

Area (ac)	CN	Description
0.019	98	Paved parking, HSG D
0.212	80	>75% Grass, Good, HSG D
0.231	81	Weighted Average
0.212		91.77% Pervious Area
0.019		8.23% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.9	100	0.0350	0.12		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.15"
0.5	80	0.0300	2.79		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
14.4	180	Total			

Summary for Link 1T: DA: 1 Total

Inflow Area = 1.137 ac, 24.01% Impervious, Inflow Depth = 3.43" for 100-yr event
Inflow = 5.22 cfs @ 12.04 hrs, Volume= 0.325 af
Primary = 5.22 cfs @ 12.04 hrs, Volume= 0.325 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-80.00 hrs, dt= 0.01 hrs

Summary for Link PT: Proposed Total

Inflow Area = 1.368 ac, 21.35% Impervious, Inflow Depth = 3.38" for 100-yr event
Inflow = 6.15 cfs @ 12.04 hrs, Volume= 0.386 af
Primary = 6.15 cfs @ 12.04 hrs, Volume= 0.386 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-80.00 hrs, dt= 0.01 hrs

Extreme Precipitation Tables

Northeast Regional Climate Center

Data represents point estimates calculated from partial duration series. All precipitation amounts are displayed in inches.

Smoothing	No
State	New York
Location	
Longitude	77.612 degrees West
Latitude	43.163 degrees North
Elevation	0 feet
Date/Time	Wed, 18 Sep 2019 14:04:58 -0400

Extreme Precipitation Estimates

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.26	0.41	0.50	0.67	0.82	0.91	**1yr**	0.71	0.89	1.01	1.24	1.46	1.84	2.06	**1yr**	1.63	1.98	2.38	2.84	3.26	**1yr**
2yr	0.31	0.48	0.59	0.79	0.98	1.11	**2yr**	0.84	1.08	1.21	1.47	1.77	2.15	2.41	**2yr**	1.90	2.32	2.72	3.22	3.68	**2yr**
5yr	0.36	0.56	0.70	0.96	1.22	1.40	**5yr**	1.05	1.37	1.54	1.85	2.23	2.64	2.97	**5yr**	2.34	2.86	3.32	3.88	4.44	**5yr**
10yr	0.42	0.65	0.80	1.12	1.45	1.67	**10yr**	1.25	1.63	1.85	2.20	2.65	3.08	3.48	**10yr**	2.73	3.35	3.86	4.48	5.12	**10yr**
25yr	0.51	0.78	0.96	1.38	1.81	2.12	**25yr**	1.56	2.07	2.37	2.77	3.35	3.78	4.29	**25yr**	3.35	4.13	4.71	5.41	6.19	**25yr**
50yr	0.59	0.89	1.11	1.60	2.15	2.53	**50yr**	1.86	2.48	2.85	3.31	4.00	4.42	5.03	**50yr**	3.91	4.84	5.47	6.24	7.14	**50yr**
100yr	0.68	1.03	1.29	1.86	2.56	3.04	**100yr**	2.21	2.97	3.45	3.96	4.78	5.17	5.90	**100yr**	4.58	5.67	6.37	7.21	8.25	**100yr**
200yr	0.79	1.19	1.50	2.18	3.04	3.65	**200yr**	2.62	3.57	4.18	4.73	5.71	6.05	6.92	**200yr**	5.35	6.66	7.41	8.32	9.53	**200yr**
500yr	0.97	1.43	1.85	2.68	3.82	4.65	**500yr**	3.29	4.54	5.39	6.01	7.24	7.44	8.55	**500yr**	6.58	8.22	9.05	10.07	11.54	**500yr**

Lower Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.23	0.36	0.44	0.59	0.73	0.80	**1yr**	0.63	0.78	0.87	1.12	1.41	1.69	1.77	**1yr**	1.50	1.70	2.00	2.68	3.06	**1yr**
2yr	0.30	0.46	0.56	0.77	0.94	1.05	**2yr**	0.81	1.03	1.15	1.42	1.72	2.10	2.36	**2yr**	1.86	2.27	2.66	3.15	3.59	**2yr**
5yr	0.34	0.52	0.65	0.89	1.13	1.26	**5yr**	0.97	1.23	1.38	1.69	2.04	2.49	2.81	**5yr**	2.20	2.70	3.14	3.68	4.22	**5yr**
10yr	0.37	0.57	0.71	0.99	1.27	1.42	**10yr**	1.10	1.39	1.57	1.92	2.31	2.80	3.17	**10yr**	2.48	3.05	3.56	4.14	4.74	**10yr**
25yr	0.42	0.65	0.80	1.15	1.51	1.67	**25yr**	1.30	1.63	1.85	2.27	2.69	3.25	3.73	**25yr**	2.88	3.59	4.21	4.84	5.52	**25yr**
50yr	0.47	0.71	0.89	1.28	1.72	1.89	**50yr**	1.48	1.85	2.09	2.56	3.01	3.66	4.21	**50yr**	3.24	4.04	4.79	5.45	6.20	**50yr**
100yr	0.52	0.79	0.98	1.42	1.95	2.12	**100yr**	1.68	2.08	2.34	2.89	3.36	4.09	4.74	**100yr**	3.62	4.56	5.44	6.13	6.97	**100yr**
200yr	0.57	0.86	1.09	1.58	2.21	2.38	**200yr**	1.91	2.33	2.63	3.26	3.73	4.57	5.34	**200yr**	4.05	5.13	6.16	6.88	7.83	**200yr**
500yr	0.66	0.98	1.27	1.84	2.61	2.77	**500yr**	2.26	2.71	3.02	3.79	4.25	5.31	6.27	**500yr**	4.70	6.03	7.28	8.06	9.17	**500yr**

Upper Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.28	0.44	0.53	0.72	0.88	0.98	**1yr**	0.76	0.96	1.08	1.34	1.66	1.96	2.18	**1yr**	1.73	2.09	2.53	3.00	3.44	**1yr**
2yr	0.32	0.49	0.61	0.82	1.01	1.16	**2yr**	0.88	1.13	1.26	1.53	1.85	2.24	2.48	**2yr**	1.98	2.39	2.80	3.31	3.77	**2yr**
5yr	0.40	0.61	0.76	1.04	1.32	1.55	**5yr**	1.14	1.52	1.71	2.02	2.39	2.79	3.14	**5yr**	2.47	3.02	3.49	4.08	4.68	**5yr**
10yr	0.47	0.72	0.90	1.25	1.62	1.95	**10yr**	1.40	1.91	2.16	2.49	2.93	3.35	3.75	**10yr**	2.96	3.61	4.15	4.80	5.53	**10yr**
25yr	0.60	0.91	1.14	1.62	2.14	2.65	**25yr**	1.84	2.60	2.96	3.34	3.85	4.26	4.75	**25yr**	3.77	4.57	5.22	5.96	6.90	**25yr**
50yr	0.72	1.09	1.36	1.95	2.63	3.35	**50yr**	2.27	3.28	3.79	4.18	4.75	5.10	5.69	**50yr**	4.52	5.47	6.21	7.02	8.19	**50yr**
100yr	0.86	1.30	1.63	2.36	3.24	4.22	**100yr**	2.79	4.13	4.83	5.21	5.88	6.14	6.83	**100yr**	5.44	6.56	7.41	8.26	9.72	**100yr**
200yr	1.03	1.56	1.97	2.86	3.98	5.34	**200yr**	3.44	5.22	6.19	6.51	7.27	7.38	8.18	**200yr**	6.53	7.86	8.82	9.74	11.50	**200yr**
500yr	1.33	1.98	2.55	3.71	5.27	7.31	**500yr**	4.55	7.15	8.60	8.82	9.65	9.44	10.41	**500yr**	8.35	10.01	11.11	12.09	14.37	**500yr**

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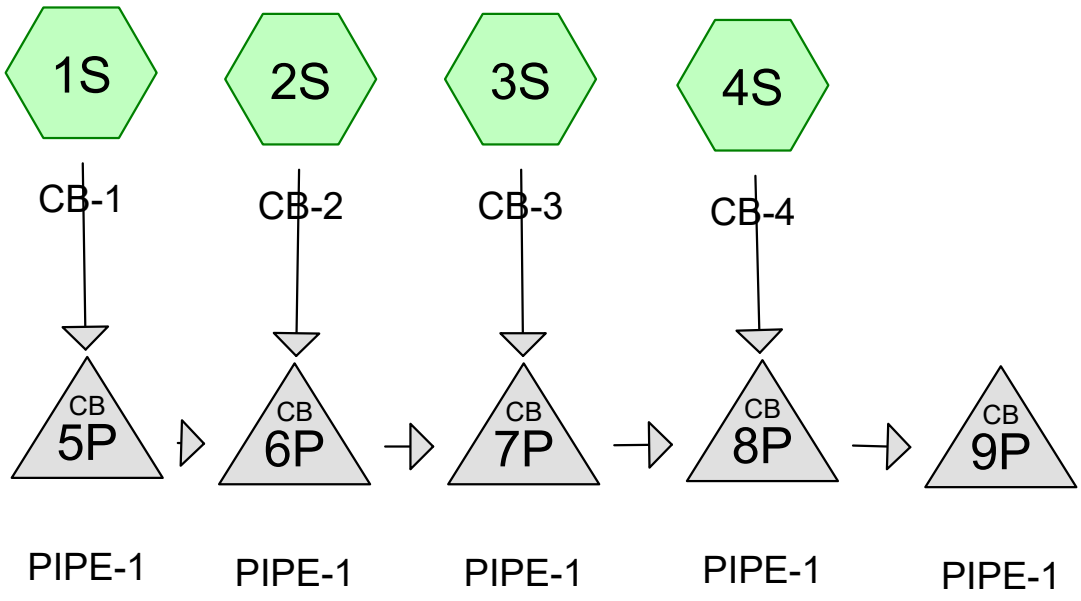
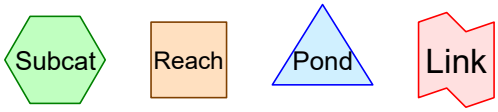




Routing Diagram for Storm Sewer
Prepared by Pinewoods Engineering, P.C., Printed 8/24/2021
HydroCAD® 10.10-4a s/n 09020 © 2020 HydroCAD Software Solutions LLC

Summary for Subcatchment 1S: CB-1

Runoff = 0.07 cfs @ 0.08 hrs, Volume= 0.001 af, Depth= 0.16"

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
output 10-yr Duration=5 min, Inten=5.04 in/hr

Area (ac)	C	Description
0.010	0.90	
0.030	0.20	
0.040	0.37	Weighted Average
0.040		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment 2S: CB-2

Runoff = 0.34 cfs @ 0.08 hrs, Volume= 0.002 af, Depth= 0.17"

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
output 10-yr Duration=5 min, Inten=5.04 in/hr

Area (ac)	C	Description
0.050	0.90	
0.120	0.20	
0.170	0.41	Weighted Average
0.170		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment 3S: CB-3

Runoff = 0.24 cfs @ 0.08 hrs, Volume= 0.002 af, Depth= 0.19"

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
output 10-yr Duration=5 min, Inten=5.04 in/hr

Area (ac)	C	Description
0.040	0.90	
0.070	0.20	
0.110	0.45	Weighted Average
0.110		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment 4S: CB-4

Runoff = 0.42 cfs @ 0.08 hrs, Volume= 0.003 af, Depth= 0.16"

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
output 10-yr Duration=5 min, Inten=5.04 in/hr

Area (ac)	C	Description
0.060	0.90	
0.160	0.20	
0.220	0.39	Weighted Average
0.220		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Pond 5P: PIPE-1

Inflow Area = 0.040 ac, 0.00% Impervious, Inflow Depth = 0.16" for 10-yr event
Inflow = 0.07 cfs @ 0.08 hrs, Volume= 0.001 af
Outflow = 0.07 cfs @ 0.08 hrs, Volume= 0.001 af, Atten= 0%, Lag= 0.0 min
Primary = 0.07 cfs @ 0.08 hrs, Volume= 0.001 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 502.27' @ 0.08 hrs
Flood Elev= 505.10'

Device	Routing	Invert	Outlet Devices
#1	Primary	502.10'	**8.0" Round Culvert** L= 116.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 502.10' / 501.52' S= 0.0050 '/' Cc= 0.900 n= 0.012, Flow Area= 0.35 sf

Primary OutFlow Max=0.07 cfs @ 0.08 hrs HW=502.27' TW=501.57' (Dynamic Tailwater)
└**1=Culvert** (Barrel Controls 0.07 cfs @ 1.54 fps)

Summary for Pond 6P: PIPE-1

Inflow Area = 0.210 ac, 0.00% Impervious, Inflow Depth = 0.17" for 10-yr event
Inflow = 0.41 cfs @ 0.08 hrs, Volume= 0.003 af
Outflow = 0.41 cfs @ 0.08 hrs, Volume= 0.003 af, Atten= 0%, Lag= 0.0 min
Primary = 0.41 cfs @ 0.08 hrs, Volume= 0.003 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Peak Elev= 501.57' @ 0.08 hrs
Flood Elev= 505.10'

Device	Routing	Invert	Outlet Devices
#1	Primary	501.18'	**12.0" Round Culvert** L= 157.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 501.18' / 500.40' S= 0.0050 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.40 cfs @ 0.08 hrs HW=501.57' TW=500.93' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 0.40 cfs @ 2.11 fps)

Summary for Pond 7P: PIPE-1

Inflow Area =	0.320 ac,	0.00% Impervious,	Inflow Depth =	0.18"	for 10-yr event
Inflow =	0.66 cfs @	0.08 hrs,	Volume=	0.005 af	
Outflow =	0.66 cfs @	0.08 hrs,	Volume=	0.005 af,	Atten= 0%, Lag= 0.0 min
Primary =	0.66 cfs @	0.08 hrs,	Volume=	0.005 af	

Routing by Dyn-Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 500.94' @ 0.09 hrs
Flood Elev= 506.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	500.40'	**12.0" Round Culvert** L= 78.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 500.40' / 500.00' S= 0.0051 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.61 cfs @ 0.08 hrs HW=500.93' TW=500.63' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 0.61 cfs @ 2.08 fps)

Summary for Pond 8P: PIPE-1

Inflow Area =	0.540 ac,	0.00% Impervious,	Inflow Depth =	0.17"	for 10-yr event
Inflow =	1.08 cfs @	0.08 hrs,	Volume=	0.008 af	
Outflow =	1.08 cfs @	0.08 hrs,	Volume=	0.008 af,	Atten= 0%, Lag= 0.0 min
Primary =	1.08 cfs @	0.08 hrs,	Volume=	0.008 af	

Routing by Dyn-Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 500.64' @ 0.08 hrs
Flood Elev= 506.70'

Device	Routing	Invert	Outlet Devices
#1	Primary	500.00'	**12.0" Round Culvert** L= 128.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 500.00' / 499.35' S= 0.0051 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=1.04 cfs @ 0.08 hrs HW=500.63' TW=499.96' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 1.04 cfs @ 2.81 fps)

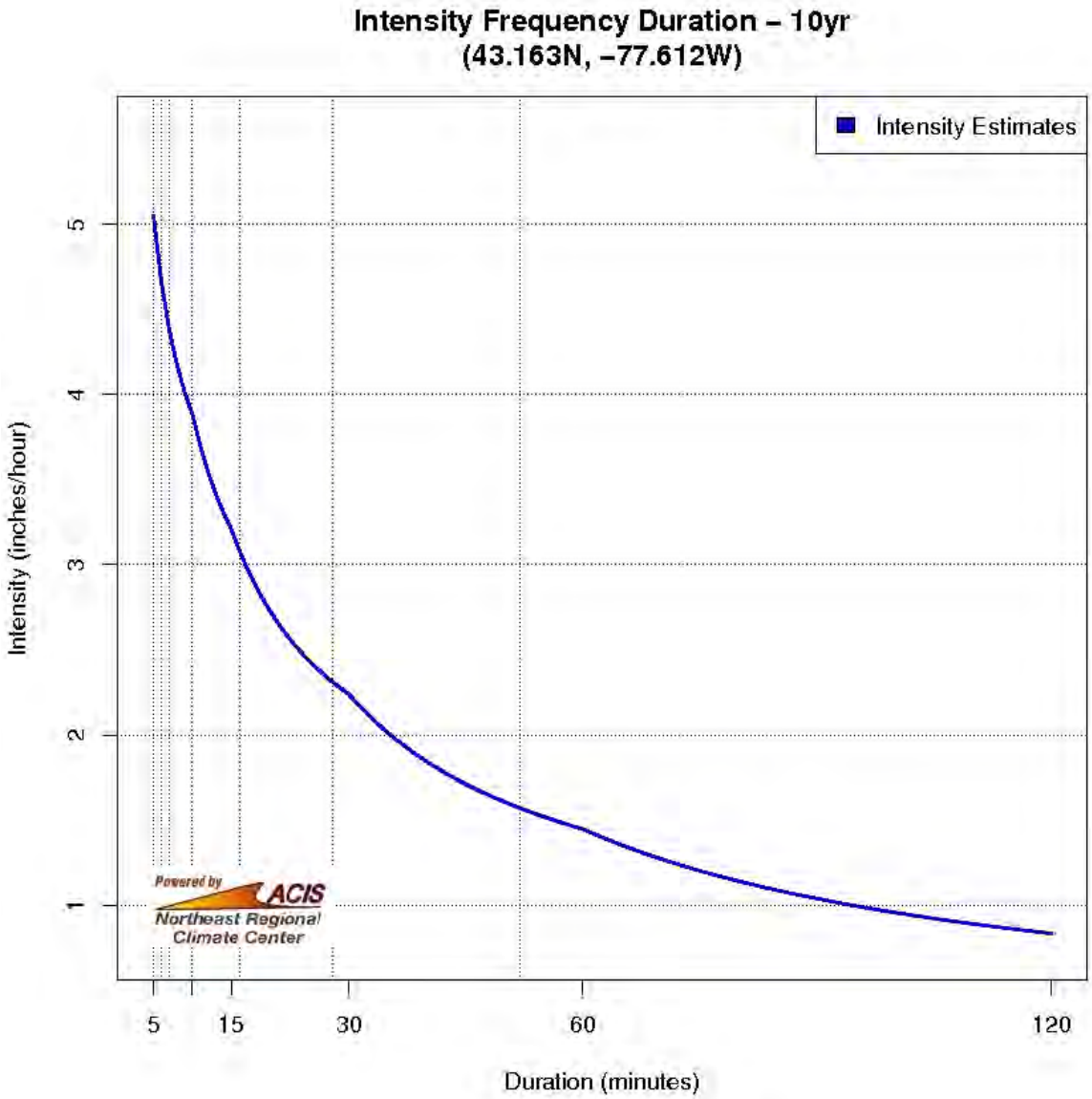
Summary for Pond 9P: PIPE-1

Inflow Area =	0.540 ac,	0.00% Impervious,	Inflow Depth =	0.17"	for 10-yr event
Inflow =	1.08 cfs @	0.08 hrs,	Volume=	0.008 af	
Outflow =	1.08 cfs @	0.08 hrs,	Volume=	0.008 af,	Atten= 0%, Lag= 0.0 min
Primary =	1.08 cfs @	0.08 hrs,	Volume=	0.008 af	

Routing by Dyn-Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 499.97' @ 0.08 hrs
Flood Elev= 507.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	499.35'	**12.0" Round Culvert** L= 125.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 499.35' / 498.72' S= 0.0050 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=1.06 cfs @ 0.08 hrs HW=499.96' (Free Discharge)
└─**1=Culvert** (Inlet Controls 1.06 cfs @ 2.10 fps)



Time (mins)	Intensity (in/hr)
5	5.05
6*	4.66
7*	4.38
8*	4.17
9*	4.01
10	3.88
11*	3.70
12*	3.54
13*	3.41
14*	3.30
15	3.20
16*	3.08
17*	2.98
18*	2.88
19*	2.80
20*	2.72

21*	2.65
22*	2.59
23*	2.53
24*	2.48
25*	2.43
26*	2.39
27*	2.35
28*	2.31
29*	2.27
30	2.24
31*	2.19
32*	2.14
33*	2.10
34*	2.05
35*	2.01
36*	1.98
37*	1.94
38*	1.91
39*	1.87
40*	1.84
41*	1.81
42*	1.79
43*	1.76
44*	1.74
45*	1.71
46*	1.69
47*	1.67
48*	1.65
49*	1.63
50*	1.61
51*	1.59
52*	1.57
53*	1.55
54*	1.54
55*	1.52
56*	1.50
57*	1.49
58*	1.47
59*	1.46
60	1.45
61*	1.43
62*	1.41
63*	1.39
64*	1.37
65*	1.35
66*	1.34
67*	1.32
68*	1.30
69*	1.29
70*	1.27
71*	1.26
72*	1.24
73*	1.23
74*	1.22
75*	1.20
76*	1.19
77*	1.18
78*	1.16
79*	1.15
80*	1.14

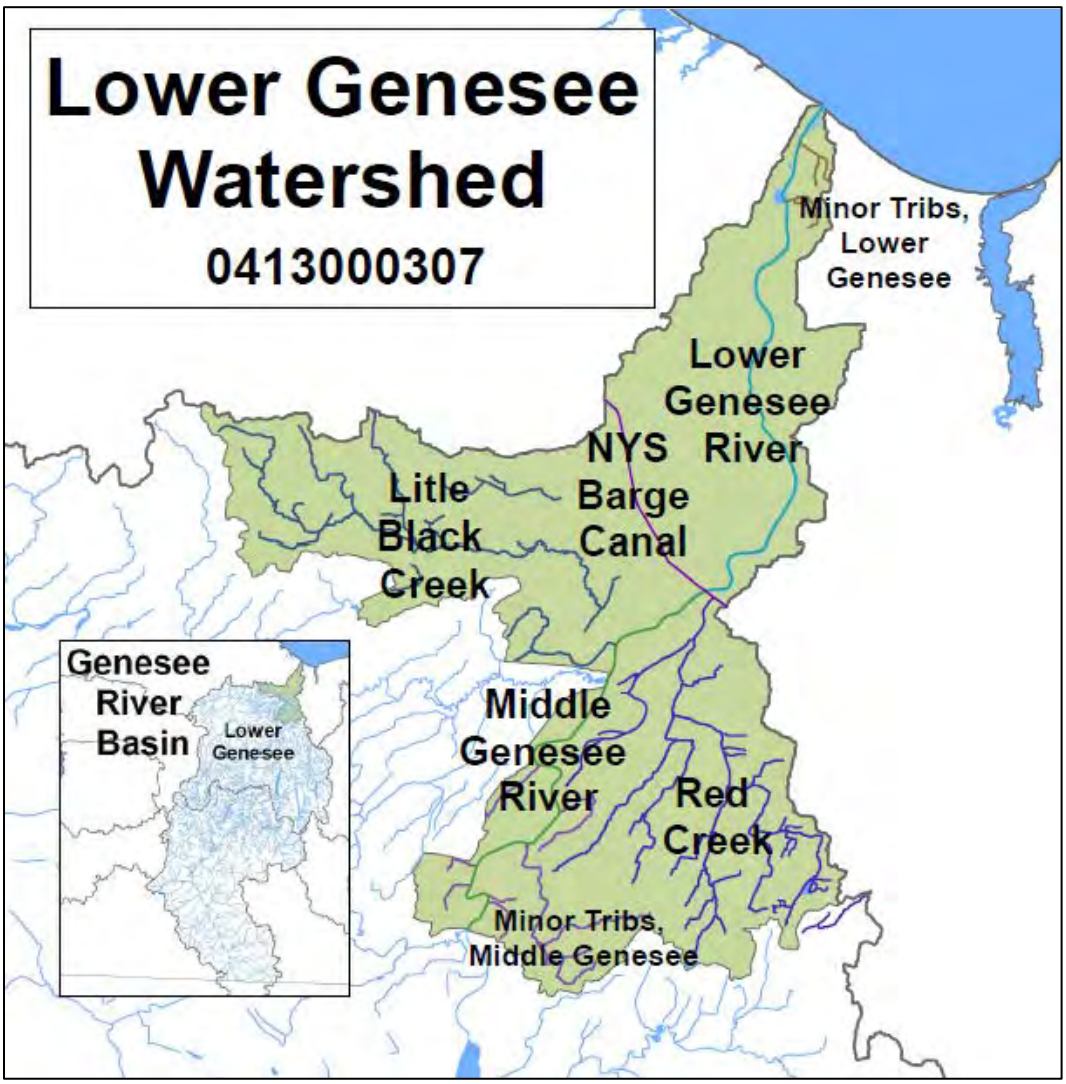
81*	1.13
82*	1.12
83*	1.11
84*	1.10
85*	1.09
86*	1.08
87*	1.07
88*	1.06
89*	1.05
90*	1.04
91*	1.03
92*	1.02
93*	1.01
94*	1.00
95*	1.00
96*	0.99
97*	0.98
98*	0.97
99*	0.96
100*	0.96
101*	0.95
102*	0.94
103*	0.94
104*	0.93
105*	0.92
106*	0.91
107*	0.91
108*	0.90
109*	0.90
110*	0.89
111*	0.88
112*	0.88
113*	0.87
114*	0.87
115*	0.86
116*	0.86
117*	0.85
118*	0.84
119*	0.84
120	0.83

*values for noted rows are calculated estimates

APPENDIX C

References

Contents



Lower Genesee Watershed
(0413000307)

Water Index Number	Waterbody Segment	Category
Ont 117 (portion 1)	Genesee River, Lower, Main Stem (0401-0001)	Impaired
Ont 117 (portion 2)	Genesee River, Middle, Main Stem (0401-0003)	Minor Impacts
Ont 117- 1 thru 7	Minor Tribs to Lower Genesee River (0401-0013)	Unassessed
NYS Barge Canal (portion 3)	NYS Barge Canal (portion 3) (0401-0012)	Unassessed
Ont 117- 8 thru 24 (selected)	Minor Tribs to Middle Genesee River (0403-0028)	Unassessed
Ont 117- 14	Red Creek and tribs (0402-0024)	Minor Impacts
Ont 117- 18	Little Black Creek, Lower, and tribs (0402-0047)	Impaired

Genesee River, Lower, Main Stem (0401-0001) Impaired

Waterbody Location Information

Revised: 11/30/2016

Water Index No:	Ont 117 (portion 1)	**Water Class:**	B
Hydro Unit Code:	Genesee River (0413000307)	**Drainage Basin:**	Genesee River
Water Type/Size:	River/Stream 11.7 Miles	**Reg/County:**	8/Monroe (28)
Description:	from mouth to NYS Barge Canal		

Water Quality Problem/Issue Information

Uses Evaluated	**Severity**	**Confidence**
Water Supply	N/A	-
Public Bathing	Stressed	Suspected
Recreation	Stressed	Suspected
Aquatic Life	Stressed	Known
Fish Consumption	Impaired	Known
Conditions Evaluated		
Habitat/Hydrology	Unknown	
Aesthetics	Fair	

Type of Pollutant(s) (CAPS indicate Major Pollutants/Sources that contribute to an Impaired/Precluded Uses)

Known: PRIORITY ORGANICS (PCBs), PRIORITY ORGANICS (dioxin), PESTICIDES (mirex) , Nutrients (phosphorus), Silt/Sediment

Suspected: PATHOGENS

Unconfirmed: - - -

Source(s) of Pollutant(s)

Known: Urban/Storm Runoff

Suspected: TOXIC/CONTAMINATED SEDIMENT, Municipal Discharges, Other Non-Permitted Sanitary Disch, Industrial Discharges

Unconfirmed: - - -

Management Information

Management Status: Restoration/Protection Strategy Needed

Lead Agency/Office: DOW/Reg8

IR/305(b) Code: Impaired Water Requiring a TMDL (IR Category 5)

Further Details

Overview

This portion of the Genesee River is assessed as an impaired waterbody due to fish consumption that is known to be impaired by priority organics (PCBs, dioxin) and pesticides (mirex) in contaminated sediment, the result of past/historic discharges. Recreational uses are also thought to be impaired by pathogen, however additional monitoring in necessary to verify this impairment. Public bathing and other recreational uses, as well as aquatic life are considered to experience minor impacts due to various pollutants from urban/storm runoff and other point and nonpoint sources in the highly-urbanized metropolitan Rochester area. Water quality at the mouth of the Genesee River is also impacted by elevated nutrient and silt/sediment loads the originate from agricultural and other nonpoint sources throughout the large rural watershed.

Use Assessment

This waterbody segment is a Class B waterbody, suitable for public bathing, general recreation use and support of aquatic life, but not as a water supply.

Fish consumption in the Lower Genesee River is impaired due to a NYS DOH health advisory that recommends eating no carp or channel catfish, and no more than one meal per month ofWhite sucker, white perch, larger lake trout (greater than 25 inches) or larger brown trout (greater than 20 inches) because of elevated PCBs, dioxin and mirex levels. The source of this contamination is considered to be contaminated sediment, the result of past industrial activity/discharges and pesticide use. The advisory for this waterbody was first issued prior to 1998-99. (NYS DOH Health Advisories and DEC/FWMR, Habitat, January 2014)

Aquatic life is evaluated as supported but stressed based on biological sampling that shows slight impacts and sampling data showing other water quality concerns. This sampling can also be used to infer that there may be other minor impacts to recreational (fishing) uses, although more specific sampling is necessary to confirm this is the case. Additional (bacteriological) sampling is needed to more fully evaluate public bathing and other recreational uses. (DEC, DOW, BWAM, July 2014)

Water Quality Information

Biological (macroinvertebrate) assessments of the Lower Genesee in the Rochester Area were most recently conducted at various sites (below the Barge Canal, at Route 104, at Boxart Street) as part of the RIBS monitoring effort in 2014 and 2009. Sampling results reflect fair (near the mouth) to good (upstream near the canal) water quality, with the macroinvertebrate community altered from what is expected under natural conditions. Some expected sensitive species are not present and overall macroinvertebrate species richness is lower than expected. Some changes in community composition have occurred due to replacement of sensitive ubiquitous taxa by more tolerant taxa, but overall there is still balanced distribution of all expected taxa. In spite of these minor impacts, aquatic life is considered to be supported. (DEC/DOW, BWAM/SBU, January 2015)

NYSDEC Rotating Intensive Basin Studies (RIBS) Routine Network monitoring of the Genesee River in Rochester (at Genesee Docks/Boxart Street) is conducted every year. The most recent overall assessments at this site are from 1999 and 2000. Macroinvertebrate assessment showed slight impact to the invertebrate community, and fish communities are considered to be adequate. Concerns were raised at the time regarding elevated levels of metals and PAHs in biologic tissue samples and sediment samples; water column parameters of concern were limited to iron and aluminum. Toxicity testing showed significant reproductive impairment to the test organisms in one of two tests conducted. Two other locations upstream in this reach were sampled by the Stream Biomonitoring Unit in 1999; based on the resident invertebrates, water quality was determined to be slightly impacted at one location (at the Ridge Road bridge), and severely impacted at the other (immediately below the inflow of the Barge Canal). Note: The more recent assessment at the Barge Canal site reflected non-impacted conditions in 2009. (DEC/DOW, BWAR/SWAS, January 2003).

This RIBS chemical sampling as well as a number of older water quality studies that have indicated impacts to aquatic life in the river were conducted prior to the discontinuation of large industrial discharges from the Kodak Park facility and Kings Landing

Source Assessment

There are a wide range of sources that contribute pollutants to this waterbody. The highly urbanized surrounding area suggests urban/storm runoff, municipal and industrial point sources and other sanitary discharges may be contributing to impacts in the River. The Lower Genesee River is also affected by nutrient and silt/sediment loads that originate throughout the watershed.

Previously cited sources of impacts to the River that require more current reassessment include hydroelectric generating plants along the river that divert water to generate powe and may have some impact on the fishery in the river (US Fish and Wildlife Service, 2001), combined sewer overflows and inactive hazardous waste sites.

Management Actions

Efforts to reduce the wastewater contribution of nutrient loadings throughout the wasteshed have been undertaken. A CSO abatement program uses deep tunnel storage to minimize discharges of combined sewage.

Efforts to restore and protect the waters of the Lower Genesee are intertwined with similar efforts in Lake Ontario. These efforts are coordinated by the NYSDEC Great Lakes Program. Working with stakeholders throughout the basin, the Program has developed a new, fully integrated action plan that guides restoration and conservation activities in New York's Great Lakes region. This action plan, or interim Great Lakes Action Agenda, is a multi-agency, multi-program,

and cross-region strategic plan to support innovative programs and build new partnerships at multiple levels of local, state, and federal government across the state's Great Lakes basin. The plan identifies high priority actions and focuses federal and state funding opportunities to address the most critical challenges unique to this region, including contamination clean-up, restoration of fish and wildlife, waterfront and economic development, climate change resiliency strategies, and recreation and tourism development. The Rochester Embayment Area of Concern is one of a number of major focus areas. (DEC, Great Lakes Program, July 2015)

Section 303(d) Listing

The Lower Genesee River is included on the current (2016) NYS Section 303(d) List of Impaired/TMDL Waters. The waterbody is included on Part 2b as an impaired water (fish consumption) needing a TMDL to address PCBs, dioxin and mirex contamination, and on Part 3a as a waterbody impaired by pathogens for which TMDL Development May be Deferred pending verification of the impairment). This waterbody was first listed (for all impairments) on the 2004 List. In 2016 the waterbody was delisted for phosphorus and silt and sediment due to reassessment.

Segment Description

This segment includes the portion of the river from the mouth at Lake Ontario, to the NYS Barge Canal. The waters of this portion of the river are Class B. Tribs to this reach/segment are listed separately.

Genesee River, Middle, Main Stem (0401-0003) Minor Impacts

Waterbody Location Information

Revised: 11/30/2016

Water Index No:	Ont 117 (portion 2)	**Water Class:**	B
Hydro Unit Code:	Genesee River (0413000307)	**Drainage Basin:**	Genesee River
Water Type/Size:	River/Stream 10.6 Miles	**Reg/County:**	8/Monroe (28)
Description:	from NYS Barge Canal to Scottsville		

Water Quality Problem/Issue Information

Uses Evaluated	**Severity**	**Confidence**
Water Supply	N/A	-
Public Bathing	Unassessed	-
Recreation	Stressed	Suspected
Aquatic Life	Stressed	Known
Fish Consumption	Fully Supported	Unconfirmed
Conditions Evaluated		
Habitat/Hydrology	Unknown	
Aesthetics	Unknown	

Type of Pollutant(s) (CAPS indicate Major Pollutants/Sources that contribute to an Impaired/Precluded Uses)

Known:	Nutrients (phosphorus)
Suspected:	Silt/Sediment
Unconfirmed:	- - -

Source(s) of Pollutant(s)

Known:	Agriculture, Streambank Erosion
Suspected:	Municipal Discharges, Urban/Storm Runoff
Unconfirmed:	Hydro Alteration

Management Information

Management Status:	Restoration/Protection Strategy Needed
Lead Agency/Office:	DOW/Reg8
IR/305(b) Code:	Impaired Water Requiring a TMDL (IR Category 5)

Further Details

Overview
This portion of the Genesee River is assessed as having minor impacts due to aquatic life that is known to be stressed by nutrient loads from agricultural activity in the watershed, other nonpoint sources, and possibly municipal discharges.

Use Assessment
This waterbody segment is a Class B waterbody, suitable for public bathing, general recreation use and support of aquatic life, but not as a water supply.

Aquatic life is evaluated as supported but stressed based on biological sampling that shows slight impacts. This sampling can also be used to infer that there may be minor impacts to recreational (fishing) uses, although more specific sampling is necessary to confirm this is the case. Additional (bacteriological) sampling is needed to more fully evaluate public bathing and other recreational uses. (DEC, DOW, BWAM, July 2014)

There are no health advisories in place limiting the consumption of fish from this waterbody (beyond the general advice for all waters). Fish consumption is considered to be fully supported based on the absence of any waterbody-specific advisory, but is noted as unconfirmed since routine monitoring of contaminants in fish is limited. (NYS DOH Health

Advisories and DEC/DOW, BWAM, January 2014)

Water Quality Information

A biological (macroinvertebrate) assessment was conducted in Rochester/Genesee Valley Park (at a site just above the NYS Barge Canal near Route 490) 2014 and 2009. Sampling results reflect generally good water quality. Conditions were in the slightly impacted range but approaching non-impacted and communities were most similar to natural conditions. The macroinvertebrate community shows some beginning signs of alteration, some expected sensitive species are not present and overall macroinvertebrate species richness is somewhat lower than expected, but overall there is still balanced distribution of all expected taxa. Aquatic life is supported and there are no other apparent water quality impacts. This evaluation is consistent with results from previous sampling at the site conducted in 2004. (DEC/DOW, BWAM/SBU, January 2015)

Sampling results from 1999 indicated severely impacted water quality conditions. Similar conditions were noted in samples collected just below the canal as well. These results were also similar to samples collected in 1995. The cause of the impact is thought to be high nutrient loads to the river which produce algal blooms and cause reduction in dissolved oxygen. These conditions may have been exacerbated by low flow conditions in both sampling years. (DEC/DOW, BWAR/SBU, December 2001)

Source Assessment

Agricultural activities and other nonpoint sources, as well as overall municipal wastewater to the watershed are thought to be the most significant sources of nutrients to the River. Previous assessments have also cited high sediment loads. However much of the sediment loading is considered to be natural, as the river flows through an alluvial plain with highly erodible soils. Streambank erosion is a particular concern at a few points where roads are close to the river and prevent widening that would naturally occur. Undercutting of the riverbanks has been noted and rip–rap has been used as a stop–gap measure. Recent studies have also documented the impact of flood control operations at the Mount Morris Dam on streambank erosion in the River (Young, SUNY Geneseo, 1997). Agricultural activtities in the area also contribute runoff and sediment loads to the river. (Monroe County Health, April 2001)

Management Actions

Efforts to restore and protect the waters of the Genesee are coordinated by the NYSDEC Great Lakes Program. Working with stakeholders throughout the basin, the Program has developed a new, fully integrated action plan that guides restoration and conservation activities in New York's Great Lakes region. This action plan, or interim Great Lakes Action Agenda, is a multi-agency, multi-program, and cross-region strategic plan to support innovative programs and build new partnerships at multiple levels of local, state, and federal government across the state's Great Lakes basin. The plan identifies high priority actions and focuses federal and state funding opportunities to address the most critical challenges unique to this region, including contamination clean-up, restoration of fish and wildlife, waterfront and economic development, climate change resiliency strategies, and recreation and tourism development. The Rochester Embayment Area of Concern is one of a number of major focus areas. (DEC, Great Lakes Program, July 2015)

Section 303(d) Listing

The waterbody is not included on the current (2016) NYS Section 303(d) List of Impaired/TMDL Waters. The Middle Genesee River was originally listed in 2004 and was delisted in 2016 due to reassessment indicating only minor impacts from identified pollutants. (DEC/DOW, BWAM/WQAS, April 2016)

Segment Description

This segment includes the portion of the river from the NYS Barge Canal to Oatka Creek (-25) in Scotsville. The waters of this portion of the river are Class B. Tribs to this reach/segment are listed separately.

Minor Tribs to Lower Genesee River (0401-0013) Unassessed

Waterbody Location Information

Revised: 10/19/2015

Water Index No:	Ont 117- 1 thru 7	**Water Class:**	C
Hydro Unit Code:	Genesee River (0413000307)	**Drainage Basin:**	Genesee River
Water Type/Size:	River/Stream 3.6 Miles	**Reg/County:**	8/Monroe (28)
Description:	total length of selected/smaller tribs to Genesee River		

Water Quality Problem/Issue Information

Uses Evaluated	**Severity**	**Confidence**
Water Supply	N/A	-
Public Bathing	N/A	-
Recreation	Unassessed	-
Aquatic Life	Unassessed	-
Fish Consumption	Unassessed	-
Conditions Evaluated		
Habitat/Hydrology	Unknown	
Aesthetics	Unknown	

Type of Pollutant(s) (CAPS indicate Major Pollutants/Sources that contribute to an Impaired/Precluded Uses)

Known: - - -
Suspected: - - -
Unconfirmed: - - -

Source(s) of Pollutant(s)

Known: - - -
Suspected: - - -
Unconfirmed: - - -

Management Information

Management Status: Unassessed
Lead Agency/Office: DOW/BWAM
IR/305(b) Code: Water with Insufficient Data (IR Category 3)

Further Details

Overview
Currently there is inadequate data/information to evaluate uses and determine a water quality assessment for this waterbody.

Use Assessment
This waterbody segment is a Class C waterbody, suitable for general recreation use and support of aquatic life, but not as a water supply or for public bathing.

Water Quality Information
There is currently no water quality information available upon which to base an assessment.

Source Assessment
Specific sources of pollutants to the waterbody have not been identified.

Management Actions
No specific management actions have been identified for the waterbody. Baseline sampling to evaluate conditions in this

waterbody segment is needed.

Section 303(d) Listing
This trib waterbody is not included on the current (2014) NYS Section 303(d) List of Impaired/TMDL Waters. There is insufficient information to make a listing decision. (DEC/DOW, BWAM, January 2015)

Segment Description
This segment includes the total length of all tribs to the Genesee River (from its mouth to the NYS Barge Canal). Tribs within this segment are Class C; a few small impoundments are Class B.

NYS Barge Canal (portion 3) (0401-0012) Unassessed

Waterbody Location Information

Revised: 10/19/2015

Water Index No:	NYS Barge Canal (portion 3)	**Water Class:**	B
Hydro Unit Code:	Genesee River (0413000307)	**Drainage Basin:**	Genesee River
Water Type/Size:	River/Stream 25 Miles	**Reg/County:**	8/Monroe (28)
Description:	from Rochester to Henrietta		

Water Quality Problem/Issue Information

Uses Evaluated	**Severity**	**Confidence**
Water Supply	N/A	-
Public Bathing	Unassessed	-
Recreation	Unassessed	-
Aquatic Life	Unassessed	-
Fish Consumption	Unassessed	-
Conditions Evaluated		
Habitat/Hydrology	Unknown	
Aesthetics	Unknown	

Type of Pollutant(s) (CAPS indicate Major Pollutants/Sources that contribute to an Impaired/Precluded Uses)

Known: - - -
Suspected: - - -
Unconfirmed: - - -

Source(s) of Pollutant(s)

Known: - - -
Suspected: - - -
Unconfirmed: - - -

Management Information

Management Status: Unassessed
Lead Agency/Office: DOW/BWAM
IR/305(b) Code: Water with Insufficient Data (IR Category 3)

Further Details

Overview
Currently there is inadequate data/information to evaluate uses and determine a water quality assessment for this waterbody. A previous assessment of more than 10 years ago indicated possible impacts that needed to be verified.

Use Assessment
This waterbody segment is a Class B waterbody, suitable for public bathing, general recreation use and support of aquatic life, but not as a water supply.

Water Quality Information
There is currently no water quality information available upon which to base an assessment.

Source Assessment
Specific sources of pollutants to the waterbody have not been identified.

Management Actions
No specific management actions have been identified for the waterbody. Baseline sampling to evaluate conditions in this

waterbody segment is needed.

Section 303(d) Listing
This trib waterbody is not included on the current (2014) NYS Section 303(d) List of Impaired/TMDL Waters. There is insufficient information to make a listing decision. (DEC/DOW, BWAM/WQAS, January 2015)

Segment Description
This segment includes the portion of the canal within the Genesee River Basin, from from 0.3 mile west of East Henrietta Road Bridge in Henrietta to 0.2 mile west of Lee Road Bridge in Gates.

Minor Tribs to Middle Genesee River (0402-0086) Unassessed

Waterbody Location Information

Revised: 10/19/2015

Water Index No:	Ont 117- 8 thru 24 (selected)	**Water Class:**	C
Hydro Unit Code:	Genesee River (0413000307)	**Drainage Basin:**	Genesee River
Water Type/Size:	River/Stream 15.7 Miles	**Reg/County:**	8/Monroe (28)
Description:	total length of selected/smaller tribs to Genesee River		

Water Quality Problem/Issue Information

Uses Evaluated	**Severity**	**Confidence**
Water Supply	N/A	-
Public Bathing	N/A	-
Recreation	Unassessed	-
Aquatic Life	Unassessed	-
Fish Consumption	Unassessed	-
Conditions Evaluated		
Habitat/Hydrology	Unknown	
Aesthetics	Unknown	

Type of Pollutant(s) (CAPS indicate Major Pollutants/Sources that contribute to an Impaired/Precluded Uses)

Known: - - -
Suspected: - - -
Unconfirmed: - - -

Source(s) of Pollutant(s)

Known: - - -
Suspected: - - -
Unconfirmed: - - -

Management Information

Management Status: Unassessed
Lead Agency/Office: DOW/BWAM
IR/305(b) Code: Water with Insufficient Data (IR Category 3)

Further Details

Overview
Currently there is inadequate data/information to evaluate uses and determine a water quality assessment for this waterbody.

Use Assessment
This waterbody segment is a Class C waterbody, suitable for general recreation use and support of aquatic life, but not as a water supply or for public bathing.

Water Quality Information
There is currently no water quality information available upon which to base an assessment.

Source Assessment
Specific sources of pollutants to the waterbody have not been identified.

Management Actions
No specific management actions have been identified for the waterbody. Baseline sampling to evaluate conditions in this

waterbody segment is needed.

Section 303(d) Listing
This trib waterbody is not included on the current (2014) NYS Section 303(d) List of Impaired/TMDL Waters. There is insufficient information to make a listing decision. (DEC/DOW, BWAM, January 2015)

Segment Description
This segment includes the total length of selected/smaller tribs to the Genesee River (from the NYS Barge Canal to Oatka Creek). Tribs within this segment are Class C. Red Creek (-14), Little Black Creek (-18) and Black Creek (-19) are listed as separate segments.

Red Creek and tribs (0402-0024) Minor Impacts

Waterbody Location Information

Revised: 11/30/2016

Water Index No:	Ont 117- 14	**Water Class:**	C
Hydro Unit Code:	Genesee River (0413000307)	**Drainage Basin:**	Genesee River
Water Type/Size:	River/Stream 45.9 Miles	**Reg/County:**	8/Monroe (28)
Description:	entire stream and tribs		

Water Quality Problem/Issue Information

Uses Evaluated	**Severity**	**Confidence**
Water Supply	N/A	-
Public Bathing	N/A	-
Recreation	Stressed	Suspected
Aquatic Life	Stressed	Known
Fish Consumption	Fully Supported	Unconfirmed
Conditions Evaluated		
Habitat/Hydrology	Fair	
Aesthetics	Unknown	

Type of Pollutant(s) (CAPS indicate Major Pollutants/Sources that contribute to an Impaired/Precluded Uses)

Known: - - -
Suspected: Unknown Pollutants (biological impacts), Nutrients (phosphorus), Water Level/Flow
Unconfirmed: - - -

Source(s) of Pollutant(s)

Known: Urban/Storm Runoff, Hydro Alteration
Suspected: Private/Commercial/Institutional Discharges, Other/Non-Permitted Sanitary Discharge
Unconfirmed: Agriculture

Management Information

Management Status: Verification of Sources Needed
Lead Agency/Office: DEC/Reg8
IR/305(b) Code: Water Attaining All Standards (IR Category 1)

Further Details

Overview
Red Creek is assessed as having minor impacts due to aquatic life impacts are considered to be stressed. No specific pollutants or sources have been identified, but sampling results and land use suggests impacts may be a result of elevated nutrient loadings thought to be the result of urban runoff, possible sanitary discharges and agricultural activity in the upstream watershed. Hydrologic impacts related to NYS Barge Canal operations also have an impact on the creek.

Use Assessment
Red Creek is a Class C waterbody, suitable for general recreation use and support of aquatic life, but not as a water supply or for public bathing.

Aquatic life is evaluated as stressed based on biological sampling that shows slight/minor impacts. This sampling can also be used to infer that there are no significant impacts to recreational (fishing) uses, although more specific sampling is necessary to confirm this is the case. (DEC, DOW, BWAM, July 2014)

There are no health advisories in place limiting the consumption of fish from this waterbody (beyond the general advice

for all waters). Fish consumption is considered to be fully supported based on the absence of any waterbody-specific advisory, but is noted as unconfirmed since routine monitoring of contaminants in fish is limited. (NYS DOH Health Advisories and DEC/DOW, BWAM, January 2014)

Water Quality Information

A biological (macroinvertebrate) assessment of Red Creek in Rochester (at East River Road in Genesee Valley Park) was conducted as part of the RIBS biological screening effort in 2014. Sampling results reflect fair water quality, with the macroinvertebrate community altered from what is expected under natural conditions and indications of residential wastewater as well as impoundment effects. Some expected sensitive species are not present and overall macroinvertebrate species richness is lower than expected. Some changes in community composition have occurred due to replacement of sensitive ubiquitous taxa by more tolerant taxa, but overall there is still balanced distribution of all expected taxa. In spite of these minor impacts, aquatic life is considered to be supported. Results from a previous samilg of the creek (at East Valley Road in Genesee Valley Park) reflected moderately impacted (poor) water quality with indications of elevated nutrient enrichment. However the sample results show the effects of the swampy habitat at the site of the sample as well as upstream. The sample was collected in slack water using the "net jab" protocol, though after applying a correction factor due to slack water the site was still assessed as moderately impacted, though heavily skewed towards impoundment effects. The level of impairment was deemed appropriate to add the water to the Section 303(d) List, but additional follow-up sampling suggests the listing be removed. (DEC/DOW, BWAM/SBU, November 2016)

Source Assessment

More general nonpoint sources are thought to affect water quality in this residential, commercial area. These include parking lot and other urban runoff, illegal floor drains from area businesses (car dealerships) and a couple of industrial inactive hazardous waste sites. Agricultural activity in the watershed is also thought to contribute some loading, however much of the sediment loading is considered to be natural, as the river flows through an alluvial plain with highly erodible soils. A Streambank Erosion Assessment Project is being conducted by the Monroe County SWCD. Sites along Red Creek that were investigated in 2000 include Crittenden Road (new bridge constricting flow), Castle Road (erosion of unprotected banks) and Rush–Henrietta bus garage (parking lot runoff). (DEC/DOW, Region 8, May 2001)

Roehlen Engraving and Stuart-Oliver-Holtz (metal finishing) are two inactive hazardous waste sites. Soil and groundwater contamination (organics, metals) has been documented at both sites. At Roehlen, soil contamination (chromium and TCE) was generally limited to the site itself. Groundwater contamination was also determined to be largely limited, but long-term groundwater treatment and monitoring is ongoing. Investigation of the Stuart-Oliver-Holtz site found leaking drums and migration of contaminated groundwater. Remediation actions were completed in 2006. A supplemental investigation, completed in 2009, further delineated the soil source and groundwater contamination and found a majority of the groundwater plume was contained within the site boundaries. (DEC/DER, Environmental Site Remediation Database, November 2009)

Stream flow in the creek is also significantly affected by the water levels of the Genesee River and NYS Barge Canal. If not for the artificial elevation control of the Genesee River and canal, the stream would be dry much of the year. However because of the impact of the river, flooding in the spring and during heavy rains is common. Some roads in the area become impassable for as long as days because runoff flow to the river is restricted. The situation also affects residences in the Mapledale Subdivision, resulting in flooded basements and occasional overflowing of the stream bank and surcharging of the sanitary sewers. (Monroe County Health Department, May 2001)

Management Actions

No specific management actions have been identified for the waterbody. Previous assessment of the site noted some source trackdown efforts. Red Creek is included on the Section 303(d) List but requiring verification of conditions. More recent sampling indicates it would be appropriate to remove the listing.

Section 303(d) Listing

Red Creek is included on the current (2016) NYS Section 303(d) List of Impaired/TMDL Waters. The waterbody is included on Part 3b of the List as an impaired waterbody requiring verification of the pollutant/cause and sources of the aquatic life impacts. However this updated assessment suggests that the suspected impacts to water quality and uses are not sufficient to warrant continued listing. This waterbody should be [considered for] delisting [for pollutant] during the next update of the List. (DEC/DOW, BWAM/WQAS, January 2016)

Segment Description

This segment includes the entire stream and all tribs. The waters of the stream are primarily Class C, with a short Class B reach from the mouth to Crittenden Road. Tribs to this reach are Class C.

Little Black Creek, Lower, and tribs (0402-0047) Impaired

Waterbody Location Information

Revised: 11/30/2016

Water Index No:	Ont 117- 18	**Water Class:**	C
Hydro Unit Code:	Genesee River (0413000307)	**Drainage Basin:**	Genesee River
Water Type/Size:	River/Stream 33.8 Miles	**Reg/County:**	8/Monroe (28)
Description:	stream and tribs from mouth to Coldwater		

Water Quality Problem/Issue Information

Uses Evaluated	**Severity**	**Confidence**
Water Supply	N/A	-
Public Bathing	N/A	-
Recreation	Stressed	Suspected
Aquatic Life	Impaired	Known
Fish Consumption	Unassessed	-
Conditions Evaluated		
Habitat/Hydrology	Fair	
Aesthetics	Unknown	

Type of Pollutant(s) (CAPS indicate Major Pollutants/Sources that contribute to an Impaired/Precluded Uses)

Known: Water Level/Flow
Suspected: UNKNOWN POLLUTANTS (biological impacts), Nutrients (phosphorus)
Unconfirmed: - - -

Source(s) of Pollutant(s)

Known: Urban/Storm Runoff
Suspected: UNKNOWN SOURCE, Agriculture
Unconfirmed: - - -

Management Information

Management Status: Verification of Problem Severity Needed
Lead Agency/Office: DOW/BWAM
IR/305(b) Code: Impaired Water Requiring a TMDL (IR Category 5)

Further Details

Overview
Little Black Creek is assessed as an impaired waterbody due to aquatic life that is known to be impaired. No specific pollutants of sources have been identified, but urban/stormwater runoff is a likely contributing source. Flooding issues in the watershed are also a concern.

Use Assessment
Little Black Creek is a Class C waterbody, suitable for general recreation use and support of aquatic life, but not as a water supply or for public bathing.

Aquatic life is evaluated as impaired based on biological sampling that shows significant impacts. This sampling can also be used to infer that there may be significant impacts to recreational (fishing) uses, although more specific sampling is necessary to confirm this is the case. (DEC, DOW, BWAM, July 2014)

Fish Consumption use is considered to be unassessed. There are no health advisories limiting the consumption of fish from this waterbody (beyond the general advice for all waters). However due to the presence of impacts/contaminants in the stream and the uncertainty as to whether the lack of a waterbody-specific health advisory is based on actual

sampling, fish consumption use is noted as unassessed, rather than fully supported but unconfirmed. (NYS DOH Health Advisories and DEC/DOW, BWAM, December 2014)

Water Quality Information

A biological (macroinvertebrate) assessment of Little Black Creek near Chili (at Beahan Road)was conducted in 2009. Sampling results reflect moderately impacted (poor) water quality, with sensitive taxa reduced, and the distribution of major taxonomic groups significantly different from what is naturally expected. Aquatic life is considered to be impaired. This evaluation is consistent with results from previous sampling at the site conducted in 2005, 2004 and 1999. (DEC/DOW, BWAM/SBU, January 2015)

Source Assessment

Specific sources of pollutants to the waterbody have not been identified. Increasing urbanization is assumed to contribute stormwater runoff and various other nonpoint source pollutants to the stream. Significant agricultural activity in the western half of the watershed includes dairy operations and manure spreading. (Monroe County Health Department, April 2001)

Flooding and other hydrologic issues are also of concern. The stream drains very flat terrain with several NYS Designated wetlands in an area that is undergoing increased development. Flooding has been a long-standing problem, but downed trees and a resident beaver population have exacerbated this problem. (Monroe County Health Department, April 2001)

Management Actions

Specific management actions for the waterbody have been limited. Little Black Creek is included on the Section 303(d) List for eventual development of a TMDL or other restoration strategy (see below). In the past, the Town of Ogden has obtained a permit to remove downed trees to open up the waterway and allow the stream to flow more freely. (DEC/DOW, BWAM, January 2008)

Section 303(d) Listing

Little Black Creek is included on the current (2016) NYS Section 303(d) List of Impaired/TMDL Waters. The waterbody is included on Part 3b of the List as an impaired waterbody requiring verification of the pollutant/cause and sources of the aquatic life impacts. This waterbody was first listed on the 2004 List. (DEC/DOW, BWAM/WQAS, January 2016)

Segment Description

This segment includes the stream and all tribs from the mouth to Route 251 in Coldwater. The waters of the stream and tribs are primarily Class C; a small portion of the stream from above Chili Avenue to Pixley Road and unnamed trib (-a) are Class B.

APPENDIX C: GEOTECHNICAL CONSULTATION, 4450.0 REVISED

Foundation Design, P.C.
SOIL • BEDROCK • GROUNDWATER

June 27, 2018

McCord Landscape Architecture
2129 Five Mile Line Road
Penfield, New York 14526

Attn: Douglas C. McCord, ASLA

Reference: Brewery Line Trail
St. Paul Street, Rochester, NY 14605
Geotechnical Consultation, 4450.0 Revised

Dear Mr. McCord:

This letter summarizes our Geotechnical Consultation for referenced project. It addresses the soil borings and our design analysis. We base this submission on the field data and our current understanding of the proposed redevelopment. In brief, setting the new trail back from the cliff face as proposed should provide relief from the ongoing slope erosive failure.

The existing trail was developed between a railroad alignment and the top of the slope over the Genesee River. The trail extends from Platt Street (at the Pont de Rennes Bridge) southward to the maintenance building north of the New York Central Railroad Bridge.

The existing park was constructed in 1977 and the parcel is to be redeveloped, also as a park. We envision that the updated park will have minimal re-grading associated with it. The intent is to incorporate "Green" design and construction practices. This will likely mean that new walk ways will be permeable to facilitate stormwater infiltration. The new trail will also be set back from the edge of the Genesee Valley river wall/slope.

We subcontracted with Target Drilling to perform five soil borings as well as infiltration tests. Target Drilling performed the soil borings on June 5, 2018. The borings at B18-1 and B18-4 were

drilled to bedrock while the remaining locations were drilled to a depth of 10 feet. The boring logs are attached.

The boring logs showed topsoil, fill material, and native soil. Topsoil thickness varied from six to seven inches. The fill soils were loose to firm and mostly consisted of sand, silt, and trace organics. Fills were generally three to five feet deep except at boring B18-3, where they extend to nine feet below grade. Historical mapping shows that there were buildings in the areas around B18-3 and B18-5 at one time. This fill could be the remains of the associated demolition and backfill. Beneath this, the native soil was silty sand/sandy silt with portions of gravel. SPT N-values increased with depth, from loose to firm in the upper fills to compact to dense within five feet of the ground surface. Deeper soils transitioned to bedrock with associated refusal at about twenty feet below grade.

We installed pipes near the five soil boring locations for NYS DEC Stormwater Infiltration testing prior to backfilling. We performed infiltration testing on June 6, 2018. The infiltration test conducted at B18-1 infiltrated at a rate of 0.5-inches per hour. The infiltration test at B18-4 and B18-5 did not infiltrate at all (i.e. 0-inches per hour). We concluded that a tight seal around the pipes was not achieved at boring locations B18-2 and B18-3 due to problems encountered with their installation and eliminated them from this evaluation. All pipes were removed and backfilled upon completion.

Our broad conclusion is that the river gorge rockwall and overburden dense native soil are 'stable'. While the passage of time, seasonal, and climatic actions can change this, the trail project is not expected to. More detailed review and analysis of their respective long term behavior is not a part of this study.

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The upper loose fill soil and runoff from the existing asphalt trail are contributing to the erosion of the top of the slope. Setting the new trail back away from the top of slope as intended should relieve this condition. You should also take steps to limit surface water flow over the top of the slope. We recommend the following:

1. Cut the walkway areas to subgrade elevation. Note that the fill and native soils are loose to very dense with trace organics present in the fills. Proof roll the subgrade with a roller or large plate tamper. Undercut soft areas or areas that contain significant organic debris. With this, we expect that the fill will reasonably support new walkways. Keep in mind some long-term settlement is possible.

2. Use a new subbase of at least 12" of N.Y.S.D.O.T. Item 304.13. This will help bridge over the fill soil. Backfill utility trenches with crusher-run stone, N.Y.S.D.O.T. Item 304.13. Place the material in lifts and to at least 95% compaction based on ASTM D1557, modified proctor.

3. Infiltration testing showed very low rates. From a slope stability perspective, our preference would be to limit groundwater movement towards the slope. Lastly, the deeper fills may settle if they are subject to large volumes of water. For these reasons our preference would be to control runoff with surface features that will take the water away from the slope.

This concludes the main points of our review/consultation to date. Let us know if we can be of further assistance herein and schedule us to review the fill conditions as the work proceeds.

Very truly yours,

FOUNDATION DESIGN, P.C.

James M. Baker, P.E.
President
Enc.

Important Information about This

Geotechnical-Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

Geotechnical Services Are Performed for Specific Purposes, Persons, and Projects

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical-engineering study conducted for a civil engineer may not fulfill the needs of a constructor — a construction contractor — or even another civil engineer. Because each geotechnical- engineering study is unique, each geotechnical-engineering report is unique, prepared *solely* for the client. No one except you should rely on this geotechnical-engineering report without first conferring with the geotechnical engineer who prepared it. *And no one — not even you* — should apply this report for any purpose or project except the one originally contemplated.

Read the Full Report

Serious problems have occurred because those relying on a geotechnical-engineering report did not read it all. Do not rely on an executive summary. Do not read selected elements only.

Geotechnical Engineers Base Each Report on a Unique Set of Project-Specific Factors

Geotechnical engineers consider many unique, project-specific factors when establishing the scope of a study. Typical factors include: the client's goals, objectives, and risk-management preferences; the general nature of the structure involved, its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless the geotechnical engineer who conducted the study specifically indicates otherwise, do not rely on a geotechnical-engineering report that was:

- not prepared for you;
- not prepared for your project;
- not prepared for the specific site explored; or
- completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical-engineering report include those that affect:

- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light-industrial plant to a refrigerated warehouse;
- the elevation, configuration, location, orientation, or weight of the proposed structure;
- the composition of the design team; or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes—even minor ones—and request an assessment of their impact. *Geotechnical engineers cannot accept responsibility or liability for problems that occur because their reports do not consider developments of which they were not informed.*

Subsurface Conditions Can Change

A geotechnical-engineering report is based on conditions that existed at the time the geotechnical engineer performed the study. *Do not rely on a geotechnical-engineering report whose adequacy may have been affected by*: the passage of time; man-made events, such as construction on or adjacent to the site; or natural events, such as floods, droughts, earthquakes, or groundwater fluctuations. *Contact the geotechnical engineer before applying this report to determine if it is still reliable.* A minor amount of additional testing or analysis could prevent major problems.

Most Geotechnical Findings Are Professional Opinions

Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. Geotechnical engineers review field and laboratory data and then apply their professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ — sometimes significantly — from those indicated in your report. Retaining the geotechnical engineer who developed your report to provide geotechnical-construction observation is the most effective method of managing the risks associated with unanticipated conditions.

A Report's Recommendations Are Not Final

Do not overrely on the confirmation-dependent recommendations included in your report. *Confirmation-dependent recommendations are not final,* because geotechnical engineers develop them principally from judgment and opinion. Geotechnical engineers can finalize their recommendations *only* by observing actual subsurface conditions revealed during construction. *The geotechnical engineer who developed your report cannot assume responsibility or liability for the report's confirmation-dependent recommendations if that engineer does not perform the geotechnical-construction observation required to confirm the recommendations' applicability.*

A Geotechnical-Engineering Report Is Subject to Misinterpretation

Other design-team members' misinterpretation of geotechnical-engineering reports has resulted in costly

problems. Confront that risk by having your geotechnical engineer confer with appropriate members of the design team after submitting the report. Also retain your geotechnical engineer to review pertinent elements of the design team's plans and specifications. Constructors can also misinterpret a geotechnical-engineering report. Confront that risk by having your geotechnical engineer participate in prebid and preconstruction conferences, and by providing geotechnical construction observation.

Do Not Redraw the Engineer's Logs

Geotechnical engineers prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in a geotechnical-engineering report should *never* be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, *but recognize that separating logs from the report can elevate risk.*

Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can make constructors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give constructors the complete geotechnical-engineering report, *but* preface it with a clearly written letter of transmittal. In that letter, advise constructors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with the geotechnical engineer who prepared the report (a modest fee may be required) and/or to conduct additional study to obtain the specific types of information they need or prefer. A prebid conference can also be valuable. *Be sure constructors have sufficient time* to perform additional study. Only then might you be in a position to give constructors the best information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions.

Read Responsibility Provisions Closely

Some clients, design professionals, and constructors fail to recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic expectations that have led to disappointments, claims, and disputes. To help reduce the risk of such outcomes, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Environmental Concerns Are Not Covered

The equipment, techniques, and personnel used to perform an *environmental* study differ significantly from those used to perform a *geotechnical* study. For that reason, a geotechnical-engineering report does not usually relate any environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated environmental problems have led to numerous project failures.* If you have not yet obtained your own environmental information, ask your geotechnical consultant for risk-management guidance. *Do not rely on an environmental report prepared for someone else.*

Obtain Professional Assistance To Deal with Mold

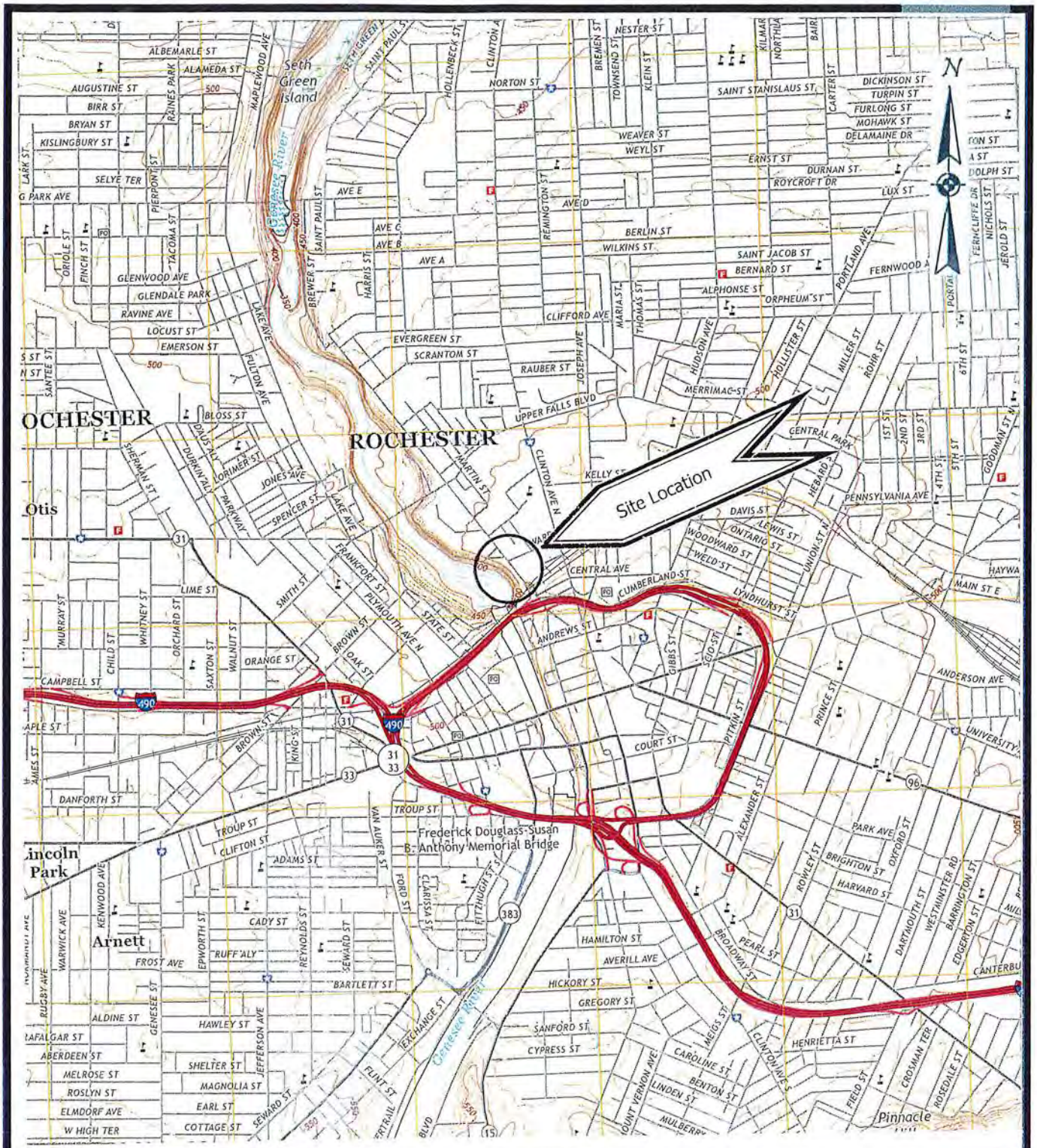
Diverse strategies can be applied during building design, construction, operation, and maintenance to prevent significant amounts of mold from growing on indoor surfaces. To be effective, all such strategies should be devised for the *express purpose* of mold prevention, integrated into a comprehensive plan, and executed with diligent oversight by a professional mold-prevention consultant. Because just a small amount of water or moisture can lead to the development of severe mold infestations, many mold- prevention strategies focus on keeping building surfaces dry. While groundwater, water infiltration, and similar issues may have been addressed as part of the geotechnical- engineering study whose findings are conveyed in this report, the geotechnical engineer in charge of this project is not a mold prevention consultant; *none of the services performed in connection with the geotechnical engineer's study were designed or conducted for the purpose of mold prevention. Proper implementation of the recommendations conveyed in this report will not of itself be sufficient to prevent mold from growing in or on the structure involved.*

Rely, on Your GBC-Member Geotechnical Engineer for Additional Assistance

Membership in the Geotechnical Business Council of the Geoprofessional Business Association exposes geotechnical engineers to a wide array of risk-confrontation techniques that can be of genuine benefit for everyone involved with a construction project. Confer with you GBC-Member geotechnical engineer for more information.

GEOTECHNICAL BUSINESS COUNCIL
of the Geoprofessional Business Association

8811 Colesville Road/Suite G106, Silver Spring, MD 20910
Telephone: 301/565-2733 Facsimile: 301/589-2017
e-mail: info@geoprofessional.org www.geoprofessional.org



Foundation Design, P.C.

46A Sager Drive
Rochester, New York 14607
Phone (585) 458-0824
FAX (585) 458-3323

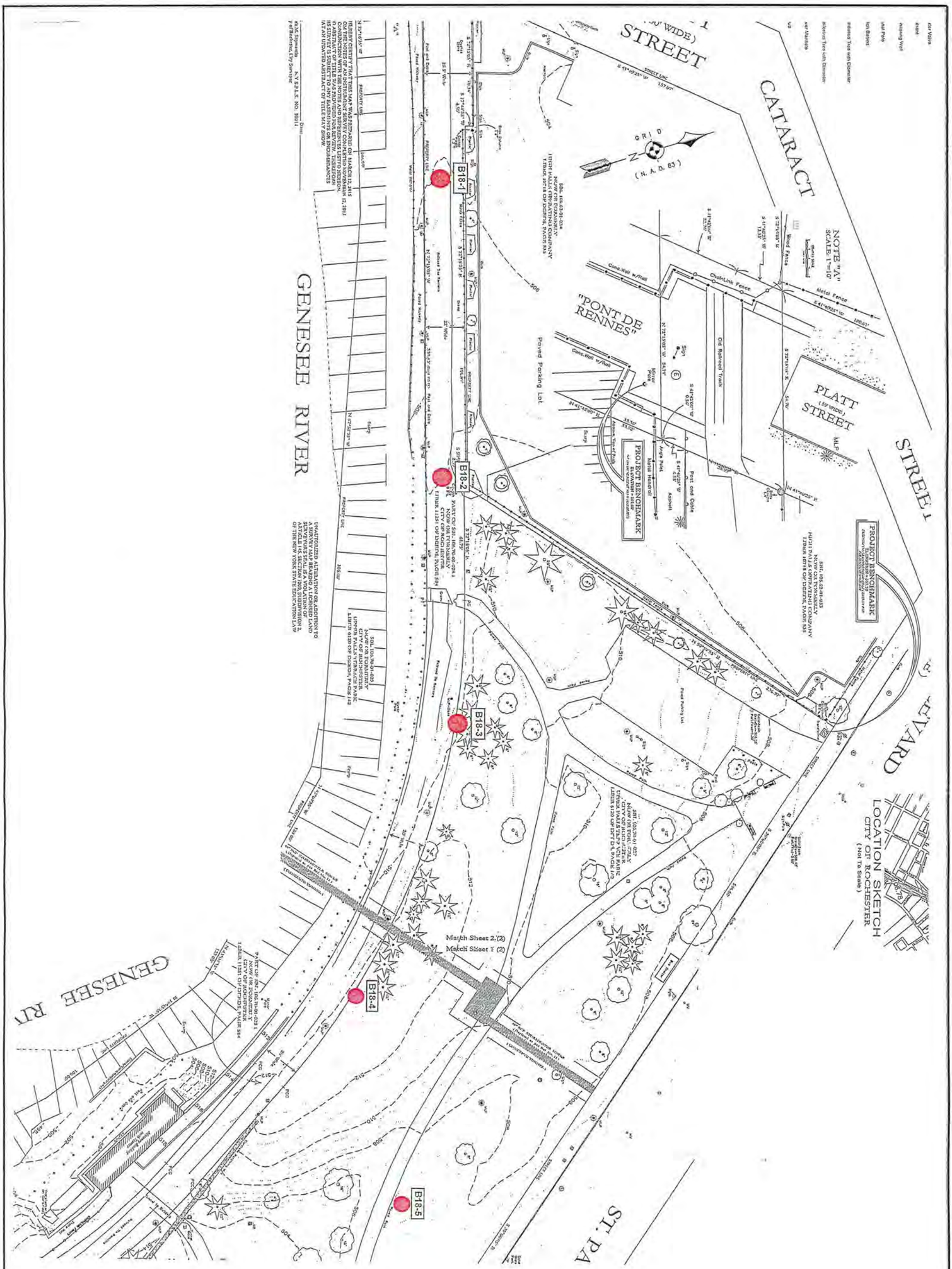
Brewery Line Trail

St. Paul Street, Rochester, NY 14605

General Location Plan

Adapted from: USGS Topographic Mapping
2016 Rochester East and West, NY Quadrangle

CHECKED BY: JMB	Scale 1"= 2000'	DATE: 6/11/2018
DRAWN BY: DWK		JOB NO.: 4450.0



Foundation Design, P.C.

46A SAGER DRIVE
ROCHESTER, NEW YORK 14607
Phone: (585) 458-0824
Fax: (585) 458-3323

PROJECT:	BREWERY LINE TRAIL ST PAUL STREET, ROCHESTER, NY 14605
TITLE: BORING LOCATION PLAN	
DRAWN BY: DWK	
CHK'D BY: JMB	
PROJECT NUMBER	DATE:6/12/2018
4450.0	1" = 50'

Foundation Design, P.C.

SOIL • BEDROCK • GROUNDWATER

SOIL DESCRIPTIONS

COHESIVE SOIL

Very fine grained soils. Plastic soils that can be rolled into a thin thread if moist. Clays and silty clays show cohesion.

DESCRIPTION	STP –BLOWS/FOOT
Very Soft	0-2
Soft	3-5
Medium	6-15
Stiff	16-25
Hard	26 or more

NON-COHESIVE SOIL

Soils composed of silt, sand and gravel, showing no cohesion or very slight cohesion

DESCRIPTION	STP –BLOWS/FOOT
Loose	0-10
Firm	11-25
Compact	26-40
Dense	41-50
Very Dense	51 or more

SOIL COMPOSITION	DESCRIPTION	ESTIMATED PERCENTAGE
	and	50
	some	30-49
	little	11-29
	trace	0-10

MOISTURE CONDITIONS Dry, Damp, Moist, Wet, Saturated
Groundwater measured in the boring or test pit may not have reached equilibrium

SOIL STRATA:	TERM	DESCRIPTION
	layer	Soil deposit more than 6" thick
	seam	Soil deposit less than 6" thick
	parting	Soil deposit less than 1/8" thick
	varved	Horizontal uniform layers or seams of soil

GRAIN SIZE

MATERIAL		SIEVE SIZE
Boulder		Larger than 12 inches
Cobble		3 inches to 12 inches
Gravel	- coarse	1 inch to 3 inches
	- medium	3/8 inch to 1 inch
	- fine	No. 4 to 3/8 inch
Sand	- coarse	No. 10 to No. 4
	- medium	No. 40 to No. 10
	- fine	No. 200 to No. 40
Silt and Clay		Less than No. 200

Standard Penetration Test: The number of blows required to drive a split spoon sampler into the soil with a 140 pound hammer dropped 30 inches. The number of blows required for each 6-inches of penetration is recorded. The total number of blows required for the second and third 6-inches of penetration is termed the penetration resistance, or the "N" value.

Split Spoon Sampler: Typically a 2-foot long, 2-inch diameter hollow steel tube that breaks apart or splits in two down the tube length.

Refusal: Depth in the boring where more than 100 blows per 5-inches are needed to advance the sample spoon.

Core Recovery (%): The total length of rock core recovered divided by the total core run.

RQD (%): Rock Quality Designation – the total length of all the pieces of the rock core longer than 4-inches divided by the total length of the rock core run.

Foundation Design, P.C.

Boring Log

Project No.	4450.0	**Page** 1	**of** 1	**Test Boring No.**	B18-1
Project Name	Brewery Line Trail				
Client	MLA/McCord Landscape Architecture, PLLC 2129 Five Mile Line Rd, Penfield, NY 14526				
Elevation	506.4	**Weather**	Cloudy / 60s	**Engineer**	Deniz Kaya
Date Started	06/5/18	**Completed**	06/5/18	**Driller**	S. Kahn
Drilling Company: Target Drilling				**Drilling Equipment**	Truck Mounted CME 75

Ft.	Blows Per Six Inches 0"/6"	6"/12"	12"/18"	18"/24"	N Value	Sample No.	Depth	Visual Soil and Rock Classifications / Remarks
	2	7						TOPSOIL 0'6"
			8	7	15	S-1	0'-2'	FILL: Firm brown damp SILT, some sand, little clay, trace organics
	6	5						3'6"
			7	8	12	S-2	2'-4'	Firm red-brown, moist, mf SAND, some silt, trace gravel
5	6	12						
			14	13	26	S-3	4'-6'	S-3: SAME Compact
	17	22						
			27	45	49	S-4	6'-8'	S-4: SAME, Dense
	30	52						
10			32	41	84	S-5	8'-10'	S-5: SAME, Very dense, 2" sand and gravel seam noted at 9'7"
	44	50/5"			50/5"	S-6	13'-13'11"	S-6: SAME, Very dense, rock fragments, little silt
15								
	19	50/5"			50/5"	S-7	18'-18'11"	S-7: SAME, Very dense, sandstone noted
20								
								21'0"
								Refusal at 21'0" on Bedrock
25								
								Notes:
								1. Dry upon completion.
								2. Bore hole backfilled using auger spoils.
30								

N=No. of blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea. Blow

Foundation Design, P.C.

Boring Log

Project No.	4450.0	**Page** 1	**of** 1	**Test Boring No.**	B18-2
Project Name	Brewery Line Trail				
Client	MLA/McCord Landscape Architecture, PLLC 2129 Five Mile Line Rd, Penfield, NY 14526				
Elevation	508.2	**Weather**	Cloudy / 60s	**Engineer**	Deniz Kaya
Date Started	06/5/18	**Completed**	06/5/18	**Driller**	S. Kahn
Drilling Company: Target Drilling				**Drilling Equipment**	Truck Mounted CME 75

Ft.	Blows Per Six Inches 0"/6"	6"/12"	12"/18"	18"/24"	N Value	Sample No.	Depth	Visual Soil and Rock Classifications / Remarks
	5	10						TOPSOIL 0'8"
			11	10	21	S-1	0'-2'	FILL: Firm brown-black damp SAND, some asphalt, some charcoal
	9	9						2'0"
			10	16	19	S-2	2'-4'	FILL: Firm red-brown, moist, mf SAND, some silt, trace organics
5	11	15						5'0"
			31	30	46	S-3	4'-6'	Dense red-brown moist cmf SAND, some silt, trace gravel
	28	24						
			21	22	45	S-4	6'-8'	
	15	16						
10			19	22	25	S-5	8'-10'	S-5: SAME, firm
								10'0"
								Boring Terminated at 10'0"
15								
20								
25								
30								Notes: 1. Dry upon completion. 2. Bore hole backfilled using auger spoils.

N=No. of blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea. Blow

Foundation Design, P.C.

Boring Log

Project No.	4450.0	**Page** 1	**of** 1	**Test Boring No.**	B18-3
Project Name	Brewery Line Trail				
Client	MLA/McCord Landscape Architecture, PLLC 2129 Five Mile Line Rd, Penfield, NY 14526				
Elevation	509.1	**Weather**	Cloudy / 60s	**Engineer**	Deniz Kaya
Date Started	06/5/18	**Completed**	06/5/18	**Driller**	S. Kahn
Drilling Company: Target Drilling				**Drilling Equipment**	Truck Mounted CME 75

Ft.	Blows Per Six Inches 0"/6"	6"/12"	12"/18"	18"/24"	N Value	Sample No.	Depth	Visual Soil and Rock Classifications / Remarks
	2	7						TOPSOIL 0'6"
			9	6	16	S-1	0'-2'	FILL: Firm red-brown moist SAND, some silt, some organics, trace gravel
	5	6						
			7	11	13	S-2	2'-4'	S-2: SAME, red-tan
5	8	10						
			9	25	19	S-3	4'-6'	
	17	16						
			14	12	30	S-4	6'-8'	S-4: NO RECOVERY
	15	16						9'0"
10			23	29	39	S-5	8'-10'	S-5: Compact brown-tan SAND, some silt, little clay 10'0"
								Boring terminated at 10'0"
15								
20								
25								
30								Notes: 1. Dry upon completion. 2. Bore hole backfilled using auger spoils.

N=No. of blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea. Blow

Foundation Design, P.C.

Boring Log

Project No.	4450.0	**Page** 1	**of** 1	**Test Boring No.**	B18-4
Project Name	Brewery Line Trail				
Client	MLA/McCord Landscape Architecture, PLLC 2129 Five Mile Line Rd, Penfield, NY 14526				
Elevation	511.2	**Weather**	Cloudy / 60s	**Engineer**	Deniz Kaya
Date Started	06/5/18	**Completed**	06/5/18	**Driller**	S. Kahn
Drilling Company: Target Drilling				**Drilling Equipment**	Truck Mounted CME 75

Ft.	Blows Per Six Inches 0"/6"	6"/12"	12"/18"	18"/24"	N Value	Sample No.	Depth	Visual Soil and Rock Classifications / Remarks
	2	7						TOPSOIL 0'6"
			10	10	17	S-1	0'-2'	FILL: Firm red-brown moist SAND, some silt, trace organics
	7	8						
			14	18	22	S-2	2'-4'	4'0"
5	5	4						Firm brown wet mf SAND, some silt, trace gravel, trace sandstone
			9	18	13	S-3	4'-6'	
	16	15						S-4: SAME, Compact, moist
			19	24	34	S-4	6'-8'	
	14	9						S-5: SAME, Compact
10			17	21	26	S-5	8'-10'	10'0"
								Very dense grey-brown damp cmf SAND, some silt, some gravel, rock fragments noted
								13'9"
	37	50/3"			50/3"	S-6	13'-13'9"	Very dense grey moist SAND, weathered rock
								20'7"
15								Auger Refusal at 20'7"
	50/4"				50/4"	S-7	18'-18'4"	
20								
25								
30								

Notes:

1. Dry upon completion.
2. Bore hole backfilled using auger spoils.

N=No. of blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea. Blow

Foundation Design, P.C.

Boring Log

Project No.	4450.0	**Page** 1	**of** 1	**Test Boring No.**	B18-5
Project Name	Brewery Line Trail				
Client	MLA/McCord Landscape Architecture, PLLC 2129 Five Mile Line Rd, Penfield, NY 14526				
Elevation	507.9	**Weather**	Cloudy / 60s	**Engineer**	Deniz Kaya
Date Started	06/5/18	**Completed**	06/5/18	**Driller**	S. Kahn
Drilling Company: Target Drilling				**Drilling Equipment**	Truck Mounted CME 75

Ft.	Blows Per Six Inches 0"/6"	6"/12"	12"/18"	18"/24"	N Value	Sample No.	Depth	Visual Soil and Rock Classifications / Remarks
	1	3						TOPSOIL 0'6"
			5	4	8	S-1	0'-2'	FILL: Loose brown moist mf SAND, some silt, little gravel, trace organics
	8	12						
			19	14	31	S-2	2'-4'	S-2: SAME, Compact
5	15	15						4'6"
			14	13	29	S-3	4'-6'	FILL: Compact tan-red-brown moist mf SAND, some silt, little gravel
	10	11						
			11	12	22	S-4	6'-8'	S-4: SAME, Firm, oil odor (at around 7')
	8	6						
10			4	8	10	S-5	8'-10'	S-5: SAME, Loose, oil odor (8'-10')
								10'0"
								Boring Terminated at 10'0"
15								
20								
25								
30								Notes: 1. Dry upon completion. 2. Bore hole backfilled using auger spoils.

N=No. of blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea. Blow

APPENDIX D: PHASE II ENVIRONMENTAL ASSESSMENT REPORT

Stantec Consulting Services Inc.

61 Commercial Street Suite 100, Rochester NY 14614-1009

September 9, 2021

Attention: **Robin Schutte**
Assistant Landscape Architect
City of Rochester
Dept. of Environmental Services, Development Division, Room 300B
City Hall, 30 Church Street Rochester, NY 14614-1279

Sent via e-mail

Dear Mr. Schutte,

Reference: **Draft Phase II Environmental Site Assessment Report, Brewery Line Trail Project, 305-365 St. Paul Street, 295 St. Paul Street and 369 St. Paul Street, Rochester, New York**

Stantec Consulting Services Inc. (Stantec) has completed a Phase II Environmental Site Assessment (ESA) designed to evaluate potential environmental impacts and budget considerations for the proposed Brewery Line Trail project ("the Site") in the City of Rochester, New York.

Project Objective

The objective of this project was to complete a Phase II ESA to evaluate data gaps identified in Stantec's Environmental Gap Analysis Summary ("Gap Analysis") report dated July 23, 2021, and to provide the City of Rochester ("the City") with associated findings and an opinion of probable costs (OPC) to address potential environmental impacts during construction on the proposed Brewery Line Trail.

Background and Understanding

The project location is shown on **Figure 1** and includes the following parcels:

- Upper Falls Terrace Park ("the Park"), consists of 2.13 acres and is located at 305-365 Saint Paul Street (SBL# 106.70-1-27);
- 295 St. Paul Street (the Former Rail Parcel), which consists of 0.87 acres of a former railroad line and is currently vacant land; (SBL# 106.70-28.001). This portion of the former rail line adjoins the western boundary of the Park and extends north from the Park beyond the Pont Du Rennes Bridge; and
- 369 St. Paul Street, covering 1.31 acres, which houses a City building and extends into the Genesee River Gorge down to the water line (SBL#106.70-1-29).

Reference: Draft Phase II Environmental Site Assessment Report, Brewery Line Trail Project, 305-365 Saint Paul Street, 295 St. Paul Street and 369 St. Paul Street, Rochester, New York

A review of proposed design drawings shows that the City plans to renovate the Park by removing outdated features such as sidewalks, light poles, a concrete tunnel and various landscaping. The Park will be improved with new bench seats, grills, and landscaping including trees. A recreational trail will be constructed atop the former rail line parcel and will receive improvements including resurfacing, landscaping, lighting upgrades and seating. The proposed design will require earth disturbances such as regrading and excavation cuts to incorporate utility upgrades, drainage, foundations and other features. Removal of existing railroad ties and bedding to facilitate construction of the proposed trail will also be necessary.

Review of Existing Information

Based on review of documentation provided by the City (draft design drawings and geotechnical reports prepared by McCord Landscape and Architecture (MLA), and previous environmental testing and environmental reports, provided by Ravi Engineering and Land Surveying (RELS) , a Phase I Environmental Assessment (Stantec, May 20, 2021) and Stantec's Gap Analysis ("Gap Analysis") of the project corridor we understand that the three parcels upon where the project corridor is located were historically used for industrial purposes such as coal storage, a former rail line with several sidings, machining, and metal working. The former Rochester Railways bus garage was also located to the south, adjacent to the Park. The Gap Analysis also identified the possibility that buried structures such as concrete slabs and additional railroad lines, ties and bedding exist from historical industrial operations where the existing Park is located immediately east of the former rail line.

Figures 2A and 2B provide an overlay of historic site features as they relate to the proposed project design. Sampling locations from this Phase II ESA and previous soils testing completed by RELS are also included.

Identified Data Gaps

Our review of information generated to date and proposed design drawings identified the following data gaps necessitating the associated Phase II ESA project tasks to address:

1. Railroad ties and bedding – In order to facilitate construction of the proposed trail, existing railroad ties and surrounding bedding will need to be excavated, removed, and disposed. An OPC for the removal and disposal of this material was provided by [redacted] to assist with budget planning. The OPC provided by [redacted] was based on the assumption that railroad bedding and ties to be disposed do not meet the definition of a hazardous waste pursuant to existing regulations. Sampling and analytical testing of the railroad ties and bedding was completed to confirm that the materials are not hazardous waste.

2. Evaluation of materials in areas of proposed utility upgrades – There are areas where utility upgrades (water and electric) are proposed at various depths ranging from less than four feet to depths of slightly greater than 12 feet. Stantec completed a combination of ground penetrating radar (GPR), test borings, test pit excavations, soil sampling and laboratory testing to evaluate potential environmental impacts to soil that is proposed to be excavated. This work was also

designed and completed to evaluate work areas where previous building materials and/or structures may impact construction and to evaluate ways to reduce costs associated with potential environmental impacts.

3. Evaluation of materials in areas to be cut and regraded – Stantec completed soil borings, sample collection and laboratory testing to evaluate potential environmental impacts to soil that is proposed to be excavated to facilitate grading on the Park property. Previous testing completed by RELS for McCord Landscape Architecture (MLA) showed several locations where subsurface soils exceeded NYSDEC restricted residential (RR) soil cleanup objectives (SCOs). Supplemental testing was completed as part of this Phase II ESA in the proposed cut areas to evaluate potential options for reuse as fill and/or disposal and to evaluate the potential need to adjust excavation plans.
4. The retaining wall along the southern end of the project corridor near the terrace is proposed to be removed. Since there is the potential for asbestos containing materials (ACM) to be present in paint and/or joint compound, analytical testing of those materials was also completed as part of this Phase II ESA.

Phase II ESA Scope of Work

To investigate identified data gaps and potential project environmental impacts, Stantec completed the following work scope items during the Phase II ESA:

Underground Facilities

Prior to commencement of investigation activities, our drilling services provider, TREC Environmental Services (“TREC”) contacted DigSafelyNY to locate public company or municipal underground utilities. TREC also completed a ground penetrating radar (“GPR”) survey at each proposed subsurface sampling location in an attempt to identify private underground features such as utility lines, tanks, or former building foundations in the areas where test borings and excavations were planned.

Prior to subsurface boring and test excavation work, the proposed work locations were surveyed by TREC using a GPR unit to evaluate potential subsurface anomalies indicative of buried objects such as tanks, potential rail lines and building materials. Information from the GPR survey was used to evaluate appropriate and safe intrusive sampling methodology (borings or test pits) for each sampling location.

Sampling and Analysis of Railroad Ties and Surrounding Bedding

Discussions were undertaken with the potential disposal destination (Waste Management), and Department of Environmental Services (DES) staff, regarding the required number of samples and laboratory analysis for disposal and associated costs for the railroad ties and surrounding bedding. The tasks identified below were completed to address suggested sampling and analytical testing.

1. Direct push borings were completed in two locations to depths of four feet below ground surface to assess railroad bedding, and shallow subsurface soil conditions, and collect soil samples. Collected samples were sent to Paradigm Environmental Services, Inc. of Rochester (“Paradigm”)

an Environmental Laboratory Approval Program (ELAP) certified laboratory (ELAP #10958) and analyzed for semi-volatile organic compounds (SVOCs) and total Resource Conservation and Recovery Act (RCRA) metals.

2. Soil samples were visually inspected, logged and described in terms of grain size distribution and potential fill materials, and inspected for indications of staining, sheen, etc.
3. The soil samples were screened with a photoionization detector (PID) for the potential presence of volatile organic compounds (VOCs). Soil descriptions, PID screening results, and other observations were documented in boring logs included in **Attachment A**.
4. One representative sample of an existing railroad tie was collected using a wood coring tool attached to a powered hand drill. The collected sample was sent to Paradigm and analyzed for the acid extractable fraction of SVOCs–and total RCRA metals.
5. Sample analytical results have been compared to existing applicable state and federal regulations to determine if the railroad ties and/or bedding are defined as hazardous waste(s) and for the soil to determine if it exceeds RR SCOs.

Soil Borings and Test Pit Excavations Along Proposed Utility Upgrades

Soil Borings

Thirteen borings were advanced using a direct push drill rig. The locations of borings are shown on **Figures 3A, 3B**. Selected locations were based on areas where subsurface soils will be disturbed during construction (utility upgrades for electricity and stormwater and cuts for regrading). Depths of the borings varied from four to twelve feet below ground surface (bgs) depending on locations and the projected depth of utility (electric and stormwater drainage) installations. Boring number SB01-BLT on the northern most portion of the proposed trail was advanced to the depth necessary to install utilities in that area (approximately four feet), with borings along the same utility corridor advancing to deeper depths (approximately twelve feet bgs) on the eastern portion of the project corridor.

Soil samples were obtained from the borings by inserting a clear acetate liner into a hollow, stainless-steel coring barrel and driving the coring barrel into the subsurface using a hydraulically driven hammer. Soil was continuously logged for lithologic characteristics. The lithologic soil classification, physical characteristics, odors, and other observed soil conditions were documented on individual test boring logs. The recovered soil was screened for visual/olfactory observations and for VOCs using a photoionization detector (PID) equipped with a 10.6 electron-volt lamp. PID readings were documented on field data sheets and boring logs.

During the project, eight soil samples from the borings were analyzed by Paradigm for the following parameters that are consistent with likely contaminants associated with historical land uses as identified by the Phase I ESA:

- VOCs (NYSDEC Part 375/CP-51 lists) using USEPA Method 8260C;
- SVOCs (NYSDEC Part 375/CP-51 lists) using EPA Method 8270D;
- RCRA metals using EPA Methods 6010D/7471B; and
- PCBs using EPA Method 8082A.

Boreholes were backfilled with their original drill cuttings and the ground surface restored to match preexisting conditions to the extent practical.

Test Pit Excavations

Due to the potential presence of buried building materials, concrete slabs and railroad sidings, four test pits (TE-01-BLT through TE-04-BLT on **Figures 3A and 3B**) were completed to provide a broader view of the subsurface conditions in the area where the new stormwater line is proposed. Test pits were advanced to native soil and/or excavation refusal, whichever occurred first. Excavation soils were monitored with a PID and evaluated for odors and staining as indicators of potential environmental impacts. Test pit dimensions, orientation, and a lithologic description were recorded, and photographs were taken at each location. Test Pit Logs are included in Attachment B.

Soil samples were collected from all four test excavations at depths determined by the Field Team Leader. Soil samples from the test pits were analyzed for the following parameters:

- VOCs (NYSDEC Part 375/CP-51 lists) using USEPA Method 8260C;
- SVOCs (NYSDEC Part 375/CP-51 lists) using EPA Method 8270D;
- RCRA metals using EPA Methods 6010D/7471B; and
- PCBs using EPA Method 8082A.

Analytical results were evaluated against NYCRR Part 375 RR and commercial (C) soil cleanup objectives to determine if materials excavated during construction may be reused in the original excavation, as fill on the same parcel, or require off-site disposal.

Site Restoration for Soil Boring and Test Pit Locations

Sampling locations were restored to their original condition to the extent practical. As settling may occur over time TREC was requested to return to the site in one month and provide additional clean cover soil as necessary to return the sample locations to original grade.

Reference: Draft Phase II Environmental Site Assessment Report, Brewery Line Trail Project, 305-365 Saint Paul Street, 295 St. Paul Street and 369 St. Paul Street, Rochester, New York

Sampling for Asbestos Containing Materials

Twenty samples of six homogeneous materials were collected by a NYS licensed asbestos inspector to evaluate the potential for ACM in paint and joint compound on the retaining wall near the observation platform. This wall is proposed for demolition and removal as part of the project.

Samples for asbestos were not collected from homogenous areas where the inspector determined that the material was a non-ACM (such as materials that were obviously metal or concrete). Samples of materials identified as suspect ACM by the survey inspectors were collected using guidelines outlined in NYS Industrial Code Rule 56.

Following collection, the suspect ACBM samples were submitted to an accredited New York State Department of Health (NYSDOH) ELAP laboratory (EMSL Analytical, Inc. Rochester, NY, ELAP #12088) for analysis of asbestos content by Polarized Light Microscopy (PLM), Gravimetric Matrix Reduction (GMR) and/or Transmission Electron Microscopy (TEM). The bulk sample asbestos analytical report is presented in **Attachment E**, along with the chain of custody report.

There was no visible evidence of suspect asbestos containing materials (SACBM) such as pieces of tile, insulation, roofing, etc.) observed in test borings or test excavations. As a result, no ACM sample analysis was required.

NYSDOH has two specific bulk materials categories:

1. Friable: Friable materials are those materials which, when dry, may be crumbled, pulverized or reduced to powder by hand-pressure and includes previously non-friable materials after such previously non-friable materials become damaged to the extent that when dry, it may be crumbled, pulverized or reduced to powder by hand pressure. The analytical procedures used for the analysis of friable materials consisted of PLM analysis. Following PLM analysis, if trace nonfriable organically bound materials (NOBs) are found to be present, they are then sent for TEM analysis.

2. Non-friable Organically Bound Materials: NOBs refer to a category of non-friable building materials embedded in flexible to rigid asphalt or vinyl materials. The typical types of material that fall within this classification include floor tiles, mastic, asphalt shingles, and roofing materials.

Reference: Draft Phase II Environmental Site Assessment Report, Brewery Line Trail Project, 305-365 Saint Paul Street, 295 St. Paul Street and 369 St. Paul Street, Rochester, New York

Samples of friable suspect ACMs are analyzed using the PLM method. Samples of non-friable organically bound (NOB) materials (i.e., mastic, glazes, roofing, etc.) are first analyzed by PLM-NOB, which consists of the GMR method. The GMR method consists of reduction of the sample to an ash residue. If the ash residue weight is less than one percent of the sample's original weight, the material is classified as non-asbestos and no further analysis is required. If the ash residue weight is greater than one percent by weight of the original material, it is then analyzed by PLM; and if the PLM result is greater than one percent asbestos, the material is confirmed as asbestos containing, and no further testing is required. However, if the ash residue is greater than one percent of the original material, but is tested negative by PLM (i.e., less than one percent asbestos by weight), then the sample will need to undergo TEM confirmation before it can be determined to be non-asbestos.

Laboratory Analysis Summary

The following table provides a summary of soil, railroad ties, and ACM samples collected and submitted to Paradigm or EMSL for analysis of compounds of concern.

		Number of Samples				
Analysis Parameters	**USEPA Analytical Method**	**Shallow Soils**	**Railroad Ties**	**Soil Borings***	**Test Pits****	**Retaining Wall**
TCL and CP-51 List VOCs	8260	2		8	4	
TCL and CP-51 (SVOCs)	8270	2		8	4	
SVOCs Acid Fraction			1			
Polychlorinated Biphenyls (PCBs)	8082	2		8	4	
8 RCRA Metals	6010 & 7471	2	1	8	4	
ACM				0	0	6

* One sample each from Borings SB-01, SB-02, SB-03, SB-04, SB-05, SB-08, SB-09, and SB-11.

** One sample each from each of four Test Pits.

Reference: **Draft Phase II Environmental Site Assessment Report, Brewery Line Trail Project, 305-365 Saint Paul Street, 295 St. Paul Street and 369 St. Paul Street, Rochester, New York**

Detailed Summary of Findings with Potential to Impact Project Construction

The following sections summarize the findings and present conclusions on the environmental management conditions that are likely to apply in each investigation area given the results of the sampling performed in that area.

Overall Site Conditions

The following conditions will apply generally to the entire project area.

- The existing Environmental Management Plan (EMP) prepared by RELS should be updated to include the findings of this Phase II ESA. The EMP will serve as a guide to be used should materials be encountered during construction that were not identified during previous environmental investigations.

- An environmental monitoring representative should be present during all excavation activities as a required element of the EMP to be used during construction for the project. If monitoring results indicate that excavated material contain more than a *de minimis* (minor) amount of non-soil components such as ash and cinders or other waste materials, or the monitoring indicates evidence of petroleum or other contamination, such material would not be eligible for beneficial use as General Fill on the project without further handling and testing. It would need to be segregated from apparently uncontaminated material and either removed for off-site landfill disposal or managed on site in a manner that meets the requirements of the Part 360 regulations. Large pieces of excavated concrete or other encountered materials (i.e. mortar and brick) should not be considered for re-use in landscaping berms or reused as fill on the project. Instead, if free of staining, odors and soil, it may be possible to segregate these and send them for reuse. No excavated material should be moved from one parcel to another as BUD requirements could be triggered. Boundaries for each of the three land parcels that make up the project corridor should be surveyed and marked by a licensed land surveyor and then clearly flagged with signs notifying the contractor not to relocate soil across those boundaries prior to starting project construction.

- All areas where excavation occurs and areas where soils are relocated within the same parcel <u>must be covered with an impervious surface or a minimum of one foot of acceptable soil</u>.

- If monitoring results indicate the only evidence of impacts is the apparent presence of petroleum or other chemical contamination rather than visible physical evidence of waste components (the material has no more than a *de minimis* amount of ash and cinders, bricks and concrete, etc.), the material can be stockpiled and sampled for lab analysis to determine if chemical contamination exceeds Part 360 limits for General Fill. Material exhibiting petroleum or other chemical odors or staining or elevated PID readings should not be considered for re-use in landscaping berms.

Reference: Draft Phase II Environmental Site Assessment Report, Brewery Line Trail Project, 305-365 Saint Paul Street, 295 St. Paul Street and 369 St. Paul Street, Rochester, New York

Removal of Existing Railroad Ties and Bedding Materials (Excavation Area 1)

A railroad was located on the Property since at least the early 1890s ceasing operations between 1960 and 1980. The former New York Central Hudson River Railroad (NYCHRRR) traversed the length of the 295 St. Paul Street parcel, with two sidings extending east across the 305-365 St. Paul Street parcel. The rail lines and/or sidings have since been removed or fully or partially covered in the development of the Park on the Property. Approximately 500 visible railroad ties were noted onsite of which approximately 400 are located within the proposed trail upgrades to the project corridor. To prevent settling of the newly constructed trail, and given the contamination associated with railroad ties, the removal and disposal of the railroad ties and a limited amount of the underlying ballast material is required prior to construction of the new trail. It is recommended that railroad ties and ballast/fill be removed by either a specialized environmental contractor or by a general contractor under the supervision of a qualified environmental professional (as defined in NYSDEC DER-10) and the site-specific environmental management plan.

Laboratory analysis from a sample of a representative railroad tie and two samples of surrounding bedding material has shown that these materials can be transported to a NYSDEC Part 360 permitted solid waste management facility approved by the City of Rochester. The area designated for removal is shown on Figure 4A as Excavation Area 1 and designated in orange and shown with its own line weight (in case drawings are copied in black and white). Laboratory Summary Tables showing exceedances of RR SCOs are included in Attachment D and the complete laboratory analytical reports for the project can be found in Attachment E.

Excavated railroad ties or preserved timbers should not be included in materials to be re-used in landscaping berms and should be managed for off-site disposal in accordance with Part 360 regulations.

Installation of Proposed Stormwater Drainage Line (Excavation Area 2A)

Based on the historical Sanborn and Plat Maps, and environmental assessments completed to date, there were former structures on the Property from at least 1892 through 1971 that have since been demolished. Stantec completed a series of borings and test pits to evaluate potential for environmental impacts and/or buried building materials, structures and potentially buried rail lines along the proposed storm sewer excavation and in other areas where utility excavations are proposed along the proposed trail and in the existing Park.

Test pits and borings completed in Excavation Area 2 did show buried cobbles, stone and footer materials (hard fill). These materials were noted at depths ranging from approximately one to four feet below ground surface. No rail lines, railroad ties or building materials with suspect asbestos containing materials were observed. If the storm sewer installation is implemented at the location and current depth proposed, the contractor will encounter the materials noted above. These materials will require off-site disposal in accordance with applicable NYSDEC Part 360 regulations.

Reference: Draft Phase II Environmental Site Assessment Report, Brewery Line Trail Project, 305-365 Saint Paul Street, 295 St. Paul Street and 369 St. Paul Street, Rochester, New York

Laboratory analysis from representative samples in Excavation Area 2 show soils in that area are acceptable for reuse in the original excavation (if acceptable to the site geotechnical engineer) or as fill material on the same parcel as long as they remain within the same property boundary and are covered with an impervious surface or a minimum of one foot of acceptable soil. The area designated for removal is shown on Figure 4B as Excavation Area 2A and designated in green and shown with its own line weight (in case drawings are copied in black and white). Laboratory Summary Tables showing exceedances of RR SCOs are included in Attachment D and the complete laboratory analytical report for the project can be found in Attachment E.

Installation of Proposed Stormwater Drainage Line (Excavation Area 2B)

According to historical records review, the Property where Excavation 2B is located has been utilized in a commercial and industrial capacity from at least 1892 through the 1970s, when the Property was converted into a city Park. Operations onsite housed the Rochester Iron & Metal Co. Inc. and operated in such capacity from at least 1923 until the 1970s. Several coal companies, Drake H F Coal Co., Langie L C Coal Co., and Beechwood Coal Co Inc. were located on or near this area from 1923 through the early 1940s. From 1928 until at least 1938, a portion of the Property formerly designated as 307 and 309 St. Paul Street housed various automotive facilities, including: an auto supplies facility and to the south a Rochester City bus garage.

Analytical results from Stantec test excavation TE-01-BLT (TE-01) and soil boring SB-04-BLT (SB-04) 4 in this area showed total lead levels of 11,400 and 1,450 mg/kg respectively, TE-01 also showed several SVOCs above RR SCOs. Both of these samples were collected from depths of one to two feet below ground surface. Upon receipt of laboratory results Stantec contacted Paradigm and requested Toxicity Characteristic Leaching Procedure (TCLP) analysis on samples TE-01 and SB-04 to determine if the material would be considered hazardous waste. Other samples collected from the remainder of the proposed storm sewer excavation area did not show elevated levels of metals or SVOCs.

Laboratory results from the TCLP analysis show that the sample from SB-04 does not meet the definition of a hazardous waste, however this material will need to be disposed of as a solid waste. The analysis from sample TE-01 did however, exceed the hazardous waste value for lead (5 mg/l) at a concentration of 68 mg/l. Based on the limited available laboratory analysis results we have estimated a volume of 85 tons of soil from this area will require removal from the site and disposal as hazardous waste at a permitted and City approved facility. Since the City of Rochester will be the generator of the waste, the contractor will need to coordinate with the City and the disposal facility during the waste characterization/approval and disposal process. In addition, excavation in this area (referenced with a red box on drawing 4B) will be performed by a qualified environmental construction contractor using personnel with appropriate OSHA HAZWOPER training.

Reference: Draft Phase II Environmental Site Assessment Report, Brewery Line Trail Project, 305-365 Saint Paul Street, 295 St. Paul Street and 369 St. Paul Street, Rochester, New York

The area and volume for hazardous waste removal is shown on Figure 4B as Excavation Area 2B, designated in red and shown with its own line weight (in case drawings are copied in black and white). Laboratory Summary Tables showing exceedances of RR SCOs are included in Attachment D and the complete laboratory analytical reports for the project can be found in Attachment E.

Cut Area Near Viewing Platform for Regrading to Construct Trail Connection (Excavation Area 3)

During a limited soil characterization study prepared by RELS for MLA (Brewery Line Trail Soil Characterization Report, July 2020), samples of onsite soils collected and analyzed at locations B-03S, B-05S, B-06S and B07S in this area identified SVOCs above New York State Department of Environmental Conservation (NYSDEC) RR soil cleanup objectives (SCOs) which are applicable to parkland. These materials were identified in samples collected from one to two feet below ground surface. Analytical results for samples collected at similar depths from this area during this Phase II ESA did not show concentrations of metals and/or SVOCs at levels above RR SCOs.

Based on the finding of RELS's soil sampling and subsequent soil sampling completed by Stantec in this area it is our professional opinion that these materials are suitable for reuse as area (non-structural) fill during the regrading as long as they remain within the same property boundary and are covered with an impervious surface or a minimum of one foot of acceptable soil. If the materials require removal and off-site disposal then applicable solid waste handling, transport and disposal requirements will apply.

The soil available for reuse is shown on Figure 4B. The area designated as Excavation Area 3, designated in blue and shown with its own line weight (in case drawings are copied in black and white). Projected excavation, cover and regrading fees for these materials are not provided in the OPC provided in **Attachment C**. A fee for excavation, transport and disposal of these soils in the event they cannot be reused on the same parcel can be provided at your request.

Retaining Wall Demolition

The retaining wall along the southern end of the project corridor near the terrace is proposed to be removed. Samples collected and analyzed for potential for asbestos containing materials (ACM) did not show the presence of asbestos.

Materials generated from the wall demolition cannot be used as onsite fill and will need to either be transported to an approved facility for disposal or transported to an approved facility for reuse. We did not include this fee in the OPCs.

Reference: Draft Phase II Environmental Site Assessment Report, Brewery Line Trail Project, 305-365 Saint Paul Street, 295 St. Paul Street and 369 St. Paul Street, Rochester, New York

Relocating the Metal Railing

The existing metal railing that is to be removed and reinstalled is assumed to have at least one layer of lead-based paint. It is recommended that notes and specifications be added to the contract documents discussing the use of Safe Work Practices for handling materials with lead-based paint.

Opinion of Probable Costs

Based on the remedial approach described above, Stantec's OPC to perform the tasks outlined in this report including a 20% contingency is $[redacted]. Attachment C contains Tables 1 through 3 which provide a breakdown of estimated Labor, Expense, and Contractor costs.

Assumptions and Exclusions

1. Preparation of a beneficial use determination BUD application is not included in this OPC as it is understood that reuse of excavated soils in Area 2A and Area 3 will remain on the parcel where they were disturbed.
2. This OPC is based on our findings from previous environmental assessments and reports for the property completed by others, Stantec's Phase I ESA, Gap Analysis and Phase II findings for the site, and a review of proposed design plans.
3. Sampling and laboratory results were used to assist Stantec with the preparation of this OPC. Sampling results are specific to the location where samples were collected and may not represent overall environmental impacts within the project corridor.
4. The OPC is not intended to be a remedial action plan for the project site. It is specific to potential areas of environmental impact that are expected be encountered during trail construction.
5. The OPC delivered by Stantec, will be for the sole use of the City. The report may not be relied upon by any other party without the express written consent of Stantec, which may be withheld at Stantec's discretion. Any such reliance to which Stantec consents will (1) contain a limitation of Stantec's liability which will be no greater than the lesser of $50,000 or the value of Stantec's fees for the Phase II ESA, and (2) only be granted pursuant to the conditions of Stantec's standard form reliance letter (i.e., Stantec will not sign forms of reliance letter proposed by lenders or other third parties).

6. We have not allowed for interaction with NYSDEC or any other agencies relative to the Phase II ESA results such services would require a separate proposal, authorization, and budget.

Reference: Draft Phase II Environmental Site Assessment Report, Brewery Line Trail Project, 305-365 Saint Paul Street, 295 St. Paul Street and 369 St. Paul Street, Rochester, New York

Closing

Stantec appreciates the opportunity to assist the City of Rochester with this project and we look forward to working with you on its successful implementation. If you have any questions or require further clarification, please contact me using the contact information below.

Regards,

STANTEC CONSULTING SERVICES INC.

Steve Campbell
Senior Environmental Project Mgr.
(585) 775-3835
steven.campbell@stantec.com

Dwight Harrienger, PE
Senior Environmental Project Mgr.
(585) 413-8740
dwight.harrienger@stantec.com

Mike Storonsky
Managing Principal
(585) 298-2386
mike.storonsky@stantec.com

Attachments:

Figures

Figure 1 Site Location Map

Figure 2A -Project Historical Use Overlay with Sampling Locations - Western Section

Figure 2B- Project Historical Use Overlay with Sampling Locations - Southeastern Section

Figure 3A -Sampling Locations and Associated Laboratory Analytical Results Western Section

Figure 3B -Sampling Locations and Associated Laboratory Analytical Results Southeastern Section

Figure 4A -Construction Areas Impacted by Environmental Considerations Western Section

Figure 4B -Construction Areas Impacted by Environmental Considerations Western Southeastern Section

Reference: Draft Phase II Environmental Site Assessment Report, Brewery Line Trail Project, 305-365 Saint Paul Street, 295 St. Paul Street and 369 St. Paul Street, Rochester, New York

Attachments

Attachment A Boring Logs

Attachment B Test Pit Logs

Attachment C Opinion of Probable Costs

Attachment D Laboratory Summary Tables

Attachment E Laboratory Analytical Reports

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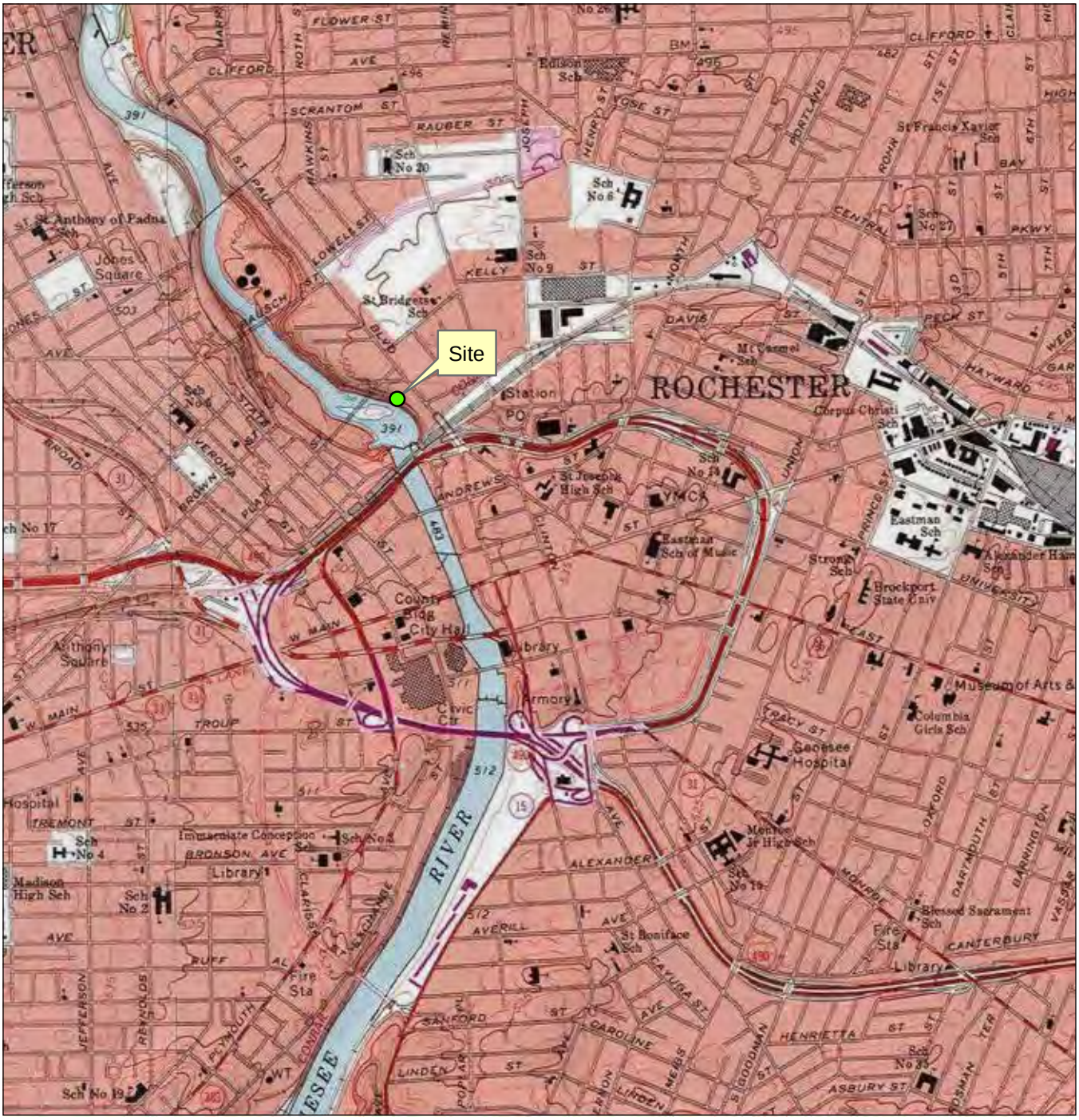
FIGURES



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USA Topo Maps

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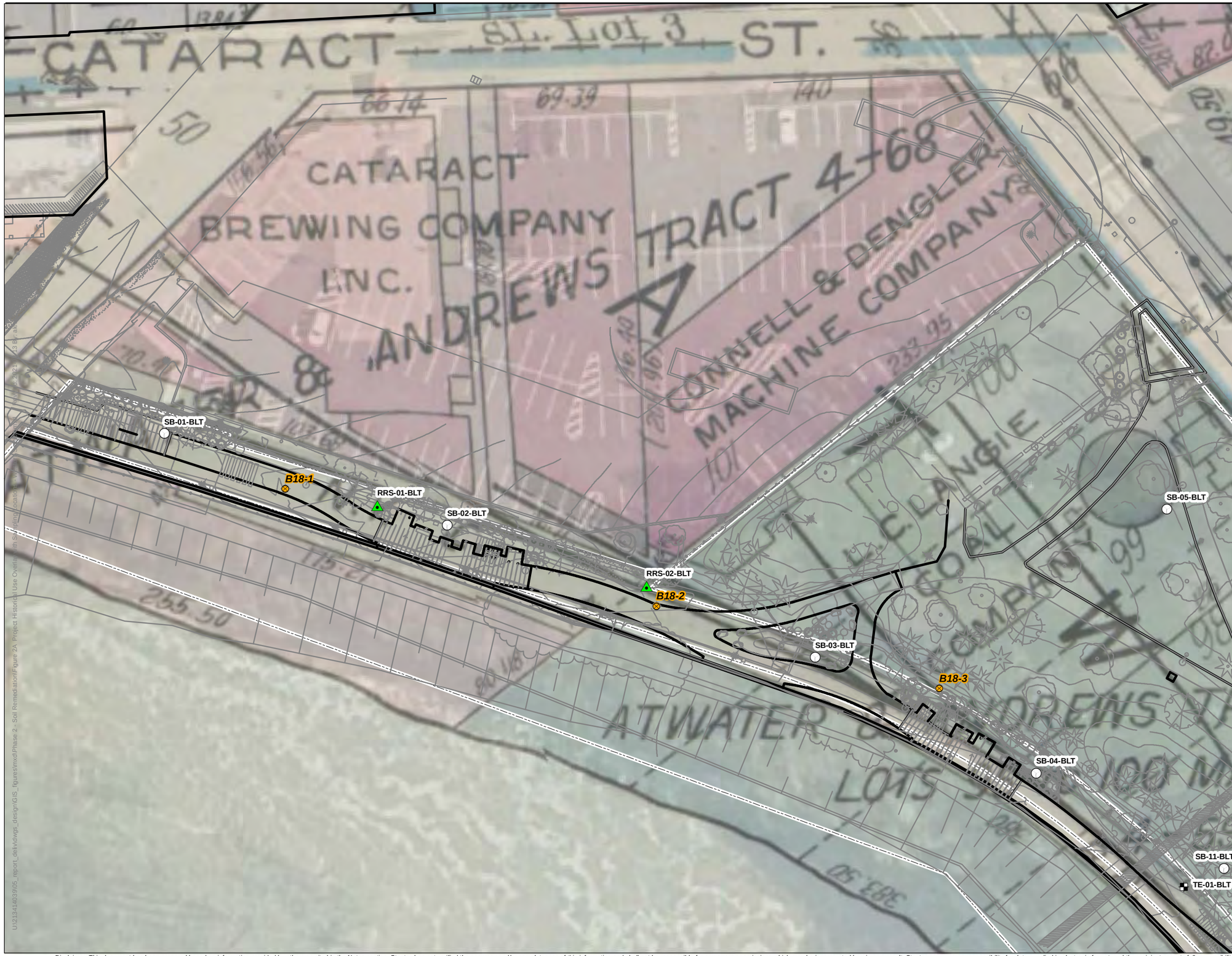
Stantec

Project Location City of Rochester Monroe County NY	Prepared byAPL on 2021-08-13 TR by DH on 2021-08-13 IR Review by SC on2021-08-13
Client/Project City of Rochester Brewery Line Trail Report	213414039
Figure No. 1	
Title	

Site Location Map

Notes

1. Coordinate System: NAD 1983 StatePlane New York West FIPS 3103 Feet
2. Data Sources:
3. Background: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Stantec

Legend

- Existing Geotechnical Borings
- Existing Environmental Boreholes
- Shallow Surface Soil Location
- Soil Boing
- Test Excavation

N

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Notes

1. Coordinate System: NAD 1983 StatePlane New York West FIPS 3103 Feet
2. Data Sources:
3. Background: GM Hopkins, 1935, City of Rochester, NY, 2014

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

Project Location
305-365 St. Paul Street, 295 St. Paul Street and 369 St. Paul Street, Rochester, NY

Prepared by APL on 2021-08-13
TR by SC/DH on 2021-08-13
IR Review by MS on 2021-08-13

Client/Project 213414039
City of Rochester
Environmental Assessment
Brewery Line Trail Project

Figure No.
2A

Title
Project Historical Use Overlay with Sampling Locations - Western Section

Stantec

Legend

- Existing Geotechnical Borings
- Existing Environmental Boreholes
- Shallow Surface Soil Location
- Soil Boing
- Test Excavation

N

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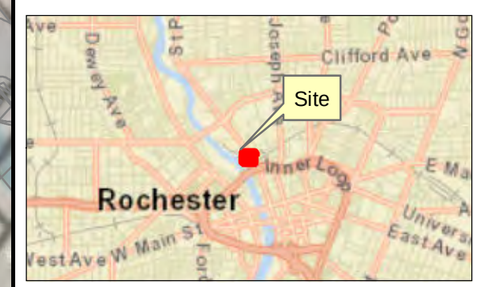
Notes

1. Coordinate System: NAD 1983 StatePlane New York West FIPS 3103 Feet
2. Data Sources:
3. Background: GM Hopkins, 1935, City of Rochester, NY, 2014
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Project Location
305-365 St. Paul Street, 295 St. Paul Street and 369 St. Paul Street, Rochester, NY

Prepared by APL on 2021-07-01
TR by SC/DH on 2021-07-01
IR Review by MS on 2021-07-01

Client/Project 213414039
City of Rochester
Environmental Assessment
Brewery Line Trail Project

Figure No.
2B

Title

Project Historical Use Overlay with Sampling Locations - Southeastern Section

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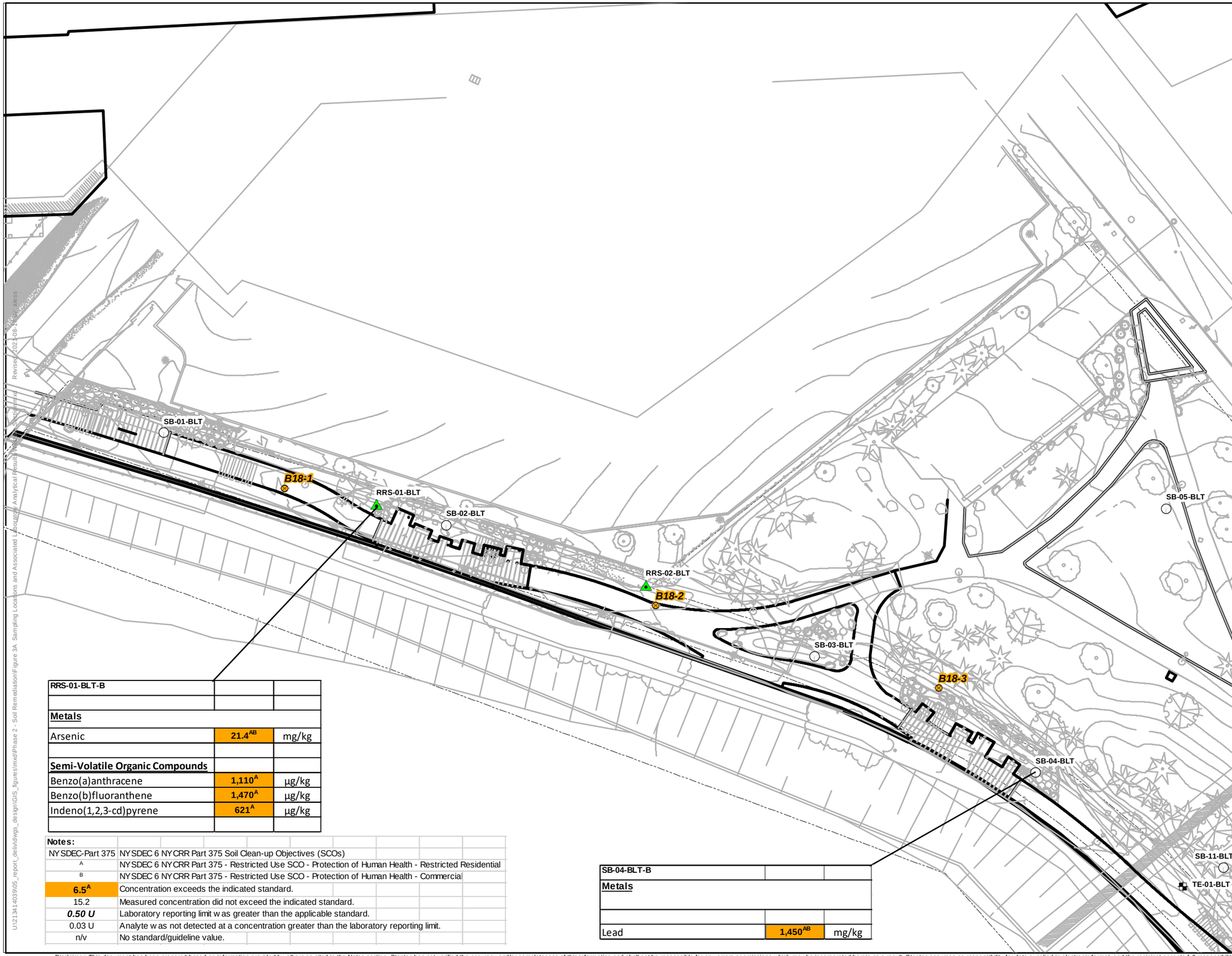

RRS-01-BLT-B		
Metals		
Arsenic	21.4[AB]	mg/kg
Semi-Volatile Organic Compounds		
Benzo(a)anthracene	1,110[A]	µg/kg
Benzo(b)fluoranthene	1,470[A]	µg/kg
Indeno(1,2,3-cd)pyrene	621[A]	µg/kg

SB-04-BLT-B		
Metals		
Lead	1,450[AB]	mg/kg

Notes:	
NYSDEC-Part 375	NYSDEC 6 NYCRR Part 375 Soil Clean-up Objectives (SCOs)
A	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Restricted Residential
B	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Commercial
6.5[A]	Concentration exceeds the indicated standard.
15.2	Measured concentration did not exceed the indicated standard.
0.50 U	Laboratory reporting limit was greater than the applicable standard.
0.03 U	Analyte was not detected at a concentration greater than the laboratory reporting limit.
n/v	No standard/guideline value.

Stantec

Legend

- Existing Geotechnical Borings
- Existing Environmental Boreholes
- Shallow Surface Soil Location
- Soil Boing
- Test Excavation

N

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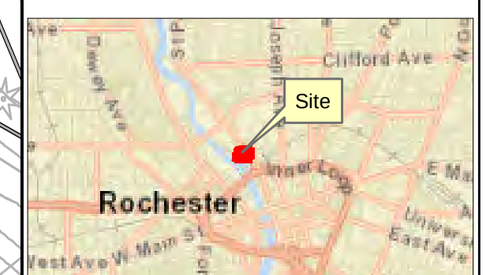
Notes

1. Coordinate System: NAD 1983 StatePlane New York West FIPS 3103 Feet
2. Data Sources:
3. Background: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Project Location

305-365 St. Paul Street, 295 St. Paul Street and 369 St. Paul Street, Rochester, NY

Prepared by APL on 2021-08-13
TR by SC/DH on 2021-08-13
IR Review by MS on 2021-08-13

Client/Project 213414039

City of Rochester
Environmental Assessment
Brewery Line Trail Project

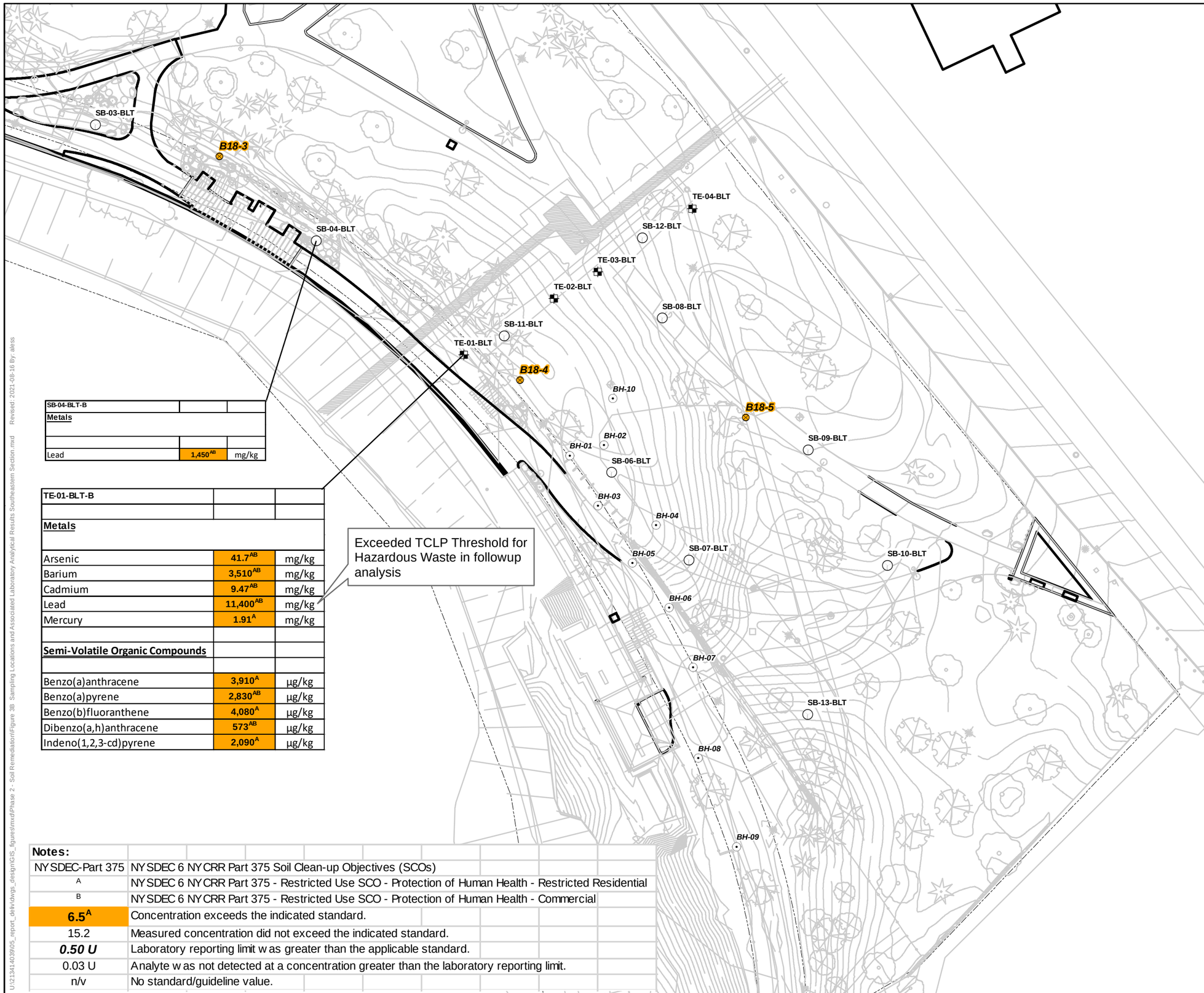
Figure No.

3A

Title

Sampling Locations and Associated Laboratory Analytical Results Western Section

U:\213414039\05_report_deliv\dwgs_design\GIS_figures\mxd\Phase 2 - Soil Remediation\Figure 3A Sampling Locations and Associated Laboratory Analytical Results Western Section - Revised 2021-08-13 - Progress



SB-04-BLT-B		
Metals		
Lead	1,450[AB]	mg/kg

TE-01-BLT-B		
Metals		
Arsenic	41.7[AB]	mg/kg
Barium	3,510[AB]	mg/kg
Cadmium	9.47[AB]	mg/kg
Lead	11,400[AB]	mg/kg
Mercury	1.91[A]	mg/kg
Semi-Volatile Organic Compounds		
Benzo(a)anthracene	3,910[A]	µg/kg
Benzo(a)pyrene	2,830[AB]	µg/kg
Benzo(b)fluoranthene	4,080[A]	µg/kg
Dibenzo(a,h)anthracene	573[AB]	µg/kg
Indeno(1,2,3-cd)pyrene	2,090[A]	µg/kg

Exceeded TCLP Threshold for Hazardous Waste in followup analysis

Notes:	
NYSDEC-Part 375	NYSDEC 6 NYCRR Part 375 Soil Clean-up Objectives (SCOs)
A	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Restricted Residential
B	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Commercial
6.5[A]	Concentration exceeds the indicated standard.
15.2	Measured concentration did not exceed the indicated standard.
0.50 U	Laboratory reporting limit was greater than the applicable standard.
0.03 U	Analyte was not detected at a concentration greater than the laboratory reporting limit.
n/v	No standard/guideline value.

Stantec

Legend

- Existing Geotechnical Borings
- Existing Environmental Boreholes
- Shallow Surface Soil Location
- Soil Boing
- Test Excavation

N

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1:480

Notes
1. Coordinate System: NAD 1983 StatePlane New York West FIPS 3103 Feet
2. Data Sources:
3. Background: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

Project Location
305-365 St. Paul Street, 295 St. Paul Street and 369 St. Paul Street, Rochester, NY

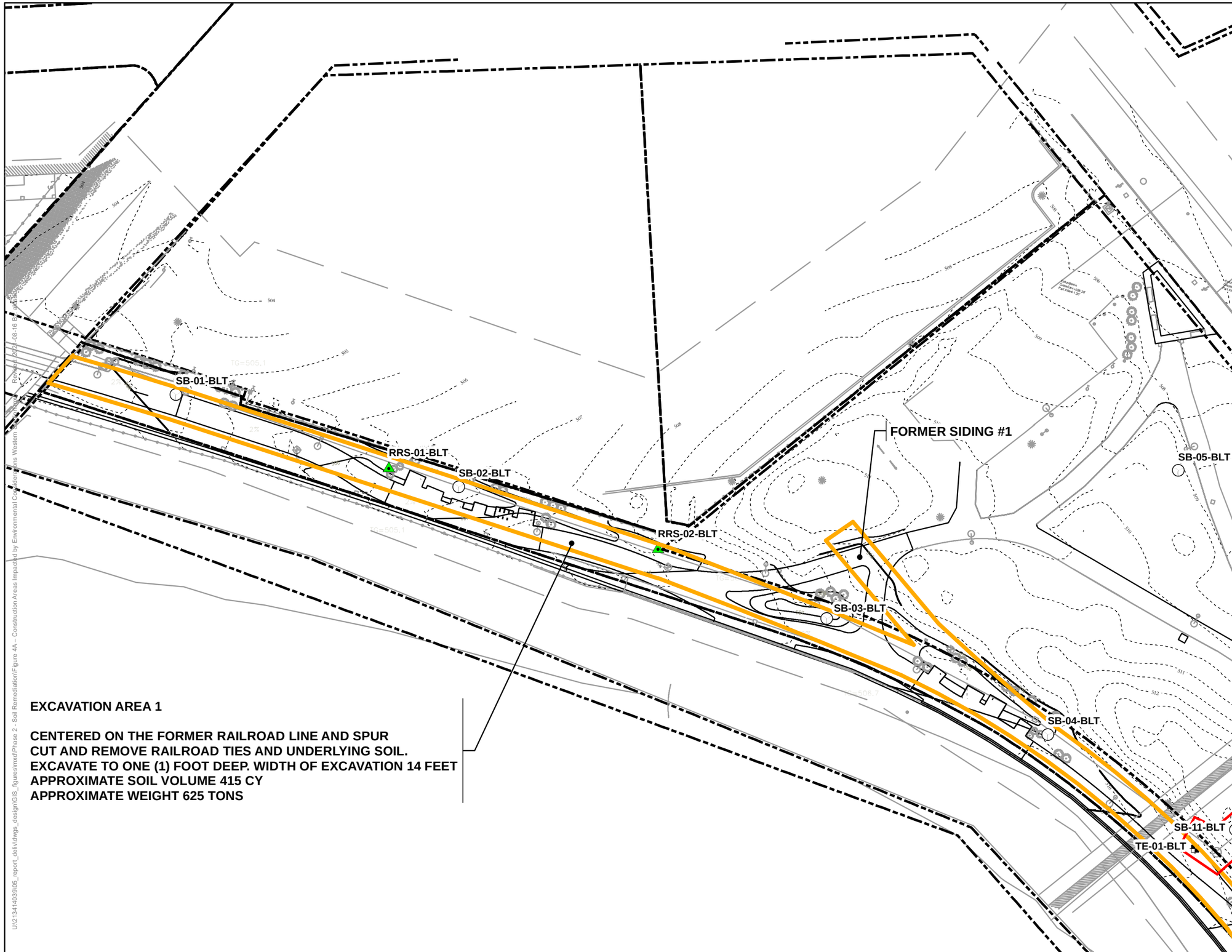
Prepared by APL on 2021-07-01
TR by SC/DH on 2021-07-01
IR Review by MS on 2021-07-01

Client/Project 213414039
City of Rochester
Environmental Assessment
Brewery Line Trail Project

Figure No.
3B

Title
Sampling Locations and Associated Laboratory Analytical Results Southeastern Section

U:\213414039\05_report_deliv\dwgs_design\GIS_figures\mxd\Phase 2 - Soil Remediation\Figure 3B Sampling Locations and Associated Laboratory Analytical Results Southeastern Section.mxd Revised: 2021-08-16 By: aless



Stantec

Legend

- Existing Geotechnical Borings
- Existing Environmental Boreholes
- Shallow Surface Soil Location
- Soil Boing
- Test Excavation

1 Excavate and Remove Railroad Ties and Underlying Soil to One Foot

N

0 20 40 Feet

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Notes

1. Coordinate System: NAD 1983 StatePlane New York West FIPS 3103 Feet
2. Data Sources:
3. Background: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

Project Location
305-365 St. Paul Street, 295 St. Paul Street and 369 St. Paul Street, Rochester, NY

Prepared by APL on 2021-08-13
TR by SC/DH on 2021-08-13
IR Review by MS on 2021-08-13

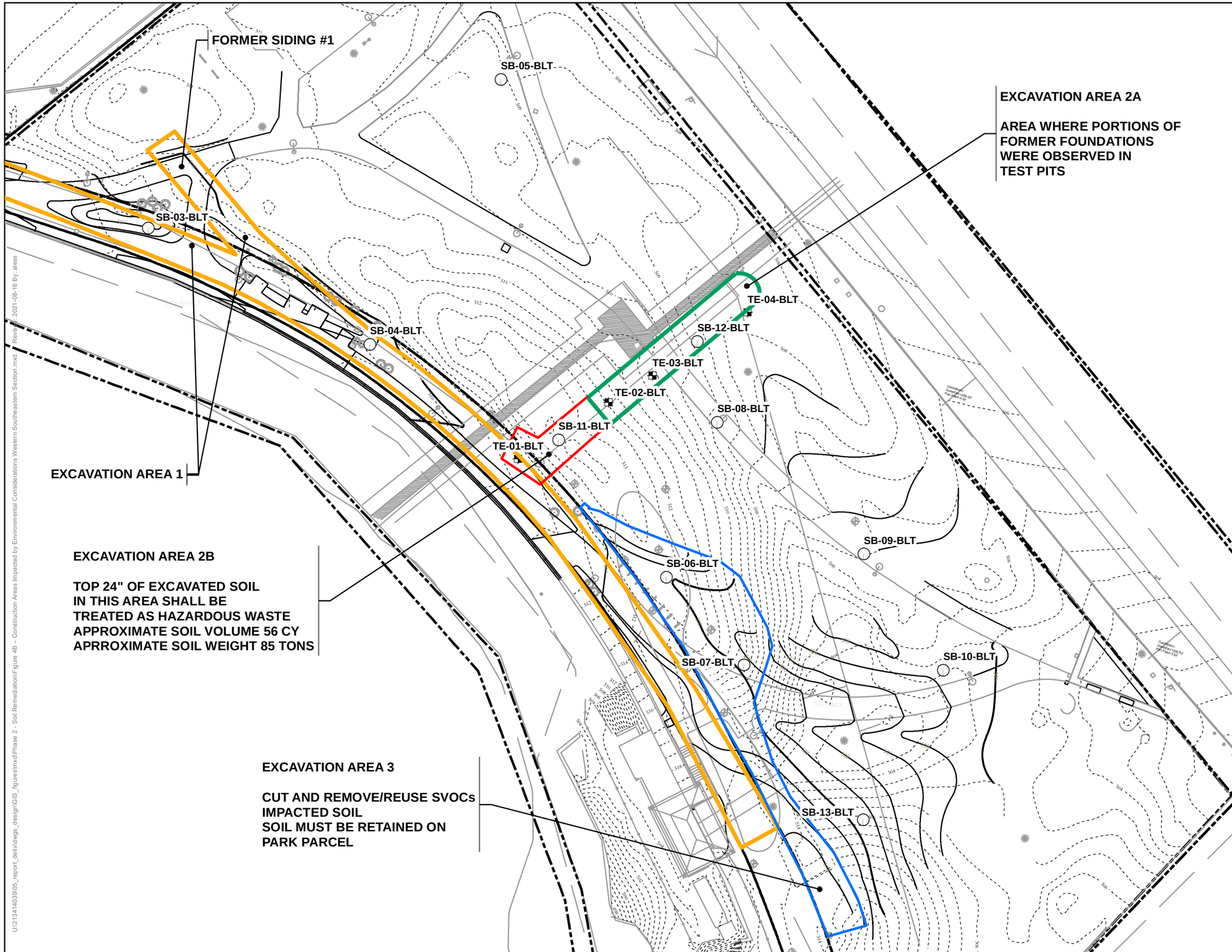
Client/Project
City of Rochester
Environmental Assessment
Brewery Line Trail Project

213414039

Figure No.
4A

Title
Construction Areas Impacted by Environmental Considerations Western Section

U:\213414039\05_report_deliv\dwgs_design\GIS_figures\mxd\Phase 2 - Soil Remediation\Figure 4A – Construction Areas Impacted by Environmental Considerations Western Section.mxd



Stantec

Legend

- Existing Geotechnical Borings
- Existing Environmental Boreholes
- Shallow Surface Soil Location
- Soil Boing
- Test Excavation

1 Excavate and Remove Railroad Ties and Underlying Soil to One Foot

2A Area where Portions of Former Foundations Walls were Observed in Test Pits

2B Excavated Soil in this Area shall be Treated as Hazardous Waste

3 Cut and Remove / Reuse SVOCs Impacted Soil

N

0 20 40 Feet
(At original document size of 11x17)
1:480

Notes
1. Coordinate System: NAD 1983 StatePlane New York West FIPS 3103 Feet
2. Data Sources:
3. Background: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

Project Location
305-365 St. Paul Street, 295 St. Paul Street and 369 St. Paul Street, Rochester, NY

Prepared by APL on 2021-08-13
TR by SC/DH on 2021-08-13
IR Review by MS on 2021-08-13

Client/Project 213414039
City of Rochester
Environmental Assessment
Brewery Line Trail Project

Figure No.
4B

Title
Construction Areas Impacted by Environmental Considerations Western Southeastern Section

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ATTACHMENTS

Attachment A Boring Logs

Stantec

61 Commercial St., Suite 100
Rochester, NY 14614
(585) 475-1440

Test Boring No.: 1
Page: 1 of 13

Project:	Brewery Line Trail Phase II	Drill Contractor:	TREC	Start Date:	8/2/2021
Project #:	213414039	Driller:	Chad Britton	Completion Date:	8/2/2021
Client:	City of Rochester	Elevation:	NM	Drilling Method:	Direct Push-Geoprobe
Location:	305-365, 295, 369 St Paul St. Rochester, NY	Weather:	70s, sunny	Supervisor:	A. Matkosky

0	SAMPLE PID (ppm)	No.	Rec. (ft)	Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	2.5	0.0-4.0	0.0-0.5	
0.7	0.5				0.5-1.0	Black-dark brown SILT and very fine SAND, trace clay, grass and roots, moist, no odor -TOPSOIL-
1.3	0.1				1.0-2.5	Dark brown-black SILT, some very fine sand, medium-coarse grey gravel, some pieces of brick,
2.0	0.1					moist, no odor -FILL-
						Black fine-coarse SAND, medium-coarse grey GRAVEL, black cinders, trace ash and brick pieces and coal, moist, no odor -FILL-
						Bottom of Exploration at 2.5 ft
5						
10						
15						
20						

Notes:
1. PID Model MiniRAE 3000 with 10.6eV lamp.

Stantec

61 Commercial St., Suite 100
Rochester, NY 14614
(585) 475-1440

Test Boring No.: 2
Page: 2 of 13

Project:	Brewery Line Trail Phase II	Drill Contractor:	TREC	Start Date:	8/2/2021
Project #:	213414039	Driller:	Chad Britton	Completion Date:	8/2/2021
Client:	City of Rochester	Elevation:	NM	Drilling Method:	Direct Push-Geoprobe
Location:	305-365, 295, 369 St Paul St. Rochester, NY	Weather:	70s, sunny	Supervisor:	A. Matkosky

	SAMPLE				Depth of Strata Change (ft)	Material Description and Remarks
0	PID (ppm)	No.	Rec. (ft)	Depth (ft)		
		1	3.0	0.0-4.0	0.0-0.5	Black-dark brown SILT and very fine SAND, grass and roots, moist, no odor -TOPSOIL-
0.6	0.1				0.5-0.7	Dark brown-black SILT and very fine-fine SAND, some very fine gravel, trace roots, moist, no odor -FILL-
1.5	0.1				0.7-1.7	
					1.7-3.0	Black medium-coarse SAND, fine-medium grey-dark grey GRAVEL, coal and cinders, trace ash, brick pieces, moist-dry, no odor -FILL-
2.6	0.1					Medium brown SILT and very fine SAND, moist, no odor -NATIVE-
		2	3.6	4.0-8.0	4.0-7.6	4-5 feet: Same as above with fill fall-in from above 5-7.6 feet: Medium brown SILT and very fine SAND, moist, no odor -NATIVE-
5						
6	0.0					
						Bottom of Exploration at 7.6 ft
10						
15						
20						

Notes:
1. PID Model MiniRAE 3000 with 10.6eV lamp.

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Project:	Brewery Line Trail Phase II	Drill Contractor:	TREC	Start Date:	8/2/2021
Project #:	213414039	Driller:	Chad Britton	Completion Date:	8/2/2021
Client:	City of Rochester	Elevation:	NM	Drilling Method:	Direct Push-Geoprobe
Location:	305-365, 295, 369 St Paul St. Rochester, NY	Weather:	70s, sunny	Supervisor:	A. Matkosky

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	3.5	0.0-4.0	0.0-0.2	Black-dark brown SILT and very fine-fine SAND, grass and roots, moist, no odor -TOPSOIL-
0.8	0.4				0.2-0.6	Dark brown SILT and very fine-fine SAND, trace very fine gravel, wood pieces, moist, no odor -FILL-
1.5	0.2				0.6-1.2	Dark brown-black medium-coarse SAND, trace silt, cinders and little coal, trace ash, brick pieces, and fine-medium grey-dark grey gravel, moderate tar like odor, moist-dry, -FILL-
					1.2-1.7	
					1.7-3.5	Same as above, slight-moderate tar like odor -FILL-
3.5	0.2					Medium brown SILT and very fine-fine SAND, moist, no odor, -NATIVE-
		2	4.0	4.0-8.0	4.0-5.0	Medium brown SILT and very fine-fine SAND with fall-in from above, no odor -NATIVE-
5					5.0-8.0	Medium brown SILT and very fine-fine SAND with little gravel -NATIVE-
6	0.2					
		3	4.0	8.0-12.0	8.0-8.3	Medium brown SILT and very fine-fine SAND with little gravel with fall-in from above -NATIVE-
					8.3-12.0	Medium brown SILT and very fine-fine SAND with little gravel with fall-in from above -NATIVE-
10	0.1					
						Bottom of Exploration at 12 ft
15						
20						

Notes:
1. PID Model MiniRAE 3000 with 10.6eV lamp.

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Test Boring No.: 4
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Project:	Brewery Line Trail Phase II	Drill Contractor:	TREC	Start Date:	8/2/2021
Project #:	213414039	Driller:	Chad Britton	Completion Date:	8/2/2021
Client:	City of Rochester	Elevation:	NM	Drilling Method:	Direct Push-Geoprobe
Location:	305-365, 295, 369 St Paul St. Rochester, NY	Weather:	70s, sunny	Supervisor:	A. Matkosky

0	SAMPLE PID (ppm)	No.	Rec. (ft)	Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
0.3	0.1	1	3.7	0.0-4.0	0.0-0.4	Black-dark brown SILT and very fine-fine SAND, grass and roots, moist, no odor -TOPSOIL-
0.9	0.1				0.4-0.8	Dark brown-black SILT, fine-medium SAND, little very fine-medium grey gravel, trace roots from above, moist, no odor -FILL-
1.4	0.1				0.8-1.8	
2					1.8-3.7	Dark brown-black SILT, fine-coarse SAND, some fine-medium grey gravel, coal and cinders, trace ash increasing ash towards bottom, moist-dry, no odor -FILL-
						Medium brown SILT and very fine-fine SAND, moist, no odor -NATIVE-
3.7	0.1	2	3.8	4.0-8.0	4.0-7.8	Medium brown SILT and very fine-fine SAND, little clay, wet, no odor around 6.0 ft -NATIVE-
5						
6.0	0.1					
		3	4	8.0-12.0	8.0-12.0	Medium brown SILT and very fine-fine sand, little very fine-fine grey gravel, wet, no odor -NATIVE-
10	0.1					
						Bottom of Exploration at 12 ft
15						
20						

Notes:
1. PID Model MiniRAE 3000 with 10.6eV lamp.

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Test Boring No.: 5
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Project:	Brewery Line Trail Phase II	Drill Contractor:	TREC	Start Date:	8/2/2021
Project #:	213414039	Driller:	Chad Britton	Completion Date:	8/2/2021
Client:	City of Rochester	Elevation:	NM	Drilling Method:	Direct Push-Geoprobe
Location:	305-365, 295, 369 St Paul St. Rochester, NY	Weather:	70s, sunny	Supervisor:	A. Matkosky

	SAMPLE				Depth of Strata Change (ft)	Material Description and Remarks
0	PID (ppm)	No.	Rec. (ft)	Depth (ft)		
0.5	0.0	1	3.5	0.0-4.0	0.0-0.4	Black-dark brown SILT and very fine-fine SAND, grass and roots, moist, no odor -TOPSOIL-
0.9	0.0				0.4-0.5	Dark brown-black SILT and fine-medium SAND, trace roots, moist, no odor -FILL-
1.5	0.0				0.5-1.6	Dark brown-black SILT and fine-coarse SAND, some fine-medium grey gravel, coal and cinders, trace ash, moist-dry, no odor -FILL-
					1.6-3.5	Medium brown SILT and very fine-fine SAND, moist, no odor -NATIVE-
3.5	0.0					
		2	3.4	4.0-8.0	4.0-7.4	Medium brown SILT and very fine-fine SAND, little clay, gravel to 5 ft, wet at 6.1 ft, no odor -NATIVE-
5						
6	0.0					
		3	4	8.0-12.0	8.0-12.0	Medium brown SILT and very fine-fine SAND, increasing sand content with depth, little very fine gravel moist, no odor -NATIVE-
10	0.0					
						Bottom of Exploration at 12 ft
15						
16						
20						

Notes:
1. PID Model MiniRAE 3000 with 10.6eV lamp.

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Test Boring No.: 6
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Project:	Brewery Line Trail Phase II	Drill Contractor:	TREC	Start Date:	8/2/2021
Project #:	213414039	Driller:	Chad Britton	Completion Date:	8/2/2021
Client:	City of Rochester	Elevation:	NM	Drilling Method:	Direct Push-Geoprobe
Location:	305-365, 295, 369 St Paul St. Rochester, NY	Weather:	70s, sunny	Supervisor:	A. Matkosky

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	3.0	0.0-4.0	0.0-0.6	Dark brown SILT and very fine-fine SAND, grass and roots, moist, no odor -TOPSOIL-
1.4	0.1				0.6-3.0	Medium brown SILT and fine SAND, little grey and red gravel, moist, no odor -NATIVE-
1.5	0.0					
		2	2.9	4.0-8.0	4.0-6.9	Medium brown SILT and fine SAND, little grey and red gravel, moist, wet from 5.3-6.9 ft, no odor -NATIVE-
4.6	0.0					
5						
6.7	0.0					
		3	4	8.0-12.0	8.0-12.0	Medium brown SILT and fine SAND, little grey and red gravel, wet, no odor -NATIVE-
10	0.0					
						Bottom of Exploration at 12 ft
15						
20						

Notes:
1. PID Model MiniRAE 3000 with 10.6eV lamp.

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Project:	Brewery Line Trail Phase II	Drill Contractor:	TREC	Start Date:	8/2/2021
Project #:	213414039	Driller:	Chad Britton	Completion Date:	8/2/2021
Client:	City of Rochester	Elevation:	NM	Drilling Method:	Direct Push-Geoprobe
Location:	305-365, 295, 369 St Paul St. Rochester, NY	Weather:	70s, sunny	Supervisor:	A. Matkosky

	SAMPLE				Depth of Strata Change (ft)	Material Description and Remarks
0	PID (ppm)	No.	Rec. (ft)	Depth (ft)		
0.5	0.0	1	2.4	0.0-4.0	0.0-0.4	Black-dark brown SILT and very fine-fine SAND, grass and roots, moist, no odor -TOPSOIL-
					0.4-1.2	Dark brown-black SILT and fine SAND, some fine-medium angular gravel, grass, little coal,
1.2	0.0				1.2-1.7	moist, no odor -FILL-
					1.7-1.11	Fine-coarse grey ROCK and GRAVEL pieces -FILL-
2.4	0.0				1.11-2.2	Red BRICK -FILL-
					2.2-2.4	Fine-coarse grey ROCK and GRAVEL pieces -FILL-
						Medium brown SILT, fine-medium SAND, and grey angular GRAVEL, little brick and coal, dry, no odor -FILL-
4.3	0.0	2	2.6	4.0-8.0	4-4.3	Medium brown SILT, fine-medium SAND, and grey angular GRAVEL, little brick and coal, dry,
5					4.3-4.9	no odor -FILL-
					4.9-6.6	Fine-coarse grey ROCK and GRAVEL pieces -FILL-
						Medium brown SILT and very fine-fine SAND, little grey gravel, moist, no odor -NATIVE-
		3	3.5	8.0-12.0	8.0-9.0	Brick and grey rock fall-in from above
					9.0-12.0	Medium brown SILT and very fine-fine SAND, little grey gravel, moist, no odor -NATIVE-
10						
11.4	0.0					
						Bottom of Exploration at 12 ft
15						
20						

Notes:
1. PID Model MiniRAE 3000 with 10.6eV lamp.

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Project:	Brewery Line Trail Phase II	Drill Contractor:	TREC	Start Date:	8/2/2021
Project #:	213414039	Driller:	Chad Britton	Completion Date:	8/2/2021
Client:	City of Rochester	Elevation:	NM	Drilling Method:	Direct Push-Geoprobe
Location:	305-365, 295, 369 St Paul St. Rochester, NY	Weather:	70s, sunny	Supervisor:	A. Matkosky

	SAMPLE				Depth of Strata Change (ft)	Material Description and Remarks
0	PID (ppm)	No.	Rec. (ft)	Depth (ft)		
0.5	0.1	1	3.3	0.0-4.0	0.0-0.4	Black-dark brown SILT and very fine-fine SAND, grass and roots, moist, no odor -TOPSOIL-
					0.4-0.7	Dark brown-black SILT and fine-coarse SAND, some fine-medium gravel and coal, moist-dry, no odor -FILL-
1.4	0.0				0.7-3.3	Medium brown SILT and very fine SAND, fine-medium gravel, moist, no odor. Wet at 2.5-2.8 ft: fine-coarse sand, silt and clay, some fine-coarse gravel, moist, no odor -FILL-
2.5	0.0					
3.3	0.0					
		2	3.5	4.0-8.0	4.0-7.5	Medium brown SILT and very fine SAND, fine-medium grey and red sandstone gravel, moist to wet, no odor -NATIVE-
5						
5.4	0.0					
7.4	0.0					
		3	4	8.0-12.0	8.0-9.6	Medium brown SILT and very fine SAND, fine-medium grey and red sandstone gravel, moist to wet, no odor -NATIVE-
10					9.6-10.4	Transitioning to below layer
					10.4-12.0	Grey-light brown SILT and very fine SAND, some clay and fine-medium grey-red gravel,dry, well compacted, no odor -NATIVE-
11.3	0.0					
						Bottom of Exploration at 12 ft
15						
20						

Notes:
1. PID Model MiniRAE 3000 with 10.6eV lamp.

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Test Boring No.: 9

Project:	Brewery Line Trail Phase II	Drill Contractor:	TREC	Start Date:	8/2/2021
Project #:	213414039	Driller:	Chad Britton	Completion Date:	8/2/2021
Client:	City of Rochester	Elevation:	NM	Drilling Method:	Direct Push-Geoprobe
Location:	305-365, 295, 369 St Paul St. Rochester, NY	Weather:	70s, sunny	Supervisor:	A. Matkosky

	SAMPLE				Depth of Strata Change (ft)	Material Description and Remarks
0	PID (ppm)	No.	Rec. (ft)	Depth (ft)		
		1	3.7	0.0-4.0	0.0-0.8	Dark brown SILT and very fine-fine SAND, grass and roots, moist, no odor -TOPSOIL-
0.6	0.1				0.8-1.0	Dark brown SILT and very fine-fine SAND, moist, no odor -TOPSOIL-
					1.0-3.7	Light brown SILT, and very fine-fine SAND, very fine-medium grey and red gravel, little brick and coal, dry, no odor -FILL-
2						
2.2	0.0					
		2	4.0	4.0-8.0	4.0-5.0	Light brown SILT, very fine-fine SAND, very fine-medium grey and red gravel, little brick and coal, dry, no odor -FILL-
5					5.0-8.0	Medium brown SILT and very fine SAND, fine-medium grey and red gravel, moist, no odor -NATIVE-
5.2	0.0					
7.1	0.0					
		3	2.9	8.0-12.0	8.0-10.9	Medium brown SILT and very fine SAND, fine-medium grey and red gravel, moist, no odor -NATIVE-
10	0.0					
						Bottom of Exploration at 12.0 ft
15						
20						

Notes:
1. PID Model MiniRAE 3000 with 10.6eV lamp.

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Project:	Brewery Line Trail Phase II	Drill Contractor:	TREC	Start Date:	8/2/2021
Project #:	213414039	Driller:	Chad Britton	Completion Date:	8/2/2021
Client:	City of Rochester	Elevation:	NM	Drilling Method:	Direct Push-Geoprobe
Location:	305-365, 295, 369 St Paul St. Rochester, NY	Weather:	70s, sunny	Supervisor:	A. Matkosky

	SAMPLE				Depth of Strata Change (ft)	Material Description and Remarks
0	PID (ppm)	No.	Rec. (ft)	Depth (ft)		
		1	4.0	0.0-4.0	0.0-0.5	Dark brown SILT and very fine-fine SAND, grass and tree roots, moist, no odor -TOPSOIL-
0.6	0.0				0.5-4.0	Medium brown SILT and very fine-fine SAND, some fine-medium gravel/rock pieces, trace clay, no odor -NATIVE-
2						
2.4	0.0					
		2	4.0	4.0-8.0	4.0-5.0	Medium brown SILT and very fine-fine SAND, some fine-medium gravel/rock pieces, trace clay, no odor -NATIVE-
4.6	0.0					
5					5.0-6.5	Transitioning to below layer
					6.5-8.0	Medium brown SILT and very fine-fine SAND, some fine-coarse gravel, trace red gravel, densely compacted, no odor -NATIVE-
7.3	0.0					
		3	2	8.0-10.0	8.0-10.0	Medium brown SILT and very fine-fine SAND, some fine-coarse gravel, trace red gravel, densely compacted, no odor -NATIVE-
10						
						Bottom of Exploration at 10 ft -REFUSAL-
15						
20						

Notes:
1. PID Model MiniRAE 3000 with 10.6eV lamp.

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Test Boring No.: 11
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Project:	Brewery Line Trail Phase II	Drill Contractor:	TREC	Start Date:	8/2/2021
Project #:	213414039	Driller:	Chad Britton	Completion Date:	8/2/2021
Client:	City of Rochester	Elevation:	NM	Drilling Method:	Direct Push-Geoprobe
Location:	305-365, 295, 369 St Paul St. Rochester, NY	Weather:	70s, sunny	Supervisor:	A. Matkosky

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	3.0	0.0-4.0	0.0-0.6	Black-dark brown SILT and very fine SAND, grass and roots, moist, no odor -TOPSOIL-
0.6	0.5				0.6-2.5	Light brown, appears native, little angular medium-coarse gravel, trace coal, moist-dry, no odor -FILL-
1.9	0.0					
2						
					2.5-3.0	Medium brown SILT and very fine-fine SAND, trace gravel, moist, no odor -NATIVE-
3	0.1					
		2	2.0	4.0-8.0	4.0-5.3	Medium brown SILT and very fine-fine SAND, trace gravel, moist, no odor -NATIVE-
5						
5.8	0.0				5.3-6.0	Medium brown SILT and very fine-fine SAND, trace gravel, broken up pieces of rock, moist, no odor -NATIVE-
6	0.1					
		3	3.6	8.0-12.0	8.0-11.6	Medium brown SILT and very fine-fine SAND, trace gravel, broken up pieces of rock, wet, no odor -NATIVE-
9	0.0					
10						
						Bottom of Exploration at 12.0 ft
15						
20						

Notes:
1. PID Model MiniRAE 3000 with 10.6eV lamp.

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Test Boring No.: 12
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Project:	Brewery Line Trail Phase II	Drill Contractor:	TREC	Start Date:	8/2/2021
Project #:	213414039	Driller:	Chad Britton	Completion Date:	8/2/2021
Client:	City of Rochester	Elevation:	NM	Drilling Method:	Direct Push-Geoprobe
Location:	305-365, 295, 369 St Paul St. Rochester, NY	Weather:	70s, sunny	Supervisor:	A. Matkosky

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
0.4	0.0	1	1.9	0.0-4.0	0.0-0.5	Dark brown SILT and very fine-fine SAND, grass and roots, moist, no odor -TOPSOIL-
1.1	0.1				0.5-1.9	Dark brown-black SILT and fine-coarse SAND, some fine-medium grey gravel and red sandstone pieces, moist-dry, no odor -FILL-
1.9	0.0					
2						
		2	2.8	4.0-8.0	4.0-5.4	Medium brown SILT and very fine-fine SAND, little grey gravel and red sandstone pieces, dark grey clay at 5 ft, moist, no odor -FILL-
5	0.0					
					5.4-6.8	Medium brown SILT and very fine SAND, moist- wet, no odor -NATIVE-
7.2	0.0					
		3	4	8.0-12.0	8.0-12.0	Medium brown SILT and very fine SAND, increasing grey clay and fine gravel content with depth moist- wet, no odor -NATIVE-
9	0.0					
10						
						Bottom of Exploration at 12 ft
15						
20						

Notes:
1. PID Model MiniRAE 3000 with 10.6eV lamp.

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Test Boring No.: 13
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Project:	Brewery Line Trail Phase II	Drill Contractor:	TREC	Start Date:	8/2/2021
Project #:	213414039	Driller:	Chad Britton	Completion Date:	8/2/2021
Client:	City of Rochester	Elevation:	NM	Drilling Method:	Direct Push-Geoprobe
Location:	305-365, 295, 369 St Paul St. Rochester, NY	Weather:	70s, sunny	Supervisor:	A. Matkosky

	SAMPLE				Depth of Strata Change (ft)	Material Description and Remarks
0	PID (ppm)	No.	Rec. (ft)	Depth (ft)		
0.5	0.0	1	2.9	0.0-4.0	0.0-0.6	Dark brown SILT and very fine-fine SAND, grass and roots, moist, no odor -TOPSOIL-
					0.6-2.9	Medium brown SILT and fine-coarse SAND, some fine-medium grey gravel, little coal and brick, moist-dry, no odor -FILL-
1.2	0.0					
2						
2.9	0.0					
		2	4.0	4.0-8.0	4.0-8.0	Medium brown SILT and very fine-fine SAND, some fine-coarse grey gravel, moist-dry, no odor -NATIVE-
5						
6	0.0					
8	0.0	3	3.2	8.0-12.0	8.0-9.0	Medium brown SILT and very fine-fine SAND, some fine-coarse grey gravel, moist-dry, no odor -NATIVE-
8.5	0.0					
						Bottom of Exploration at 9 ft -REFUSAL-
10						
15						
20						

Notes:
1. PID Model MiniRAE 3000 with 10.6eV lamp.

ATTACHMENT B TEST PIT LOGS

Stantec
61 Commercial Street
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Test Pit ID: TE-1

Project:	Brewery Line Trail Phase II	**Contractor:**	TREC	**Date:**	8/3/2021
Project #:	213414039.000	**Operator:**	Chad Britton	**Start Time:**	0815
Client:	City of Rochester	**Equip Used:**	Kx 121-3	**Completed Time:**	0820
Location:	305-306, 295, 369 St Paul St.	**Weather:**	60's sunny	**Stantec Rep:**	A. Matkosky
	Rochester, NY				

Depth (ft)	PID (ppm)	Sample Info ID	Sample Info Depth	Strata Change (ft)	Soil & Stratigraphy Descriptions	Remarks
0.7	0.6			0.0-1.5	Black-dark brown SILT and fine-coarse SAND, coal pieces and cinders, some fine-medium gravel, little ash and brick pieces, moist, no odor -FILL-	Railroad tie held together during removal
1.0	7.1			1.5-2.0		
1.5	4.5				Medium brown SILT and very fine-fine SAND, little gravel, moist, no odor -NATIVE-	
2						
3					Bottom of Explorationat 2 ft in NATIVE	
4						
5						
6						
7						
8						
9						

Notes:
1. PID Model Mini-Rae 3000 with 10.6 eV lamp.

TP Length & Width: 2 x 10

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Test Pit ID: TE-2

Project:	Brewery Line Trail Phase II	**Contractor:**	TREC	**Date:**	8/3/2021
Project #:	213414039.000	**Operator:**	Chad Britton	**Start Time:**	0838
Client:	City of Rochester	**Equip Used:**	Kx 121-3	**Completed Time:**	0856
Location:	305-306, 295, 369 St Paul St.	**Weather:**	60's sunny	**Stantec Rep:**	A. Matkosky
	Rochester, NY				

Depth (ft)	PID (ppm)	Sample Info ID	Sample Info Depth	Strata Change (ft)	Soil & Stratigraphy Descriptions	Remarks
0.7	1.6			0.0-0.8	Medium-dark brown SILT and very fine-medium SAND, little very fine-fine gravel, roots, moist, no odor -TOPSOIL-	Rock foundation pieces
1						
1.5	1.4			0.8-4.0	Medium brown SILT and fine-medium SAND, little fine-medium gravel, some rock pieces, trace brick, moist, no odor -FILL- Building foundation footer at ~2.9 ftbgs and slab at ~4 ftbgs	Stone foundations - could not break through with excavator
2						
3	0.5					
4						
					Refusal at 4 ft	
5						
6						
7						
8						
9						

Notes:
1. PID Model Mini-Rae 3000 with 10.6 eV lamp.

TP Length & Width: 11.5 x 2

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Test Pit ID: TE-3

Project:	Brewery Line Trail Phase II	**Contractor:**	TREC	**Date:**	8/3/2021
Project #:	213414039.000	**Operator:**	Chad Britton	**Start Time:**	0905
Client:	City of Rochester	**Equip Used:**	Kx 121-3	**Completed Time:**	0920
Location:	305-306, 295, 369 St Paul St.	**Weather:**	60's sunny	**Stantec Rep:**	A. Matkosky
	Rochester, NY				

Depth (ft)	PID (ppm)	Sample Info ID	Sample Info Depth	Strata Change (ft)	Soil & Stratigraphy Descriptions	Remarks
0.5	0.0			0.0-0.7	Medium-dark brown SILT and very fine-medium SAND, fine-coarse gravel, roots, moist, no odor -TOPSOIL-	
1	0.0			0.7-1.1		
1.5	0.0				Medium-brown SILT and fine-medium SAND, fine-very coarse gravel, rock pieces, little brick, moist, no odor -FILL-	'Rock foundation pieces and minor seepage of water on west wall at ~3 ftbgs
2				1.1-3.1		
					Medium-brown-grey silt and fine-medium SAND, medium-coarse gravel, rock pieces and brick, moist-dry, no odor -FILL-	
3						
				3.1-4.5	Medium-brown SILT and fine sand, little fine-medium gravel, moist, no odor -NATIVE-	
4	0.0					
5					Bottom of Exploration at 4.5 ft	
6						
7						
8						
9						

Notes:
1. PID Model Mini-Rae 3000 with 10.6 eV lamp.

TP Length & Width: 10 x 2

Stantec
61 Commercial Street
Rochester, NY 14614
(585) 475-1440

Test Pit ID: TE-4

Project:	Brewery Line Trail Phase II	**Contractor:**	TREC	**Date:**	8/3/2021
Project #:	213414039.000	**Operator:**	Chad Britton	**Start Time:**	0935
Client:	City of Rochester	**Equip Used:**	Kx 121-3	**Completed Time:**	1011
Location:	305-306, 295, 369 St Paul St.	**Weather:**	60's sunny	**Stantec Rep:**	A. Matkosky
	Rochester, NY				

Depth (ft)	PID (ppm)	Sample Info ID	Sample Info Depth	Strata Change (ft)	Soil & Stratigraphy Descriptions	Remarks
0.5	0.0			0.0-0.9	Medium-dark brown SILT and very fine-medium SAND, fine gravel, roots, moist, no odor -TOPSOIL-	
1	0.0					
				0.9-7.5	Medium brown SILT and very fine-fine SAND, fine-very coarse gravel, large rock pieces, little asphalt, trace brick, moist-dry, no odor -FILL-	Rock foundation pieces
2						
2.5	0.0				Rock pieces from suspected old foundation at ~5.5 ft	
3						
4						
5	0.0					
6						
7						
8					Refusal at 7.5 ft	
9						

Notes:
1. PID Model Mini-Rae 3000 with 10.6 eV lamp.

TP Length & Width: 9 x 2

Test Pit 1, TE-01-BLT

Test Pit 2, TE-02-BLT

Test Pit 3, TE-03-BLT

Test Pit 4, TE-04-BLT

ATTACHMENT C OPINION OF PROBABLE COSTS

ATTACHMENT D LABORATORY SUMMARY TABLES

Table
Summary of Soil Analytical Results
Brewery Line Trail Environmental
City of Rochester

Sample Location			RRS-01		RRS-02		SB-01		SB-02		SB-03		SB-04		SB-05		SB-08		SB-09	
Sample Date			2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21
Sample ID			RRS-01-BLT-A	RRS-01-BLT-B	RRS-02-BLT-A	RRS-02-BLT-B	SB-01-BLT	SB-01-BLT	SB-02-BLT	SB-02-BLT	SB-03-BLT	SB-03-BLT	SB-04-BLT-A	SB-04-BLT-B	SB-05-BLT-A	SB-05-BLT-B	SB-08-BLT-A	SB-08-BLT-B	SB-09-BLT-A	SB-09-BLT-B
			0 - 2 ft	0 - 2 ft	0 - 2 ft	0 - 2 ft	0.7 ft (VOC)	2.0 ft (SVOC)	0.8 ft (VOC)	1.4 ft (SVOC)	0.8 ft (VOC)	1.5 ft (SVOC)	0.8 ft	1.5 ft	0.9 ft	1.5 ft	0.5 ft	2.5 ft	0.6 ft	2.3 ft
Sampling Company			STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory			PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH
Laboratory Work Order			213459	213459	213459	213459	213459	213459	213459	213459	213459	213459	213459	213459	213459	213459	213459	213459	213459	213459
Laboratory Sample ID			213459-09A	213459-09	213459-10A	213459-10	213459-01A	213459-01	213459-02A	213459-02	213459-03A	213459-03	213459-04A	213459-04	213459-05A	213459-05	213459-06A	213459-06	213459-07A	213459-07
Sample Type	Units	NYSDEC-Part 375																		
Metals																				
Arsenic	mg/kg	16_g^{AB}	-	**21.4^{AB}**	-	8.63	-	4.80	-	10.0	-	3.63	-	10.1	-	6.73	-	5.16	-	2.05 D
Barium	mg/kg	400^{AB}	-	82.5	-	68.5	-	53.5	-	77.7	-	49.2	-	58.2	-	121	-	58.8	-	36.2 D
Cadmium	mg/kg	4.3^{A} 9.3^{B}	-	0.315	-	0.289 U	-	0.425	-	0.276 U	-	0.274 U	-	0.433	-	0.278 U	-	0.291 U	-	0.275 U
Chromium	mg/kg	180^{A} $1{,}500^{B}$	-	10.1	-	10.8	-	6.24	-	11.6	-	7.00	-	8.90	-	6.52	-	14.2	-	7.05 D
Lead	mg/kg	400^{A} $1{,}000^{B}$	-	88.7	-	87.2	-	9.16	-	62.9	-	40.4	-	**$1{,}450^{AB}$**	-	69.3	-	9.08	-	4.76 D
Mercury	mg/kg	0.81_k^{A} 2.8_k^{B}	-	0.409	-	0.306	-	0.0270	-	0.316	-	0.0867	-	0.249	-	0.0913	-	0.0198	-	0.00840 U
Selenium	mg/kg	180^{A} $1{,}500^{B}$	-	1.20	-	1.15 U	-	1.54	-	1.10 U	-	1.10 U	-	1.15 U	-	1.11 U	-	1.17 U	-	1.10 U
Silver	mg/kg	180^{A} $1{,}500^{B}$	-	0.564 U	-	0.577 U	-	0.621 U	-	0.552 U	-	0.549 U	-	0.577 U	-	0.557 U	-	0.583 U	-	0.549 U
Polychlorinated Biphenyls																				
Aroclor 1016	mg/kg	$_o^{AB}$	-	0.184 U	-	0.179 U	-	0.156 U	-	0.153 U	-	0.141 U	-	0.161 U	-	0.175 U	-	0.164 U	-	0.149 U
Aroclor 1221	mg/kg	$_o^{AB}$	-	0.184 U	-	0.179 U	-	0.156 U	-	0.153 U	-	0.141 U	-	0.161 U	-	0.175 U	-	0.164 U	-	0.149 U
Aroclor 1232	mg/kg	$_o^{AB}$	-	0.184 U	-	0.179 U	-	0.156 U	-	0.153 U	-	0.141 U	-	0.161 U	-	0.175 U	-	0.164 U	-	0.149 U
Aroclor 1242	mg/kg	$_o^{AB}$	-	0.184 U	-	0.179 U	-	0.156 U	-	0.153 U	-	0.141 U	-	0.161 U	-	0.175 U	-	0.164 U	-	0.149 U
Aroclor 1248	mg/kg	$_o^{AB}$	-	0.184 U	-	0.179 U	-	0.156 U	-	0.153 U	-	0.141 U	-	0.161 U	-	0.175 U	-	0.164 U	-	0.149 U
Aroclor 1254	mg/kg	$_o^{AB}$	-	0.184 U	-	0.179 U	-	0.156 U	-	0.153 U	-	0.141 U	-	0.161 U	-	0.175 U	-	0.164 U	-	0.149 U
Aroclor 1260	mg/kg	$_o^{AB}$	-	0.184 U	-	0.179 U	-	0.156 U	-	0.153 U	-	0.141 U	-	0.161 U	-	0.175 U	-	0.164 U	-	0.149 U
Aroclor 1262	mg/kg	$_o^{AB}$	-	0.184 U	-	0.179 U	-	0.156 U	-	0.153 U	-	0.141 U	-	0.161 U	-	0.175 U	-	0.164 U	-	0.149 U
Aroclor 1268	mg/kg	$_o^{AB}$	-	0.184 U	-	0.179 U	-	0.156 U	-	0.153 U	-	0.141 U	-	0.161 U	-	0.175 U	-	0.164 U	-	0.149 U
Polychlorinated Biphenyls (PCBs)	mg/kg	1^{AB}	-	ND	-	ND	-	ND	-	ND	-	ND	-	ND	-	ND	-	ND	-	ND
Volatile Organic Compounds																				
Acetone	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	47.0 U	-	37.1 U	-	54.0 U	-	49.2 U	-	40.9 U	-	48.4 U	-	44.3 U	-	36.0 U	-	37.9 U	-
Benzene	µg/kg	$4{,}800^{A}$ $44{,}000^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Bromodichloromethane	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Bromoform (Tribromomethane)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	23.5 U	-	18.5 U	-	27.0 U	-	24.6 U	-	20.4 U	-	24.2 U	-	22.1 U	-	18.0 U	-	18.9 U	-
Bromomethane (Methyl bromide)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Butylbenzene, n-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Butylbenzene, sec- (2-Phenylbutane)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Butylbenzene, tert-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Carbon Disulfide	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Carbon Tetrachloride (Tetrachloromethane)	µg/kg	$2{,}400^{A}$ $22{,}000^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Chlorobenzene (Monochlorobenzene)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Chlorobromomethane	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	23.5 U	-	18.5 U	-	27.0 U	-	24.6 U	-	20.4 U	-	24.2 U	-	22.1 U	-	18.0 U	-	18.9 U	-
Chloroethane (Ethyl Chloride)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Chloroform (Trichloromethane)	µg/kg	$49{,}000^{A}$ $350{,}000^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Chloromethane	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Cyclohexane	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	47.0 U	-	37.1 U	-	54.0 U	-	49.2 U	-	40.9 U	-	48.4 U	-	44.3 U	-	36.0 U	-	37.9 U	-
Dibromo-3-Chloropropane, 1,2- (DBCP)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	47.0 U	-	37.1 U	-	54.0 U	-	49.2 U	-	40.9 U	-	48.4 U	-	44.3 U	-	36.0 U	-	37.9 U	-
Dibromochloromethane	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Dichlorobenzene, 1,2-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Dichlorobenzene, 1,3-	µg/kg	$49{,}000^{A}$ $280{,}000^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Dichlorobenzene, 1,4-	µg/kg	$13{,}000^{A}$ $130{,}000^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Dichlorodifluoromethane (Freon 12)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Dichloroethane, 1,1-	µg/kg	$26{,}000^{A}$ $240{,}000^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Dichloroethane, 1,2-	µg/kg	$3{,}100^{A}$ $30{,}000^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Dichloroethene, 1,1-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Dichloroethene, cis-1,2-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Dichloroethene, trans-1,2-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Dichloropropane, 1,2-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Dichloropropene, cis-1,3-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Dichloropropene, trans-1,3-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Dioxane, 1,4-	µg/kg	$13{,}000^{A}$ $130{,}000^{B}$	47.0 U	-	37.1 U	-	54.0 U	-	49.2 U	-	40.9 U	-	48.4 U	-	44.3 U	-	36.0 U	-	37.9 U	-
Ethylbenzene	µg/kg	$41{,}000^{A}$ $390{,}000^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Hexanone, 2- (Methyl Butyl Ketone)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	23.5 U	-	18.5 U	-	27.0 U	-	24.6 U	-	20.4 U	-	24.2 U	-	22.1 U	-	18.0 U	-	18.9 U	-
Isopropylbenzene	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Isopropyltoluene, p- (Cymene)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Methyl Acetate	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Methyl Ethyl Ketone (MEK) (2-Butanone)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	47.0 U	-	37.1 U	-	54.0 U	-	49.2 U	-	40.9 U	-	48.4 U	-	44.3 U	-	36.0 U	-	37.9 U	-
Methyl Isobutyl Ketone (MIBK)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	23.5 U	-	18.5 U	-	27.0 U	-	24.6 U	-	20.4 U	-	24.2 U	-	22.1 U	-	18.0 U	-	18.9 U	-
Methyl tert-butyl ether (MTBE)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Methylcyclohexane	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Methylene Chloride (Dichloromethane)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	23.5 U	-	18.5 U	-	27.0 U	-	24.6 U	-	20.4 U	-	24.2 U	-	22.1 U	-	18.0 U	-	18.9 U	-
Naphthalene	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	23.5 U	-	18.5 U	-	27.0 U	-	24.6 U	-	20.4 U	-	24.2 U	-	22.1 U	-	18.0 U	-	18.9 U	-
Propylbenzene, n-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Styrene	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	23.5 U	-	18.5 U	-	27.0 U	-	24.6 U	-	20.4 U	-	24.2 U	-	22.1 U	-	18.0 U	-	18.9 U	-
Tetrachloroethane, 1,1,2,2-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Tetrachloroethene (PCE)	µg/kg	$19{,}000^{A}$ $150{,}000^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Toluene	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Trichlorobenzene, 1,2,3-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	23.5 U	-	18.5 U	-	27.0 U	-	24.6 U	-	20.4 U	-	24.2 U	-	22.1 U	-	18.0 U	-	18.9 U	-
Trichlorobenzene, 1,2,4-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	23.5 U	-	18.5 U	-	27.0 U	-	24.6 U	-	20.4 U	-	24.2 U	-	22.1 U	-	18.0 U	-	18.9 U	-
Trichloroethane, 1,1,1-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Trichloroethane, 1,1,2-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Trichloroethene (TCE)	µg/kg	$21{,}000^{A}$ $200{,}000^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Trichlorofluoromethane (Freon 11)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Trichlorotrifluoroethane (Freon 113)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Trimethylbenzene, 1,2,4-	µg/kg	$52{,}000^{A}$ $190{,}000^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Trimethylbenzene, 1,3,5-	µg/kg	$52{,}000^{A}$ $190{,}000^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Vinyl Chloride	µg/kg	900^{A} $13{,}000^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Xylene, m & p-	µg/kg	$100{,}000_{b,p}^{A}$ $500{,}000_{c,p}^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Xylene, o-	µg/kg	$100{,}000_{b,o}^{A}$ $500{,}000_{c,o}^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-

See notes on last page.

Table
Summary of Soil Analytical Results
Brewery Line Trail Environmental
City of Rochester

Sample Location			RRS-01		RRS-02		SB-01		SB-02		SB-03		SB-04		SB-05		SB-08		SB-09	
Sample Date			2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21
Sample ID			RRS-01-BLT-A	RRS-01-BLT-B	RRS-02-BLT-A	RRS-02-BLT-B	SB-01-BLT	SB-01-BLT	SB-02-BLT	SB-02-BLT	SB-03-BLT	SB-03-BLT	SB-04-BLT-A	SB-04-BLT-B	SB-05-BLT-A	SB-05-BLT-B	SB-08-BLT-A	SB-08-BLT-B	SB-09-BLT-A	SB-09-BLT-B
			0 - 2 ft	0 - 2 ft	0 - 2 ft	0 - 2 ft	0.7 ft (VOC)	2.0 ft (SVOC)	0.8 ft (VOC)	1.4 ft (SVOC)	0.8 ft (VOC)	1.5 ft (SVOC)	0.8 ft	1.5 ft	0.9 ft	1.5 ft	0.5 ft	2.5 ft	0.6 ft	2.3 ft
Sampling Company			STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory			PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH
Laboratory Work Order			213459	213459	213459	213459	213459	213459	213459	213459	213459	213459	213459	213459	213459	213459	213459	213459	213459	213459
Laboratory Sample ID			213459-09A	213459-09	213459-10A	213459-10	213459-01A	213459-01	213459-02A	213459-02	213459-03A	213459-03	213459-04A	213459-04	213459-05A	213459-05	213459-06A	213459-06	213459-07A	213459-07
Sample Type	Units	NYSDEC-Part 375																		
Semi-Volatile Organic Compounds																				
Acenaphthene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Acenaphthylene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	445	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Acetophenone	µg/kg	$100{,}000_b^A$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Anthracene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	436	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Atrazine	µg/kg	$100{,}000_b^A$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Benzaldehyde	µg/kg	$100{,}000_b^A$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Benzo(a)anthracene	µg/kg	$1{,}000_g^A$ $5{,}600^B$	-	**1,110^A**	-	316 U	-	336 U	-	312 U	-	276 U	-	449	-	321 U	-	305 U	-	294 U
Benzo(a)pyrene	µg/kg	$1{,}000_g^{AB}$	-	805	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Benzo(b)fluoranthene	µg/kg	$1{,}000_g^A$ $5{,}600^B$	-	**1,470^A**	-	316 U	-	336 U	-	312 U	-	276 U	-	456	-	432	-	305 U	-	294 U
Benzo(g,h,i)perylene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	499	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Benzo(k)fluoranthene	µg/kg	$3{,}900^A$ $56{,}000^B$	-	781	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Biphenyl	µg/kg	$100{,}000_b^A$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Bis(2-Chloroethoxy)methane	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Bis(2-Chloroethyl)ether	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Bis(2-Chloroisopropyl)ether (2,2-oxybis(1-Chloropropane))	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Bis(2-Ethylhexyl)phthalate (DEHP)	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Bromophenyl Phenyl Ether, 4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Butyl Benzyl Phthalate	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Caprolactam	µg/kg	$100{,}000_b^A$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Carbazole	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Chloro-3-methyl phenol, 4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Chloroaniline, 4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Chloronaphthalene, 2-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Chlorophenol, 2- (ortho-Chlorophenol)	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Chlorophenyl Phenyl Ether, 4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Chrysene	µg/kg	$3{,}900^A$ $56{,}000^B$	-	1,330	-	316 U	-	336 U	-	312 U	-	276 U	-	506	-	390	-	305 U	-	294 U
Cresol, m & p- (Methylphenol, 3&4-)	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Cresol, o- (Methylphenol, 2-)	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Dibenzo(a,h)anthracene	µg/kg	330^A 560^B	-	327 U	-	316 U	-	***336 U***	-	312 U	-	276 U	-	***333 U***	-	321 U	-	305 U	-	294 U
Dibenzofuran	µg/kg	$59{,}000^A$ $350{,}000^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Dibutyl Phthalate (DBP)	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Dichlorobenzene, 1,2-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Dichlorobenzene, 1,3-	µg/kg	$49{,}000^A$ $280{,}000^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Dichlorobenzene, 1,4-	µg/kg	$13{,}000^A$ $130{,}000^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Dichlorobenzidine, 3,3'-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Dichlorophenol, 2,4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Diethyl Phthalate	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Dimethyl Phthalate	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Dimethylphenol, 2,4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Dinitro-o-cresol, 4,6-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	654 U	-	632 U	-	671 U	-	625 U	-	552 U	-	665 U	-	643 U	-	610 U	-	587 U
Dinitrophenol, 2,4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	1,310 U	-	1,260 U	-	1,340 U	-	1,250 U	-	1,100 U	-	1,330 U	-	1,290 U	-	1,220 U	-	1,170 U
Dinitrotoluene, 2,4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Dinitrotoluene, 2,6-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Di-n-Octyl phthalate	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Fluoranthene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	2,130	-	316 U	-	336 U	-	312 U	-	276 U	-	1,230	-	602	-	305 U	-	294 U
Fluorene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Hexachlorobenzene	µg/kg	$1{,}200^A$ $6{,}000^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Hexachlorocyclopentadiene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	1,310 U	-	1,260 U	-	1,340 U	-	1,250 U	-	1,100 U	-	1,330 U	-	1,290 U	-	1,220 U	-	1,170 U
Hexachloroethane	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Indeno(1,2,3-cd)pyrene	µg/kg	500_g^A $5{,}600^B$	-	**621^A**	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Isophorone	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Methylnaphthalene, 2-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	497	-	305 U	-	294 U
Naphthalene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	331	-	305 U	-	294 U
Nitroaniline, 2-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Nitroaniline, 3-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Nitroaniline, 4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Nitrobenzene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Nitrophenol, 2-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Nitrophenol, 4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
N-Nitrosodi-n-Propylamine	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
n-Nitrosodiphenylamine	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Pentachlorophenol	µg/kg	$6{,}700^{AB}$	-	654 U	-	632 U	-	671 U	-	625 U	-	552 U	-	665 U	-	643 U	-	610 U	-	587 U
Phenanthrene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	912	-	316 U	-	336 U	-	312 U	-	276 U	-	1,510	-	745	-	305 U	-	294 U
Phenol	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Pyrene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	1,770	-	316 U	-	336 U	-	312 U	-	276 U	-	963	-	353	-	305 U	-	294 U
Tetrachlorobenzene, 1,2,4,5-	µg/kg	$100{,}000_b^A$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Tetrachlorophenol, 2,3,4,6-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Trichlorobenzene, 1,2,4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Trichlorophenol, 2,4,5-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Trichlorophenol, 2,4,6-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U

See notes on last page.

Table
Summary of Soil Analytical Results
Brewery Line Trail Environmental
City of Rochester

Sample Location			SB-11		TE-01		TE-02		TE-03		TE-04	
Sample Date			2-Aug-21	2-Aug-21	3-Aug-21	3-Aug-21	3-Aug-21	3-Aug-21	3-Aug-21	3-Aug-21	3-Aug-21	3-Aug-21
Sample ID			SB-11-BLT-A 1.1 ft	SB-11-BLT-B 1.9 ft	TE-01-BLT-A 1.0 ft	TE-01-BLT-B 1.0 ft	TE-02-BLT-A 1.6 ft	TE-02-BLT-B 1.6 ft	TE-03-BLT-A 1.5 ft	TE-03-BLT-B 1.5 ft	TE-04-BLT-A 2.5 ft	TE-04-BLT-B 2.5 ft
Sampling Company			STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory			PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH
Laboratory Work Order			213459	213459	213480	213480	213480	213480	213480	213480	213480	213480
Laboratory Sample ID			213459-08A	213459-08	213480-01A	213480-01	213480-02A	213480-02	213480-03A	213480-03	213480-04A	213480-04
Sample Type	Units	NYSDEC-Part 375										
Metals												
Arsenic	mg/kg	16_g^{AB}	-	2.96	-	**41.7^{AB}**	-	2.77	-	5.76	-	3.71 D
Barium	mg/kg	400^{AB}	-	39.5	-	**$3{,}510^{AB}$**	-	69.6	-	53.5	-	60.1
Cadmium	mg/kg	4.3^{A} 9.3^{B}	-	0.490	-	**9.47^{AB}**	-	0.271 U	-	0.289	-	0.289 D
Chromium	mg/kg	180_d^{A} $1{,}500_d^{B}$	-	10.8	-	126	-	10.7	-	10.1	-	9.69
Lead	mg/kg	400^{A} $1{,}000^{B}$	-	44.7	-	**$11{,}400^{AB}$**	-	22.7	-	59.5	-	62.7
Mercury	mg/kg	0.81_k^{A} 2.8_k^{B}	-	0.117	-	**1.91^{A}**	-	0.0773	-	0.175	-	0.285
Selenium	mg/kg	180^{A} $1{,}500^{B}$	-	1.08 U	-	2.62	-	1.08 U	-	1.11 U	-	1.10 U
Silver	mg/kg	180^{A} $1{,}500^{B}$	-	0.541 U	-	0.598 U	-	0.542 U	-	0.553 U	-	0.550 U
Polychlorinated Biphenyls												
Aroclor 1016	mg/kg	$_o^{AB}$	-	0.134 U	-	0.180 U	-	0.181 U	-	0.143 U	-	0.175 U
Aroclor 1221	mg/kg	$_o^{AB}$	-	0.134 U	-	0.180 U	-	0.181 U	-	0.143 U	-	0.175 U
Aroclor 1232	mg/kg	$_o^{AB}$	-	0.134 U	-	0.180 U	-	0.181 U	-	0.143 U	-	0.175 U
Aroclor 1242	mg/kg	$_o^{AB}$	-	0.134 U	-	0.180 U	-	0.181 U	-	0.143 U	-	0.175 U
Aroclor 1248	mg/kg	$_o^{AB}$	-	0.134 U	-	0.180 U	-	0.181 U	-	0.143 U	-	0.175 U
Aroclor 1254	mg/kg	$_o^{AB}$	-	0.134 U	-	0.180 U	-	0.181 U	-	0.143 U	-	0.175 U
Aroclor 1260	mg/kg	$_o^{AB}$	-	0.134 U	-	0.180 U	-	0.181 U	-	0.143 U	-	0.175 U
Aroclor 1262	mg/kg	$_o^{AB}$	-	0.134 U	-	0.180 U	-	0.181 U	-	0.143 U	-	0.175 U
Aroclor 1268	mg/kg	$_o^{AB}$	-	0.134 U	-	0.180 U	-	0.181 U	-	0.143 U	-	0.175 U
Polychlorinated Biphenyls (PCBs)	mg/kg	1^{AB}	-	ND	-	ND	-	ND	-	ND	-	ND
Volatile Organic Compounds												
Acetone	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	40.7 U	-	55.4 U	-	49.3 U	-	35.2 U	-	42.5 U	-
Benzene	µg/kg	$4{,}800^{A}$ $44{,}000^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Bromodichloromethane	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Bromoform (Tribromomethane)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	20.3 U	-	27.7 U	-	24.7 U	-	17.6 U	-	21.3 U	-
Bromomethane (Methyl bromide)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Butylbenzene, n-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Butylbenzene, sec- (2-Phenylbutane)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Butylbenzene, tert-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Carbon Disulfide	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Carbon Tetrachloride (Tetrachloromethane)	µg/kg	$2{,}400^{A}$ $22{,}000^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Chlorobenzene (Monochlorobenzene)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Chlorobromomethane	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	20.3 U	-	27.7 U	-	24.7 U	-	17.6 U	-	21.3 U	-
Chloroethane (Ethyl Chloride)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Chloroform (Trichloromethane)	µg/kg	$49{,}000^{A}$ $350{,}000^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Chloromethane	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Cyclohexane	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	40.7 U	-	55.4 U	-	49.3 U	-	35.2 U	-	42.5 U	-
Dibromo-3-Chloropropane, 1,2- (DBCP)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	40.7 U	-	55.4 U	-	49.3 U	-	35.2 U	-	42.5 U	-
Dibromochloromethane	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Dichlorobenzene, 1,2-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Dichlorobenzene, 1,3-	µg/kg	$49{,}000^{A}$ $280{,}000^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Dichlorobenzene, 1,4-	µg/kg	$13{,}000^{A}$ $130{,}000^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Dichlorodifluoromethane (Freon 12)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Dichloroethane, 1,1-	µg/kg	$26{,}000^{A}$ $240{,}000^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Dichloroethane, 1,2-	µg/kg	$3{,}100^{A}$ $30{,}000^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Dichloroethene, 1,1-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Dichloroethene, cis-1,2-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Dichloroethene, trans-1,2-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Dichloropropane, 1,2-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Dichloropropene, cis-1,3-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Dichloropropene, trans-1,3-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Dioxane, 1,4-	µg/kg	$13{,}000^{A}$ $130{,}000^{B}$	40.7 U	-	55.4 U	-	49.3 U	-	35.2 U	-	42.5 U	-
Ethylbenzene	µg/kg	$41{,}000^{A}$ $390{,}000^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Hexanone, 2- (Methyl Butyl Ketone)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	20.3 U	-	27.7 U	-	24.7 U	-	17.6 U	-	21.3 U	-
Isopropylbenzene	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Isopropyltoluene, p- (Cymene)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	8.14 U	-	11.5	-	9.86 U	-	7.04 U	-	8.50 U	-
Methyl Acetate	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Methyl Ethyl Ketone (MEK) (2-Butanone)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	40.7 U	-	55.4 U	-	49.3 U	-	35.2 U	-	42.5 U	-
Methyl Isobutyl Ketone (MIBK)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	20.3 U	-	27.7 U	-	24.7 U	-	17.6 U	-	21.3 U	-
Methyl tert-butyl ether (MTBE)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Methylcyclohexane	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Methylene Chloride (Dichloromethane)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	20.3 U	-	27.7 U	-	24.7 U	-	17.6 U	-	21.3 U	-
Naphthalene	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	20.3 U	-	27.7 U	-	24.7 U	-	17.6 U	-	21.3 U	-
Propylbenzene, n-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Styrene	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	20.3 U	-	27.7 U	-	24.7 U	-	17.6 U	-	21.3 U	-
Tetrachloroethane, 1,1,2,2-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Tetrachloroethene (PCE)	µg/kg	$19{,}000^{A}$ $150{,}000^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Toluene	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Trichlorobenzene, 1,2,3-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	20.3 U	-	27.7 U	-	24.7 U	-	17.6 U	-	21.3 U	-
Trichlorobenzene, 1,2,4-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	20.3 U	-	27.7 U	-	24.7 U	-	17.6 U	-	21.3 U	-
Trichloroethane, 1,1,1-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Trichloroethane, 1,1,2-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Trichloroethene (TCE)	µg/kg	$21{,}000^{A}$ $200{,}000^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Trichlorofluoromethane (Freon 11)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Trichlorotrifluoroethane (Freon 113)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Trimethylbenzene, 1,2,4-	µg/kg	$52{,}000^{A}$ $190{,}000^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Trimethylbenzene, 1,3,5-	µg/kg	$52{,}000^{A}$ $190{,}000^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Vinyl Chloride	µg/kg	900^{A} $13{,}000^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Xylene, m & p-	µg/kg	$100{,}000_{b,o}^{A}$ $500{,}000_{c,p}^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Xylene, o-	µg/kg	$100{,}000_{b,o}^{A}$ $500{,}000_{c,p}^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-

See notes on last page.

Table
Summary of Soil Analytical Results
Brewery Line Trail Environmental
City of Rochester

Sample Location			SB-11		TE-01		TE-02		TE-03		TE-04	
Sample Date			2-Aug-21	2-Aug-21	3-Aug-21	3-Aug-21	3-Aug-21	3-Aug-21	3-Aug-21	3-Aug-21	3-Aug-21	3-Aug-21
Sample ID			SB-11-BLT-A	SB-11-BLT-B	TE-01-BLT-A	TE-01-BLT-B	TE-02-BLT-A	TE-02-BLT-B	TE-03-BLT-A	TE-03-BLT-B	TE-04-BLT-A	TE-04-BLT-B
			1.1 ft	1.9 ft	1.0 ft	1.0 ft	1.6 ft	1.6 ft	1.5 ft	1.5 ft	2.5 ft	2.5 ft
Sampling Company			STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory			PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH
Laboratory Work Order			213459	213459	213480	213480	213480	213480	213480	213480	213480	213480
Laboratory Sample ID			213459-08A	213459-08	213480-01A	213480-01	213480-02A	213480-02	213480-03A	213480-03	213480-04A	213480-04
Sample Type	Units	NYSDEC-Part 375										
Semi-Volatile Organic Compounds												
Acenaphthene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Acenaphthylene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	940	-	321 U	-	296 U	-	294 U
Acetophenone	µg/kg	$100{,}000_b^A$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Anthracene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	1,130	-	321 U	-	296 U	-	294 U
Atrazine	µg/kg	$100{,}000_b^A$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Benzaldehyde	µg/kg	$100{,}000_b^A$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Benzo(a)anthracene	µg/kg	$1{,}000_g^A$ $5{,}600^B$	-	284 U	-	**3,910^A**	-	321 U	-	296 U	-	294 U
Benzo(a)pyrene	µg/kg	$1{,}000_g^{AB}$	-	284 U	-	**2,830^{AB}**	-	321 U	-	296 U	-	294 U
Benzo(b)fluoranthene	µg/kg	$1{,}000_g^A$ $5{,}600^B$	-	284 U	-	**4,080^A**	-	321 U	-	296 U	-	294 U
Benzo(g,h,i)perylene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	1,950	-	321 U	-	296 U	-	294 U
Benzo(k)fluoranthene	µg/kg	$3{,}900^A$ $56{,}000^B$	-	284 U	-	2,000	-	321 U	-	296 U	-	294 U
Biphenyl	µg/kg	$100{,}000_b^A$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Bis(2-Chloroethoxy)methane	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Bis(2-Chloroethyl)ether	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Bis(2-Chloroisopropyl)ether (2,2-oxybis(1-Chloropropane))	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Bis(2-Ethylhexyl)phthalate (DEHP)	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Bromophenyl Phenyl Ether, 4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Butyl Benzyl Phthalate	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Caprolactam	µg/kg	$100{,}000_b^A$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Carbazole	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	501	-	321 U	-	296 U	-	294 U
Chloro-3-methyl phenol, 4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Chloroaniline, 4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Chloronaphthalene, 2-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Chlorophenol, 2- (ortho-Chlorophenol)	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Chlorophenyl Phenyl Ether, 4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Chrysene	µg/kg	$3{,}900^A$ $56{,}000^B$	-	284 U	-	3,690	-	321 U	-	296 U	-	294 U
Cresol, m & p- (Methylphenol, 3&4-)	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Cresol, o- (Methylphenol, 2-)	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Dibenzo(a,h)anthracene	µg/kg	330^A 560^B	-	284 U	-	**573^{AB}**	-	321 U	-	296 U	-	294 U
Dibenzofuran	µg/kg	$59{,}000^A$ $350{,}000^B$	-	284 U	-	336	-	321 U	-	296 U	-	294 U
Dibutyl Phthalate (DBP)	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Dichlorobenzene, 1,2-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Dichlorobenzene, 1,3-	µg/kg	$49{,}000^A$ $280{,}000^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Dichlorobenzene, 1,4-	µg/kg	$13{,}000^A$ $130{,}000^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Dichlorobenzidine, 3,3'-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Dichlorophenol, 2,4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Diethyl Phthalate	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Dimethyl Phthalate	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Dimethylphenol, 2,4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Dinitro-o-cresol, 4,6-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	569 U	-	623 U	-	642 U	-	593 U	-	588 U
Dinitrophenol, 2,4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	1,140 U	-	1,250 U	-	1,280 U	-	1,190 U	-	1,180 U
Dinitrotoluene, 2,4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Dinitrotoluene, 2,6-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Di-n-Octyl phthalate	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Fluoranthene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	359	-	6,190	-	321 U	-	296 U	-	294 U
Fluorene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Hexachlorobenzene	µg/kg	$1{,}200^A$ $6{,}000^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Hexachlorocyclopentadiene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	1,140 U	-	1,250 U	-	1,280 U	-	1,190 U	-	1,180 U
Hexachloroethane	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Indeno(1,2,3-cd)pyrene	µg/kg	500_g^A $5{,}600^B$	-	284 U	-	**2,090^A**	-	321 U	-	296 U	-	294 U
Isophorone	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Methylnaphthalene, 2-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	505	-	321 U	-	296 U	-	294 U
Naphthalene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	686	-	321 U	-	296 U	-	294 U
Nitroaniline, 2-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Nitroaniline, 3-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Nitroaniline, 4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Nitrobenzene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Nitrophenol, 2-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Nitrophenol, 4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
N-Nitrosodi-n-Propylamine	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
n-Nitrosodiphenylamine	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Pentachlorophenol	µg/kg	$6{,}700^{AB}$	-	569 U	-	623 U	-	642 U	-	593 U	-	588 U
Phenanthrene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	2,310	-	321 U	-	296 U	-	294 U
Phenol	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Pyrene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	307	-	4,620	-	321 U	-	296 U	-	294 U
Tetrachlorobenzene, 1,2,4,5-	µg/kg	$100{,}000_b^A$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Tetrachlorophenol, 2,3,4,6-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Trichlorobenzene, 1,2,4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Trichlorophenol, 2,4,5-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Trichlorophenol, 2,4,6-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U

See notes on last page.

Table
Summary of Soil Analytical Results
Brewery Line Trail Environmental
City of Rochester

Notes:

NYSDEC-Part 375	NYSDEC 6 NYCRR Part 375 Soil Clean-up Objectives (SCOs)
A	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Restricted Residential
B	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Commercial
6.5[A]	Concentration exceeds the indicated standard.
15.2	Measured concentration did not exceed the indicated standard.
0.50 U	Laboratory reporting limit was greater than the applicable standard.
0.03 U	Analyte was not detected at a concentration greater than the laboratory reporting limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
b	The SCOs for residential, restricted-residential and ecological resources use were capped at a maximum value of 100 mg/kg. See 6 NYCRR Part 375 TSD Section 9.3.
b,p	The SCOs for residential, restricted-residential and ecological resources use were capped at a maximum value of 100 mg/kg. See 6 NYCRR Part 375 TSD Section 9.3. The criterion is applicable to total xylenes, and the individual isomers should be added for comparison.
c	The SCOs for commercial use were capped at a maximum value of 500 mg/kg. See TSD Section 9.3.
c,p	The SCOs for commercial use were capped at a maximum value of 500 mg/kg. See TSD Section 9.3. The criterion is applicable to total xylenes, and the individual isomers should be added for comparison.
f	For constituents where the calculated SCO was lower than the CRQL, the CRQL is used as the SCO value.
g	For constituents where the calculated SCO was lower than the rural soil background concentration as determined by the DEC/DOH rural soil survey, the rural soil background concentration is used as the Track 2 SCO value for this use of the site.
i	The SCO for this specific compound (or family of compounds) is considered to be met if the analysis for the total species of this contaminant is below the specific SCO.
k	This SCO is the lower of the values for mercury (elemental) or mercury (inorganic salts). See 6 NYCRR Part 375 TSD Table 5.6-1.
o	Standard is applicable to total PCBs, and the individual Aroclors should be added for comparison.
D	Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.
ND	Not detected.

ATTACHMENT E LABORATORY ANALYTICAL REPORTS

Analytical Report For

Stantec

For Lab Project ID

213459

Referencing

213414039.400

Prepared

Tuesday, August 10, 2021

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-01-BLT		
Lab Sample ID:	213459-01	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.0270**	mg/Kg		8/6/2021 10:32

Method Reference(s): EPA 7471B
Preparation Date: 8/5/2021
Data File: Hg210806A

RCRA Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**4.80**	mg/Kg		8/5/2021 20:19
Barium	**53.5**	mg/Kg		8/5/2021 20:19
Cadmium	**0.425**	mg/Kg		8/5/2021 20:19
Chromium	**6.24**	mg/Kg		8/5/2021 20:19
Lead	**9.16**	mg/Kg		8/5/2021 20:19
Selenium	**1.54**	mg/Kg		8/5/2021 20:19
Silver	< 0.621	mg/Kg		8/5/2021 20:19

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 8/5/2021
Data File: 210805D

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.156	mg/Kg		8/4/2021 18:54
PCB-1221	< 0.156	mg/Kg		8/4/2021 18:54
PCB-1232	< 0.156	mg/Kg		8/4/2021 18:54
PCB-1242	< 0.156	mg/Kg		8/4/2021 18:54
PCB-1248	< 0.156	mg/Kg		8/4/2021 18:54
PCB-1254	< 0.156	mg/Kg		8/4/2021 18:54
PCB-1260	< 0.156	mg/Kg		8/4/2021 18:54
PCB-1262	< 0.156	mg/Kg		8/4/2021 18:54
PCB-1268	< 0.156	mg/Kg		8/4/2021 18:54

Report Prepared Tuesday, August 10, 2021

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-01-BLT		
Lab Sample ID:	213459-01	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	**59.1**	18.5 - 93.4		8/4/2021 18:54

Method Reference(s): EPA 8082A
EPA 3546
Preparation Date: 8/4/2021

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 336	ug/Kg		8/6/2021 15:01
1,2,4,5-Tetrachlorobenzene	< 336	ug/Kg		8/6/2021 15:01
1,2,4-Trichlorobenzene	< 336	ug/Kg		8/6/2021 15:01
1,2-Dichlorobenzene	< 336	ug/Kg		8/6/2021 15:01
1,3-Dichlorobenzene	< 336	ug/Kg		8/6/2021 15:01
1,4-Dichlorobenzene	< 336	ug/Kg		8/6/2021 15:01
2,2-Oxybis (1-chloropropane)	< 336	ug/Kg		8/6/2021 15:01
2,3,4,6-Tetrachlorophenol	< 336	ug/Kg		8/6/2021 15:01
2,4,5-Trichlorophenol	< 336	ug/Kg		8/6/2021 15:01
2,4,6-Trichlorophenol	< 336	ug/Kg		8/6/2021 15:01
2,4-Dichlorophenol	< 336	ug/Kg		8/6/2021 15:01
2,4-Dimethylphenol	< 336	ug/Kg		8/6/2021 15:01
2,4-Dinitrophenol	< 1340	ug/Kg		8/6/2021 15:01
2,4-Dinitrotoluene	< 336	ug/Kg		8/6/2021 15:01
2,6-Dinitrotoluene	< 336	ug/Kg		8/6/2021 15:01
2-Chloronaphthalene	< 336	ug/Kg		8/6/2021 15:01
2-Chlorophenol	< 336	ug/Kg		8/6/2021 15:01
2-Methylnapthalene	< 336	ug/Kg		8/6/2021 15:01
2-Methylphenol	< 336	ug/Kg		8/6/2021 15:01
2-Nitroaniline	< 336	ug/Kg		8/6/2021 15:01
2-Nitrophenol	< 336	ug/Kg		8/6/2021 15:01
3&4-Methylphenol	< 336	ug/Kg		8/6/2021 15:01
3,3'-Dichlorobenzidine	< 336	ug/Kg		8/6/2021 15:01

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-01-BLT
Lab Sample ID: 213459-01 **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

3-Nitroaniline	< 336	ug/Kg	8/6/2021	15:01
4,6-Dinitro-2-methylphenol	< 449	ug/Kg	8/6/2021	15:01
4-Bromophenyl phenyl ether	< 336	ug/Kg	8/6/2021	15:01
4-Chloro-3-methylphenol	< 336	ug/Kg	8/6/2021	15:01
4-Chloroaniline	< 336	ug/Kg	8/6/2021	15:01
4-Chlorophenyl phenyl ether	< 336	ug/Kg	8/6/2021	15:01
4-Nitroaniline	< 336	ug/Kg	8/6/2021	15:01
4-Nitrophenol	< 336	ug/Kg	8/6/2021	15:01
Acenaphthene	< 336	ug/Kg	8/6/2021	15:01
Acenaphthylene	< 336	ug/Kg	8/6/2021	15:01
Acetophenone	< 336	ug/Kg	8/6/2021	15:01
Anthracene	< 336	ug/Kg	8/6/2021	15:01
Atrazine	< 336	ug/Kg	8/6/2021	15:01
Benzaldehyde	< 336	ug/Kg	8/6/2021	15:01
Benzo (a) anthracene	< 336	ug/Kg	8/6/2021	15:01
Benzo (a) pyrene	< 336	ug/Kg	8/6/2021	15:01
Benzo (b) fluoranthene	< 336	ug/Kg	8/6/2021	15:01
Benzo (g,h,i) perylene	< 336	ug/Kg	8/6/2021	15:01
Benzo (k) fluoranthene	< 336	ug/Kg	8/6/2021	15:01
Bis (2-chloroethoxy) methane	< 336	ug/Kg	8/6/2021	15:01
Bis (2-chloroethyl) ether	< 336	ug/Kg	8/6/2021	15:01
Bis (2-ethylhexyl) phthalate	< 336	ug/Kg	8/6/2021	15:01
Butylbenzylphthalate	< 336	ug/Kg	8/6/2021	15:01
Caprolactam	< 336	ug/Kg	8/6/2021	15:01
Carbazole	< 336	ug/Kg	8/6/2021	15:01
Chrysene	< 336	ug/Kg	8/6/2021	15:01
Dibenz (a,h) anthracene	< 336	ug/Kg	8/6/2021	15:01
Dibenzofuran	< 336	ug/Kg	8/6/2021	15:01
Diethyl phthalate	< 336	ug/Kg	8/6/2021	15:01
Dimethyl phthalate	< 336	ug/Kg	8/6/2021	15:01

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-01-BLT
Lab Sample ID: 213459-01 **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Di-n-butyl phthalate	< 336	ug/Kg	8/6/2021	15:01
Di-n-octylphthalate	< 336	ug/Kg	8/6/2021	15:01
Fluoranthene	< 336	ug/Kg	8/6/2021	15:01
Fluorene	< 336	ug/Kg	8/6/2021	15:01
Hexachlorobenzene	< 336	ug/Kg	8/6/2021	15:01
Hexachlorobutadiene	< 336	ug/Kg	8/6/2021	15:01
Hexachlorocyclopentadiene	< 1340	ug/Kg	8/6/2021	15:01
Hexachloroethane	< 336	ug/Kg	8/6/2021	15:01
Indeno (1,2,3-cd) pyrene	< 336	ug/Kg	8/6/2021	15:01
Isophorone	< 336	ug/Kg	8/6/2021	15:01
Naphthalene	< 336	ug/Kg	8/6/2021	15:01
Nitrobenzene	< 336	ug/Kg	8/6/2021	15:01
N-Nitroso-di-n-propylamine	< 336	ug/Kg	8/6/2021	15:01
N-Nitrosodiphenylamine	< 336	ug/Kg	8/6/2021	15:01
Pentachlorophenol	< 671	ug/Kg	8/6/2021	15:01
Phenanthrene	< 336	ug/Kg	8/6/2021	15:01
Phenol	< 336	ug/Kg	8/6/2021	15:01
Pyrene	< 336	ug/Kg	8/6/2021	15:01

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	**56.7**	36.4 - 87.2		8/6/2021	15:01
2-Fluorobiphenyl	**54.9**	44 - 84		8/6/2021	15:01
2-Fluorophenol	**45.6**	43.2 - 82.1		8/6/2021	15:01
Nitrobenzene-d5	**46.2**	36.4 - 82.2		8/6/2021	15:01
Phenol-d5	**49.6**	41.1 - 81.4		8/6/2021	15:01
Terphenyl-d14	**64.6**	43.8 - 103		8/6/2021	15:01

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 8/5/2021
Data File: B55994.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-01-BLT		
Lab Sample ID:	213459-01A	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 10.8	ug/Kg		8/4/2021 15:36
1,1,2,2-Tetrachloroethane	< 10.8	ug/Kg		8/4/2021 15:36
1,1,2-Trichloroethane	< 10.8	ug/Kg		8/4/2021 15:36
1,1-Dichloroethane	< 10.8	ug/Kg		8/4/2021 15:36
1,1-Dichloroethene	< 10.8	ug/Kg		8/4/2021 15:36
1,2,3-Trichlorobenzene	< 27.0	ug/Kg		8/4/2021 15:36
1,2,4-Trichlorobenzene	< 27.0	ug/Kg		8/4/2021 15:36
1,2,4-Trimethylbenzene	< 10.8	ug/Kg		8/4/2021 15:36
1,2-Dibromo-3-Chloropropane	< 54.0	ug/Kg		8/4/2021 15:36
1,2-Dibromoethane	< 10.8	ug/Kg		8/4/2021 15:36
1,2-Dichlorobenzene	< 10.8	ug/Kg		8/4/2021 15:36
1,2-Dichloroethane	< 10.8	ug/Kg		8/4/2021 15:36
1,2-Dichloropropane	< 10.8	ug/Kg		8/4/2021 15:36
1,3,5-Trimethylbenzene	< 10.8	ug/Kg		8/4/2021 15:36
1,3-Dichlorobenzene	< 10.8	ug/Kg		8/4/2021 15:36
1,4-Dichlorobenzene	< 10.8	ug/Kg		8/4/2021 15:36
1,4-Dioxane	< 54.0	ug/Kg		8/4/2021 15:36
2-Butanone	< 54.0	ug/Kg		8/4/2021 15:36
2-Hexanone	< 27.0	ug/Kg		8/4/2021 15:36
4-Methyl-2-pentanone	< 27.0	ug/Kg		8/4/2021 15:36
Acetone	< 54.0	ug/Kg		8/4/2021 15:36
Benzene	< 10.8	ug/Kg		8/4/2021 15:36
Bromochloromethane	< 27.0	ug/Kg		8/4/2021 15:36
Bromodichloromethane	< 10.8	ug/Kg		8/4/2021 15:36
Bromoform	< 27.0	ug/Kg		8/4/2021 15:36
Bromomethane	< 10.8	ug/Kg		8/4/2021 15:36
Carbon disulfide	< 10.8	ug/Kg		8/4/2021 15:36
Carbon Tetrachloride	< 10.8	ug/Kg		8/4/2021 15:36

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-01-BLT
Lab Sample ID: 213459-01A **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Chlorobenzene	< 10.8	ug/Kg	8/4/2021	15:36
Chloroethane	< 10.8	ug/Kg	8/4/2021	15:36
Chloroform	< 10.8	ug/Kg	8/4/2021	15:36
Chloromethane	< 10.8	ug/Kg	8/4/2021	15:36
cis-1,2-Dichloroethene	< 10.8	ug/Kg	8/4/2021	15:36
cis-1,3-Dichloropropene	< 10.8	ug/Kg	8/4/2021	15:36
Cyclohexane	< 54.0	ug/Kg	8/4/2021	15:36
Dibromochloromethane	< 10.8	ug/Kg	8/4/2021	15:36
Dichlorodifluoromethane	< 10.8	ug/Kg	8/4/2021	15:36
Ethylbenzene	< 10.8	ug/Kg	8/4/2021	15:36
Freon 113	< 10.8	ug/Kg	8/4/2021	15:36
Isopropylbenzene	< 10.8	ug/Kg	8/4/2021	15:36
m,p-Xylene	< 10.8	ug/Kg	8/4/2021	15:36
Methyl acetate	< 10.8	ug/Kg	8/4/2021	15:36
Methyl tert-butyl Ether	< 10.8	ug/Kg	8/4/2021	15:36
Methylcyclohexane	< 10.8	ug/Kg	8/4/2021	15:36
Methylene chloride	< 27.0	ug/Kg	8/4/2021	15:36
Naphthalene	< 27.0	ug/Kg	8/4/2021	15:36
n-Butylbenzene	< 10.8	ug/Kg	8/4/2021	15:36
n-Propylbenzene	< 10.8	ug/Kg	8/4/2021	15:36
o-Xylene	< 10.8	ug/Kg	8/4/2021	15:36
p-Isopropyltoluene	< 10.8	ug/Kg	8/4/2021	15:36
sec-Butylbenzene	< 10.8	ug/Kg	8/4/2021	15:36
Styrene	< 27.0	ug/Kg	8/4/2021	15:36
tert-Butylbenzene	< 10.8	ug/Kg	8/4/2021	15:36
Tetrachloroethene	< 10.8	ug/Kg	8/4/2021	15:36
Toluene	< 10.8	ug/Kg	8/4/2021	15:36
trans-1,2-Dichloroethene	< 10.8	ug/Kg	8/4/2021	15:36
trans-1,3-Dichloropropene	< 10.8	ug/Kg	8/4/2021	15:36
Trichloroethene	< 10.8	ug/Kg	8/4/2021	15:36

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-01-BLT		
Lab Sample ID:	213459-01A	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Trichlorofluoromethane	< 10.8	ug/Kg			8/4/2021	15:36
Vinyl chloride	< 10.8	ug/Kg			8/4/2021	15:36

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	**99.9**	88.8 - 123		8/4/2021	15:36
4-Bromofluorobenzene	**76.8**	68.7 - 115		8/4/2021	15:36
Pentafluorobenzene	**98.9**	80.2 - 112		8/4/2021	15:36
Toluene-D8	**95.1**	83.5 - 123		8/4/2021	15:36

Method Reference(s): EPA 8260C
EPA 5035A - L

Data File: z03387.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-02-BLT		
Lab Sample ID:	213459-02	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.316**	mg/Kg		8/6/2021 10:34

Method Reference(s): EPA 7471B
Preparation Date: 8/5/2021
Data File: Hg210806A

RCRA Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**10.0**	mg/Kg		8/5/2021 20:24
Barium	**77.7**	mg/Kg		8/5/2021 20:24
Cadmium	< 0.276	mg/Kg		8/5/2021 20:24
Chromium	**11.6**	mg/Kg		8/5/2021 20:24
Lead	**62.9**	mg/Kg		8/5/2021 20:24
Selenium	< 1.10	mg/Kg		8/5/2021 20:24
Silver	< 0.552	mg/Kg		8/5/2021 20:24

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 8/5/2021
Data File: 210805D

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.153	mg/Kg		8/4/2021 19:17
PCB-1221	< 0.153	mg/Kg		8/4/2021 19:17
PCB-1232	< 0.153	mg/Kg		8/4/2021 19:17
PCB-1242	< 0.153	mg/Kg		8/4/2021 19:17
PCB-1248	< 0.153	mg/Kg		8/4/2021 19:17
PCB-1254	< 0.153	mg/Kg		8/4/2021 19:17
PCB-1260	< 0.153	mg/Kg		8/4/2021 19:17
PCB-1262	< 0.153	mg/Kg		8/4/2021 19:17
PCB-1268	< 0.153	mg/Kg		8/4/2021 19:17

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-02-BLT		
Lab Sample ID:	213459-02	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	**68.3**	18.5 - 93.4		8/4/2021 19:17

Method Reference(s): EPA 8082A
EPA 3546
Preparation Date: 8/4/2021

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 312	ug/Kg		8/6/2021 15:31
1,2,4,5-Tetrachlorobenzene	< 312	ug/Kg		8/6/2021 15:31
1,2,4-Trichlorobenzene	< 312	ug/Kg		8/6/2021 15:31
1,2-Dichlorobenzene	< 312	ug/Kg		8/6/2021 15:31
1,3-Dichlorobenzene	< 312	ug/Kg		8/6/2021 15:31
1,4-Dichlorobenzene	< 312	ug/Kg		8/6/2021 15:31
2,2-Oxybis (1-chloropropane)	< 312	ug/Kg		8/6/2021 15:31
2,3,4,6-Tetrachlorophenol	< 312	ug/Kg		8/6/2021 15:31
2,4,5-Trichlorophenol	< 312	ug/Kg		8/6/2021 15:31
2,4,6-Trichlorophenol	< 312	ug/Kg		8/6/2021 15:31
2,4-Dichlorophenol	< 312	ug/Kg		8/6/2021 15:31
2,4-Dimethylphenol	< 312	ug/Kg		8/6/2021 15:31
2,4-Dinitrophenol	< 1250	ug/Kg		8/6/2021 15:31
2,4-Dinitrotoluene	< 312	ug/Kg		8/6/2021 15:31
2,6-Dinitrotoluene	< 312	ug/Kg		8/6/2021 15:31
2-Chloronaphthalene	< 312	ug/Kg		8/6/2021 15:31
2-Chlorophenol	< 312	ug/Kg		8/6/2021 15:31
2-Methylnapthalene	< 312	ug/Kg		8/6/2021 15:31
2-Methylphenol	< 312	ug/Kg		8/6/2021 15:31
2-Nitroaniline	< 312	ug/Kg		8/6/2021 15:31
2-Nitrophenol	< 312	ug/Kg		8/6/2021 15:31
3&4-Methylphenol	< 312	ug/Kg		8/6/2021 15:31
3,3'-Dichlorobenzidine	< 312	ug/Kg		8/6/2021 15:31

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-02-BLT		
Lab Sample ID:	213459-02	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

3-Nitroaniline	< 312	ug/Kg	8/6/2021 15:31
4,6-Dinitro-2-methylphenol	< 418	ug/Kg	8/6/2021 15:31
4-Bromophenyl phenyl ether	< 312	ug/Kg	8/6/2021 15:31
4-Chloro-3-methylphenol	< 312	ug/Kg	8/6/2021 15:31
4-Chloroaniline	< 312	ug/Kg	8/6/2021 15:31
4-Chlorophenyl phenyl ether	< 312	ug/Kg	8/6/2021 15:31
4-Nitroaniline	< 312	ug/Kg	8/6/2021 15:31
4-Nitrophenol	< 312	ug/Kg	8/6/2021 15:31
Acenaphthene	< 312	ug/Kg	8/6/2021 15:31
Acenaphthylene	< 312	ug/Kg	8/6/2021 15:31
Acetophenone	< 312	ug/Kg	8/6/2021 15:31
Anthracene	< 312	ug/Kg	8/6/2021 15:31
Atrazine	< 312	ug/Kg	8/6/2021 15:31
Benzaldehyde	< 312	ug/Kg	8/6/2021 15:31
Benzo (a) anthracene	< 312	ug/Kg	8/6/2021 15:31
Benzo (a) pyrene	< 312	ug/Kg	8/6/2021 15:31
Benzo (b) fluoranthene	< 312	ug/Kg	8/6/2021 15:31
Benzo (g,h,i) perylene	< 312	ug/Kg	8/6/2021 15:31
Benzo (k) fluoranthene	< 312	ug/Kg	8/6/2021 15:31
Bis (2-chloroethoxy) methane	< 312	ug/Kg	8/6/2021 15:31
Bis (2-chloroethyl) ether	< 312	ug/Kg	8/6/2021 15:31
Bis (2-ethylhexyl) phthalate	< 312	ug/Kg	8/6/2021 15:31
Butylbenzylphthalate	< 312	ug/Kg	8/6/2021 15:31
Caprolactam	< 312	ug/Kg	8/6/2021 15:31
Carbazole	< 312	ug/Kg	8/6/2021 15:31
Chrysene	< 312	ug/Kg	8/6/2021 15:31
Dibenz (a,h) anthracene	< 312	ug/Kg	8/6/2021 15:31
Dibenzofuran	< 312	ug/Kg	8/6/2021 15:31
Diethyl phthalate	< 312	ug/Kg	8/6/2021 15:31
Dimethyl phthalate	< 312	ug/Kg	8/6/2021 15:31

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-02-BLT
Lab Sample ID: 213459-02 **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Di-n-butyl phthalate	< 312	ug/Kg	8/6/2021	15:31
Di-n-octylphthalate	< 312	ug/Kg	8/6/2021	15:31
Fluoranthene	< 312	ug/Kg	8/6/2021	15:31
Fluorene	< 312	ug/Kg	8/6/2021	15:31
Hexachlorobenzene	< 312	ug/Kg	8/6/2021	15:31
Hexachlorobutadiene	< 312	ug/Kg	8/6/2021	15:31
Hexachlorocyclopentadiene	< 1250	ug/Kg	8/6/2021	15:31
Hexachloroethane	< 312	ug/Kg	8/6/2021	15:31
Indeno (1,2,3-cd) pyrene	< 312	ug/Kg	8/6/2021	15:31
Isophorone	< 312	ug/Kg	8/6/2021	15:31
Naphthalene	< 312	ug/Kg	8/6/2021	15:31
Nitrobenzene	< 312	ug/Kg	8/6/2021	15:31
N-Nitroso-di-n-propylamine	< 312	ug/Kg	8/6/2021	15:31
N-Nitrosodiphenylamine	< 312	ug/Kg	8/6/2021	15:31
Pentachlorophenol	< 625	ug/Kg	8/6/2021	15:31
Phenanthrene	< 312	ug/Kg	8/6/2021	15:31
Phenol	< 312	ug/Kg	8/6/2021	15:31
Pyrene	< 312	ug/Kg	8/6/2021	15:31

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	**59.5**	36.4 - 87.2		8/6/2021	15:31
2-Fluorobiphenyl	**62.9**	44 - 84		8/6/2021	15:31
2-Fluorophenol	**53.5**	43.2 - 82.1		8/6/2021	15:31
Nitrobenzene-d5	**56.1**	36.4 - 82.2		8/6/2021	15:31
Phenol-d5	**56.9**	41.1 - 81.4		8/6/2021	15:31
Terphenyl-d14	**74.1**	43.8 - 103		8/6/2021	15:31

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 8/5/2021
Data File: B55995.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-02-BLT		
Lab Sample ID:	213459-02A	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 9.84	ug/Kg		8/4/2021 15:55
1,1,2,2-Tetrachloroethane	< 9.84	ug/Kg		8/4/2021 15:55
1,1,2-Trichloroethane	< 9.84	ug/Kg		8/4/2021 15:55
1,1-Dichloroethane	< 9.84	ug/Kg		8/4/2021 15:55
1,1-Dichloroethene	< 9.84	ug/Kg		8/4/2021 15:55
1,2,3-Trichlorobenzene	< 24.6	ug/Kg		8/4/2021 15:55
1,2,4-Trichlorobenzene	< 24.6	ug/Kg		8/4/2021 15:55
1,2,4-Trimethylbenzene	< 9.84	ug/Kg		8/4/2021 15:55
1,2-Dibromo-3-Chloropropane	< 49.2	ug/Kg		8/4/2021 15:55
1,2-Dibromoethane	< 9.84	ug/Kg		8/4/2021 15:55
1,2-Dichlorobenzene	< 9.84	ug/Kg		8/4/2021 15:55
1,2-Dichloroethane	< 9.84	ug/Kg		8/4/2021 15:55
1,2-Dichloropropane	< 9.84	ug/Kg		8/4/2021 15:55
1,3,5-Trimethylbenzene	< 9.84	ug/Kg		8/4/2021 15:55
1,3-Dichlorobenzene	< 9.84	ug/Kg		8/4/2021 15:55
1,4-Dichlorobenzene	< 9.84	ug/Kg		8/4/2021 15:55
1,4-Dioxane	< 49.2	ug/Kg		8/4/2021 15:55
2-Butanone	< 49.2	ug/Kg		8/4/2021 15:55
2-Hexanone	< 24.6	ug/Kg		8/4/2021 15:55
4-Methyl-2-pentanone	< 24.6	ug/Kg		8/4/2021 15:55
Acetone	< 49.2	ug/Kg		8/4/2021 15:55
Benzene	< 9.84	ug/Kg		8/4/2021 15:55
Bromochloromethane	< 24.6	ug/Kg		8/4/2021 15:55
Bromodichloromethane	< 9.84	ug/Kg		8/4/2021 15:55
Bromoform	< 24.6	ug/Kg		8/4/2021 15:55
Bromomethane	< 9.84	ug/Kg		8/4/2021 15:55
Carbon disulfide	< 9.84	ug/Kg		8/4/2021 15:55
Carbon Tetrachloride	< 9.84	ug/Kg		8/4/2021 15:55

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-02-BLT		
Lab Sample ID:	213459-02A	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Chlorobenzene	< 9.84	ug/Kg	8/4/2021	15:55
Chloroethane	< 9.84	ug/Kg	8/4/2021	15:55
Chloroform	< 9.84	ug/Kg	8/4/2021	15:55
Chloromethane	< 9.84	ug/Kg	8/4/2021	15:55
cis-1,2-Dichloroethene	< 9.84	ug/Kg	8/4/2021	15:55
cis-1,3-Dichloropropene	< 9.84	ug/Kg	8/4/2021	15:55
Cyclohexane	< 49.2	ug/Kg	8/4/2021	15:55
Dibromochloromethane	< 9.84	ug/Kg	8/4/2021	15:55
Dichlorodifluoromethane	< 9.84	ug/Kg	8/4/2021	15:55
Ethylbenzene	< 9.84	ug/Kg	8/4/2021	15:55
Freon 113	< 9.84	ug/Kg	8/4/2021	15:55
Isopropylbenzene	< 9.84	ug/Kg	8/4/2021	15:55
m,p-Xylene	< 9.84	ug/Kg	8/4/2021	15:55
Methyl acetate	< 9.84	ug/Kg	8/4/2021	15:55
Methyl tert-butyl Ether	< 9.84	ug/Kg	8/4/2021	15:55
Methylcyclohexane	< 9.84	ug/Kg	8/4/2021	15:55
Methylene chloride	< 24.6	ug/Kg	8/4/2021	15:55
Naphthalene	< 24.6	ug/Kg	8/4/2021	15:55
n-Butylbenzene	< 9.84	ug/Kg	8/4/2021	15:55
n-Propylbenzene	< 9.84	ug/Kg	8/4/2021	15:55
o-Xylene	< 9.84	ug/Kg	8/4/2021	15:55
p-Isopropyltoluene	< 9.84	ug/Kg	8/4/2021	15:55
sec-Butylbenzene	< 9.84	ug/Kg	8/4/2021	15:55
Styrene	< 24.6	ug/Kg	8/4/2021	15:55
tert-Butylbenzene	< 9.84	ug/Kg	8/4/2021	15:55
Tetrachloroethene	< 9.84	ug/Kg	8/4/2021	15:55
Toluene	< 9.84	ug/Kg	8/4/2021	15:55
trans-1,2-Dichloroethene	< 9.84	ug/Kg	8/4/2021	15:55
trans-1,3-Dichloropropene	< 9.84	ug/Kg	8/4/2021	15:55
Trichloroethene	< 9.84	ug/Kg	8/4/2021	15:55

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-02-BLT		
Lab Sample ID:	213459-02A	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Trichlorofluoromethane	< 9.84	ug/Kg		8/4/2021	15:55
Vinyl chloride	< 9.84	ug/Kg		8/4/2021	15:55

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	**95.0**	88.8 - 123		8/4/2021	15:55
4-Bromofluorobenzene	**60.9**	68.7 - 115	*	8/4/2021	15:55
Pentafluorobenzene	**96.6**	80.2 - 112		8/4/2021	15:55
Toluene-D8	**85.7**	83.5 - 123		8/4/2021	15:55

Internal standard outliers indicate probable matrix interference

Method Reference(s): EPA 8260C
EPA 5035A - L

Data File: z03388.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-03-BLT
Lab Sample ID: 213459-03 **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.0867**	mg/Kg		8/6/2021 10:35

Method Reference(s): EPA 7471B
Preparation Date: 8/5/2021
Data File: Hg210806A

RCRA Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**3.63**	mg/Kg		8/5/2021 20:28
Barium	**49.2**	mg/Kg		8/5/2021 20:28
Cadmium	< 0.274	mg/Kg		8/5/2021 20:28
Chromium	**7.00**	mg/Kg		8/5/2021 20:28
Lead	**40.4**	mg/Kg		8/5/2021 20:28
Selenium	< 1.10	mg/Kg		8/5/2021 20:28
Silver	< 0.549	mg/Kg		8/5/2021 20:28

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 8/5/2021
Data File: 210805D

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.141	mg/Kg		8/4/2021 19:40
PCB-1221	< 0.141	mg/Kg		8/4/2021 19:40
PCB-1232	< 0.141	mg/Kg		8/4/2021 19:40
PCB-1242	< 0.141	mg/Kg		8/4/2021 19:40
PCB-1248	< 0.141	mg/Kg		8/4/2021 19:40
PCB-1254	< 0.141	mg/Kg		8/4/2021 19:40
PCB-1260	< 0.141	mg/Kg		8/4/2021 19:40
PCB-1262	< 0.141	mg/Kg		8/4/2021 19:40
PCB-1268	< 0.141	mg/Kg		8/4/2021 19:40

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-03-BLT		
Lab Sample ID:	213459-03	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	**73.1**	18.5 - 93.4		8/4/2021 19:40

Method Reference(s): EPA 8082A
EPA 3546
Preparation Date: 8/4/2021

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 276	ug/Kg		8/6/2021 16:01
1,2,4,5-Tetrachlorobenzene	< 276	ug/Kg		8/6/2021 16:01
1,2,4-Trichlorobenzene	< 276	ug/Kg		8/6/2021 16:01
1,2-Dichlorobenzene	< 276	ug/Kg		8/6/2021 16:01
1,3-Dichlorobenzene	< 276	ug/Kg		8/6/2021 16:01
1,4-Dichlorobenzene	< 276	ug/Kg		8/6/2021 16:01
2,2-Oxybis (1-chloropropane)	< 276	ug/Kg		8/6/2021 16:01
2,3,4,6-Tetrachlorophenol	< 276	ug/Kg		8/6/2021 16:01
2,4,5-Trichlorophenol	< 276	ug/Kg		8/6/2021 16:01
2,4,6-Trichlorophenol	< 276	ug/Kg		8/6/2021 16:01
2,4-Dichlorophenol	< 276	ug/Kg		8/6/2021 16:01
2,4-Dimethylphenol	< 276	ug/Kg		8/6/2021 16:01
2,4-Dinitrophenol	< 1100	ug/Kg		8/6/2021 16:01
2,4-Dinitrotoluene	< 276	ug/Kg		8/6/2021 16:01
2,6-Dinitrotoluene	< 276	ug/Kg		8/6/2021 16:01
2-Chloronaphthalene	< 276	ug/Kg		8/6/2021 16:01
2-Chlorophenol	< 276	ug/Kg		8/6/2021 16:01
2-Methylnapthalene	< 276	ug/Kg		8/6/2021 16:01
2-Methylphenol	< 276	ug/Kg		8/6/2021 16:01
2-Nitroaniline	< 276	ug/Kg		8/6/2021 16:01
2-Nitrophenol	< 276	ug/Kg		8/6/2021 16:01
3&4-Methylphenol	< 276	ug/Kg		8/6/2021 16:01
3,3'-Dichlorobenzidine	< 276	ug/Kg		8/6/2021 16:01

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-03-BLT
Lab Sample ID: 213459-03 **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

3-Nitroaniline	< 276	ug/Kg	8/6/2021	16:01
4,6-Dinitro-2-methylphenol	< 369	ug/Kg	8/6/2021	16:01
4-Bromophenyl phenyl ether	< 276	ug/Kg	8/6/2021	16:01
4-Chloro-3-methylphenol	< 276	ug/Kg	8/6/2021	16:01
4-Chloroaniline	< 276	ug/Kg	8/6/2021	16:01
4-Chlorophenyl phenyl ether	< 276	ug/Kg	8/6/2021	16:01
4-Nitroaniline	< 276	ug/Kg	8/6/2021	16:01
4-Nitrophenol	< 276	ug/Kg	8/6/2021	16:01
Acenaphthene	< 276	ug/Kg	8/6/2021	16:01
Acenaphthylene	< 276	ug/Kg	8/6/2021	16:01
Acetophenone	< 276	ug/Kg	8/6/2021	16:01
Anthracene	< 276	ug/Kg	8/6/2021	16:01
Atrazine	< 276	ug/Kg	8/6/2021	16:01
Benzaldehyde	< 276	ug/Kg	8/6/2021	16:01
Benzo (a) anthracene	< 276	ug/Kg	8/6/2021	16:01
Benzo (a) pyrene	< 276	ug/Kg	8/6/2021	16:01
Benzo (b) fluoranthene	< 276	ug/Kg	8/6/2021	16:01
Benzo (g,h,i) perylene	< 276	ug/Kg	8/6/2021	16:01
Benzo (k) fluoranthene	< 276	ug/Kg	8/6/2021	16:01
Bis (2-chloroethoxy) methane	< 276	ug/Kg	8/6/2021	16:01
Bis (2-chloroethyl) ether	< 276	ug/Kg	8/6/2021	16:01
Bis (2-ethylhexyl) phthalate	< 276	ug/Kg	8/6/2021	16:01
Butylbenzylphthalate	< 276	ug/Kg	8/6/2021	16:01
Caprolactam	< 276	ug/Kg	8/6/2021	16:01
Carbazole	< 276	ug/Kg	8/6/2021	16:01
Chrysene	< 276	ug/Kg	8/6/2021	16:01
Dibenz (a,h) anthracene	< 276	ug/Kg	8/6/2021	16:01
Dibenzofuran	< 276	ug/Kg	8/6/2021	16:01
Diethyl phthalate	< 276	ug/Kg	8/6/2021	16:01
Dimethyl phthalate	< 276	ug/Kg	8/6/2021	16:01

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-03-BLT
Lab Sample ID: 213459-03 **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Di-n-butyl phthalate	< 276	ug/Kg	8/6/2021	16:01
Di-n-octylphthalate	< 276	ug/Kg	8/6/2021	16:01
Fluoranthene	< 276	ug/Kg	8/6/2021	16:01
Fluorene	< 276	ug/Kg	8/6/2021	16:01
Hexachlorobenzene	< 276	ug/Kg	8/6/2021	16:01
Hexachlorobutadiene	< 276	ug/Kg	8/6/2021	16:01
Hexachlorocyclopentadiene	< 1100	ug/Kg	8/6/2021	16:01
Hexachloroethane	< 276	ug/Kg	8/6/2021	16:01
Indeno (1,2,3-cd) pyrene	< 276	ug/Kg	8/6/2021	16:01
Isophorone	< 276	ug/Kg	8/6/2021	16:01
Naphthalene	< 276	ug/Kg	8/6/2021	16:01
Nitrobenzene	< 276	ug/Kg	8/6/2021	16:01
N-Nitroso-di-n-propylamine	< 276	ug/Kg	8/6/2021	16:01
N-Nitrosodiphenylamine	< 276	ug/Kg	8/6/2021	16:01
Pentachlorophenol	< 552	ug/Kg	8/6/2021	16:01
Phenanthrene	< 276	ug/Kg	8/6/2021	16:01
Phenol	< 276	ug/Kg	8/6/2021	16:01
Pyrene	< 276	ug/Kg	8/6/2021	16:01

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	**64.8**	36.4 - 87.2		8/6/2021	16:01
2-Fluorobiphenyl	**60.6**	44 - 84		8/6/2021	16:01
2-Fluorophenol	**55.4**	43.2 - 82.1		8/6/2021	16:01
Nitrobenzene-d5	**55.1**	36.4 - 82.2		8/6/2021	16:01
Phenol-d5	**58.0**	41.1 - 81.4		8/6/2021	16:01
Terphenyl-d14	**74.8**	43.8 - 103		8/6/2021	16:01

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 8/5/2021
Data File: B55996.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-03-BLT		
Lab Sample ID:	213459-03A	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 8.17	ug/Kg		8/4/2021 16:14
1,1,2,2-Tetrachloroethane	< 8.17	ug/Kg		8/4/2021 16:14
1,1,2-Trichloroethane	< 8.17	ug/Kg		8/4/2021 16:14
1,1-Dichloroethane	< 8.17	ug/Kg		8/4/2021 16:14
1,1-Dichloroethene	< 8.17	ug/Kg		8/4/2021 16:14
1,2,3-Trichlorobenzene	< 20.4	ug/Kg		8/4/2021 16:14
1,2,4-Trichlorobenzene	< 20.4	ug/Kg		8/4/2021 16:14
1,2,4-Trimethylbenzene	< 8.17	ug/Kg		8/4/2021 16:14
1,2-Dibromo-3-Chloropropane	< 40.9	ug/Kg		8/4/2021 16:14
1,2-Dibromoethane	< 8.17	ug/Kg		8/4/2021 16:14
1,2-Dichlorobenzene	< 8.17	ug/Kg		8/4/2021 16:14
1,2-Dichloroethane	< 8.17	ug/Kg		8/4/2021 16:14
1,2-Dichloropropane	< 8.17	ug/Kg		8/4/2021 16:14
1,3,5-Trimethylbenzene	< 8.17	ug/Kg		8/4/2021 16:14
1,3-Dichlorobenzene	< 8.17	ug/Kg		8/4/2021 16:14
1,4-Dichlorobenzene	< 8.17	ug/Kg		8/4/2021 16:14
1,4-Dioxane	< 40.9	ug/Kg		8/4/2021 16:14
2-Butanone	< 40.9	ug/Kg		8/4/2021 16:14
2-Hexanone	< 20.4	ug/Kg		8/4/2021 16:14
4-Methyl-2-pentanone	< 20.4	ug/Kg		8/4/2021 16:14
Acetone	< 40.9	ug/Kg		8/4/2021 16:14
Benzene	< 8.17	ug/Kg		8/4/2021 16:14
Bromochloromethane	< 20.4	ug/Kg		8/4/2021 16:14
Bromodichloromethane	< 8.17	ug/Kg		8/4/2021 16:14
Bromoform	< 20.4	ug/Kg		8/4/2021 16:14
Bromomethane	< 8.17	ug/Kg		8/4/2021 16:14
Carbon disulfide	< 8.17	ug/Kg		8/4/2021 16:14
Carbon Tetrachloride	< 8.17	ug/Kg		8/4/2021 16:14

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-03-BLT
Lab Sample ID: 213459-03A **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Chlorobenzene	< 8.17	ug/Kg	8/4/2021	16:14
Chloroethane	< 8.17	ug/Kg	8/4/2021	16:14
Chloroform	< 8.17	ug/Kg	8/4/2021	16:14
Chloromethane	< 8.17	ug/Kg	8/4/2021	16:14
cis-1,2-Dichloroethene	< 8.17	ug/Kg	8/4/2021	16:14
cis-1,3-Dichloropropene	< 8.17	ug/Kg	8/4/2021	16:14
Cyclohexane	< 40.9	ug/Kg	8/4/2021	16:14
Dibromochloromethane	< 8.17	ug/Kg	8/4/2021	16:14
Dichlorodifluoromethane	< 8.17	ug/Kg	8/4/2021	16:14
Ethylbenzene	< 8.17	ug/Kg	8/4/2021	16:14
Freon 113	< 8.17	ug/Kg	8/4/2021	16:14
Isopropylbenzene	< 8.17	ug/Kg	8/4/2021	16:14
m,p-Xylene	< 8.17	ug/Kg	8/4/2021	16:14
Methyl acetate	< 8.17	ug/Kg	8/4/2021	16:14
Methyl tert-butyl Ether	< 8.17	ug/Kg	8/4/2021	16:14
Methylcyclohexane	< 8.17	ug/Kg	8/4/2021	16:14
Methylene chloride	< 20.4	ug/Kg	8/4/2021	16:14
Naphthalene	< 20.4	ug/Kg	8/4/2021	16:14
n-Butylbenzene	< 8.17	ug/Kg	8/4/2021	16:14
n-Propylbenzene	< 8.17	ug/Kg	8/4/2021	16:14
o-Xylene	< 8.17	ug/Kg	8/4/2021	16:14
p-Isopropyltoluene	< 8.17	ug/Kg	8/4/2021	16:14
sec-Butylbenzene	< 8.17	ug/Kg	8/4/2021	16:14
Styrene	< 20.4	ug/Kg	8/4/2021	16:14
tert-Butylbenzene	< 8.17	ug/Kg	8/4/2021	16:14
Tetrachloroethene	< 8.17	ug/Kg	8/4/2021	16:14
Toluene	< 8.17	ug/Kg	8/4/2021	16:14
trans-1,2-Dichloroethene	< 8.17	ug/Kg	8/4/2021	16:14
trans-1,3-Dichloropropene	< 8.17	ug/Kg	8/4/2021	16:14
Trichloroethene	< 8.17	ug/Kg	8/4/2021	16:14

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-03-BLT		
Lab Sample ID:	213459-03A	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Trichlorofluoromethane	< 8.17	ug/Kg		8/4/2021 16:14
Vinyl chloride	< 8.17	ug/Kg		8/4/2021 16:14

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**94.4**	88.8 - 123		8/4/2021 16:14
4-Bromofluorobenzene	**68.2**	68.7 - 115	*	8/4/2021 16:14
Pentafluorobenzene	**103**	80.2 - 112		8/4/2021 16:14
Toluene-D8	**90.8**	83.5 - 123		8/4/2021 16:14

Internal standard outliers indicate probable matrix interference

Method Reference(s): EPA 8260C
EPA 5035A - L

Data File: z03389.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-04-BLT-B		
Lab Sample ID:	213459-04	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.249**	mg/Kg		8/6/2021 10:37

Method Reference(s): EPA 7471B
Preparation Date: 8/5/2021
Data File: Hg210806A

RCRA Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**10.1**	mg/Kg		8/5/2021 20:33
Barium	**58.2**	mg/Kg		8/5/2021 20:33
Cadmium	**0.433**	mg/Kg		8/5/2021 20:33
Chromium	**8.90**	mg/Kg		8/5/2021 20:33
Lead	**1450**	mg/Kg		8/5/2021 20:33
Selenium	< 1.15	mg/Kg		8/5/2021 20:33
Silver	< 0.577	mg/Kg		8/5/2021 20:33

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 8/5/2021
Data File: 210805D

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.161	mg/Kg		8/4/2021 20:03
PCB-1221	< 0.161	mg/Kg		8/4/2021 20:03
PCB-1232	< 0.161	mg/Kg		8/4/2021 20:03
PCB-1242	< 0.161	mg/Kg		8/4/2021 20:03
PCB-1248	< 0.161	mg/Kg		8/4/2021 20:03
PCB-1254	< 0.161	mg/Kg		8/4/2021 20:03
PCB-1260	< 0.161	mg/Kg		8/4/2021 20:03
PCB-1262	< 0.161	mg/Kg		8/4/2021 20:03
PCB-1268	< 0.161	mg/Kg		8/4/2021 20:03

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-04-BLT-B		
Lab Sample ID:	213459-04	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	**71.5**	18.5 - 93.4		8/4/2021 20:03

Method Reference(s): EPA 8082A
EPA 3546
Preparation Date: 8/4/2021

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 333	ug/Kg		8/6/2021 16:30
1,2,4,5-Tetrachlorobenzene	< 333	ug/Kg		8/6/2021 16:30
1,2,4-Trichlorobenzene	< 333	ug/Kg		8/6/2021 16:30
1,2-Dichlorobenzene	< 333	ug/Kg		8/6/2021 16:30
1,3-Dichlorobenzene	< 333	ug/Kg		8/6/2021 16:30
1,4-Dichlorobenzene	< 333	ug/Kg		8/6/2021 16:30
2,2-Oxybis (1-chloropropane)	< 333	ug/Kg		8/6/2021 16:30
2,3,4,6-Tetrachlorophenol	< 333	ug/Kg		8/6/2021 16:30
2,4,5-Trichlorophenol	< 333	ug/Kg		8/6/2021 16:30
2,4,6-Trichlorophenol	< 333	ug/Kg		8/6/2021 16:30
2,4-Dichlorophenol	< 333	ug/Kg		8/6/2021 16:30
2,4-Dimethylphenol	< 333	ug/Kg		8/6/2021 16:30
2,4-Dinitrophenol	< 1330	ug/Kg		8/6/2021 16:30
2,4-Dinitrotoluene	< 333	ug/Kg		8/6/2021 16:30
2,6-Dinitrotoluene	< 333	ug/Kg		8/6/2021 16:30
2-Chloronaphthalene	< 333	ug/Kg		8/6/2021 16:30
2-Chlorophenol	< 333	ug/Kg		8/6/2021 16:30
2-Methylnapthalene	< 333	ug/Kg		8/6/2021 16:30
2-Methylphenol	< 333	ug/Kg		8/6/2021 16:30
2-Nitroaniline	< 333	ug/Kg		8/6/2021 16:30
2-Nitrophenol	< 333	ug/Kg		8/6/2021 16:30
3&4-Methylphenol	< 333	ug/Kg		8/6/2021 16:30
3,3'-Dichlorobenzidine	< 333	ug/Kg		8/6/2021 16:30

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-04-BLT-B
Lab Sample ID: 213459-04 **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

3-Nitroaniline	< 333	ug/Kg	8/6/2021	16:30
4,6-Dinitro-2-methylphenol	< 445	ug/Kg	8/6/2021	16:30
4-Bromophenyl phenyl ether	< 333	ug/Kg	8/6/2021	16:30
4-Chloro-3-methylphenol	< 333	ug/Kg	8/6/2021	16:30
4-Chloroaniline	< 333	ug/Kg	8/6/2021	16:30
4-Chlorophenyl phenyl ether	< 333	ug/Kg	8/6/2021	16:30
4-Nitroaniline	< 333	ug/Kg	8/6/2021	16:30
4-Nitrophenol	< 333	ug/Kg	8/6/2021	16:30
Acenaphthene	< 333	ug/Kg	8/6/2021	16:30
Acenaphthylene	< 333	ug/Kg	8/6/2021	16:30
Acetophenone	< 333	ug/Kg	8/6/2021	16:30
Anthracene	< 333	ug/Kg	8/6/2021	16:30
Atrazine	< 333	ug/Kg	8/6/2021	16:30
Benzaldehyde	< 333	ug/Kg	8/6/2021	16:30
Benzo (a) anthracene	**449**	ug/Kg	8/6/2021	16:30
Benzo (a) pyrene	< 333	ug/Kg	8/6/2021	16:30
Benzo (b) fluoranthene	**456**	ug/Kg	8/6/2021	16:30
Benzo (g,h,i) perylene	< 333	ug/Kg	8/6/2021	16:30
Benzo (k) fluoranthene	< 333	ug/Kg	8/6/2021	16:30
Bis (2-chloroethoxy) methane	< 333	ug/Kg	8/6/2021	16:30
Bis (2-chloroethyl) ether	< 333	ug/Kg	8/6/2021	16:30
Bis (2-ethylhexyl) phthalate	< 333	ug/Kg	8/6/2021	16:30
Butylbenzylphthalate	< 333	ug/Kg	8/6/2021	16:30
Caprolactam	< 333	ug/Kg	8/6/2021	16:30
Carbazole	< 333	ug/Kg	8/6/2021	16:30
Chrysene	**506**	ug/Kg	8/6/2021	16:30
Dibenz (a,h) anthracene	< 333	ug/Kg	8/6/2021	16:30
Dibenzofuran	< 333	ug/Kg	8/6/2021	16:30
Diethyl phthalate	< 333	ug/Kg	8/6/2021	16:30
Dimethyl phthalate	< 333	ug/Kg	8/6/2021	16:30

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-04-BLT-B
Lab Sample ID: 213459-04 **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Di-n-butyl phthalate	< 333	ug/Kg	8/6/2021	16:30
Di-n-octylphthalate	< 333	ug/Kg	8/6/2021	16:30
Fluoranthene	**1230**	ug/Kg	8/6/2021	16:30
Fluorene	< 333	ug/Kg	8/6/2021	16:30
Hexachlorobenzene	< 333	ug/Kg	8/6/2021	16:30
Hexachlorobutadiene	< 333	ug/Kg	8/6/2021	16:30
Hexachlorocyclopentadiene	< 1330	ug/Kg	8/6/2021	16:30
Hexachloroethane	< 333	ug/Kg	8/6/2021	16:30
Indeno (1,2,3-cd) pyrene	< 333	ug/Kg	8/6/2021	16:30
Isophorone	< 333	ug/Kg	8/6/2021	16:30
Naphthalene	< 333	ug/Kg	8/6/2021	16:30
Nitrobenzene	< 333	ug/Kg	8/6/2021	16:30
N-Nitroso-di-n-propylamine	< 333	ug/Kg	8/6/2021	16:30
N-Nitrosodiphenylamine	< 333	ug/Kg	8/6/2021	16:30
Pentachlorophenol	< 665	ug/Kg	8/6/2021	16:30
Phenanthrene	**1510**	ug/Kg	8/6/2021	16:30
Phenol	< 333	ug/Kg	8/6/2021	16:30
Pyrene	**963**	ug/Kg	8/6/2021	16:30

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	**57.7**	36.4 - 87.2		8/6/2021	16:30
2-Fluorobiphenyl	**60.4**	44 - 84		8/6/2021	16:30
2-Fluorophenol	**50.4**	43.2 - 82.1		8/6/2021	16:30
Nitrobenzene-d5	**52.6**	36.4 - 82.2		8/6/2021	16:30
Phenol-d5	**54.2**	41.1 - 81.4		8/6/2021	16:30
Terphenyl-d14	**68.9**	43.8 - 103		8/6/2021	16:30

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 8/5/2021
Data File: B55997.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-04-BLT-A		
Lab Sample ID:	213459-04A	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 9.69	ug/Kg		8/4/2021 16:33
1,1,2,2-Tetrachloroethane	< 9.69	ug/Kg		8/4/2021 16:33
1,1,2-Trichloroethane	< 9.69	ug/Kg		8/4/2021 16:33
1,1-Dichloroethane	< 9.69	ug/Kg		8/4/2021 16:33
1,1-Dichloroethene	< 9.69	ug/Kg		8/4/2021 16:33
1,2,3-Trichlorobenzene	< 24.2	ug/Kg		8/4/2021 16:33
1,2,4-Trichlorobenzene	< 24.2	ug/Kg		8/4/2021 16:33
1,2,4-Trimethylbenzene	< 9.69	ug/Kg		8/4/2021 16:33
1,2-Dibromo-3-Chloropropane	< 48.4	ug/Kg		8/4/2021 16:33
1,2-Dibromoethane	< 9.69	ug/Kg		8/4/2021 16:33
1,2-Dichlorobenzene	< 9.69	ug/Kg		8/4/2021 16:33
1,2-Dichloroethane	< 9.69	ug/Kg		8/4/2021 16:33
1,2-Dichloropropane	< 9.69	ug/Kg		8/4/2021 16:33
1,3,5-Trimethylbenzene	< 9.69	ug/Kg		8/4/2021 16:33
1,3-Dichlorobenzene	< 9.69	ug/Kg		8/4/2021 16:33
1,4-Dichlorobenzene	< 9.69	ug/Kg		8/4/2021 16:33
1,4-Dioxane	< 48.4	ug/Kg		8/4/2021 16:33
2-Butanone	< 48.4	ug/Kg		8/4/2021 16:33
2-Hexanone	< 24.2	ug/Kg		8/4/2021 16:33
4-Methyl-2-pentanone	< 24.2	ug/Kg		8/4/2021 16:33
Acetone	< 48.4	ug/Kg		8/4/2021 16:33
Benzene	< 9.69	ug/Kg		8/4/2021 16:33
Bromochloromethane	< 24.2	ug/Kg		8/4/2021 16:33
Bromodichloromethane	< 9.69	ug/Kg		8/4/2021 16:33
Bromoform	< 24.2	ug/Kg		8/4/2021 16:33
Bromomethane	< 9.69	ug/Kg		8/4/2021 16:33
Carbon disulfide	< 9.69	ug/Kg		8/4/2021 16:33
Carbon Tetrachloride	< 9.69	ug/Kg		8/4/2021 16:33

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-04-BLT-A
Lab Sample ID: 213459-04A **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Chlorobenzene	< 9.69	ug/Kg	8/4/2021	16:33
Chloroethane	< 9.69	ug/Kg	8/4/2021	16:33
Chloroform	< 9.69	ug/Kg	8/4/2021	16:33
Chloromethane	< 9.69	ug/Kg	8/4/2021	16:33
cis-1,2-Dichloroethene	< 9.69	ug/Kg	8/4/2021	16:33
cis-1,3-Dichloropropene	< 9.69	ug/Kg	8/4/2021	16:33
Cyclohexane	< 48.4	ug/Kg	8/4/2021	16:33
Dibromochloromethane	< 9.69	ug/Kg	8/4/2021	16:33
Dichlorodifluoromethane	< 9.69	ug/Kg	8/4/2021	16:33
Ethylbenzene	< 9.69	ug/Kg	8/4/2021	16:33
Freon 113	< 9.69	ug/Kg	8/4/2021	16:33
Isopropylbenzene	< 9.69	ug/Kg	8/4/2021	16:33
m,p-Xylene	< 9.69	ug/Kg	8/4/2021	16:33
Methyl acetate	< 9.69	ug/Kg	8/4/2021	16:33
Methyl tert-butyl Ether	< 9.69	ug/Kg	8/4/2021	16:33
Methylcyclohexane	< 9.69	ug/Kg	8/4/2021	16:33
Methylene chloride	< 24.2	ug/Kg	8/4/2021	16:33
Naphthalene	< 24.2	ug/Kg	8/4/2021	16:33
n-Butylbenzene	< 9.69	ug/Kg	8/4/2021	16:33
n-Propylbenzene	< 9.69	ug/Kg	8/4/2021	16:33
o-Xylene	< 9.69	ug/Kg	8/4/2021	16:33
p-Isopropyltoluene	< 9.69	ug/Kg	8/4/2021	16:33
sec-Butylbenzene	< 9.69	ug/Kg	8/4/2021	16:33
Styrene	< 24.2	ug/Kg	8/4/2021	16:33
tert-Butylbenzene	< 9.69	ug/Kg	8/4/2021	16:33
Tetrachloroethene	< 9.69	ug/Kg	8/4/2021	16:33
Toluene	< 9.69	ug/Kg	8/4/2021	16:33
trans-1,2-Dichloroethene	< 9.69	ug/Kg	8/4/2021	16:33
trans-1,3-Dichloropropene	< 9.69	ug/Kg	8/4/2021	16:33
Trichloroethene	< 9.69	ug/Kg	8/4/2021	16:33

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-04-BLT-A		
Lab Sample ID:	213459-04A	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Trichlorofluoromethane	< 9.69	ug/Kg			8/4/2021 16:33
Vinyl chloride	< 9.69	ug/Kg			8/4/2021 16:33

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**97.9**	88.8 - 123		8/4/2021 16:33
4-Bromofluorobenzene	**66.3**	68.7 - 115	*	8/4/2021 16:33
Pentafluorobenzene	**101**	80.2 - 112		8/4/2021 16:33
Toluene-D8	**90.9**	83.5 - 123		8/4/2021 16:33

Internal standard outliers indicate probable matrix interference

Method Reference(s): EPA 8260C
EPA 5035A - L

Data File: z03390.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-05-BLT-B		
Lab Sample ID:	213459-05	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.0913**	mg/Kg		8/6/2021 10:38

Method Reference(s): EPA 7471B
Preparation Date: 8/5/2021
Data File: Hg210806A

RCRA Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**6.73**	mg/Kg		8/5/2021 20:37
Barium	**121**	mg/Kg		8/5/2021 20:37
Cadmium	< 0.278	mg/Kg		8/5/2021 20:37
Chromium	**6.52**	mg/Kg		8/5/2021 20:37
Lead	**69.3**	mg/Kg		8/5/2021 20:37
Selenium	< 1.11	mg/Kg		8/5/2021 20:37
Silver	< 0.557	mg/Kg		8/5/2021 20:37

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 8/5/2021
Data File: 210805D

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.175	mg/Kg		8/4/2021 20:26
PCB-1221	< 0.175	mg/Kg		8/4/2021 20:26
PCB-1232	< 0.175	mg/Kg		8/4/2021 20:26
PCB-1242	< 0.175	mg/Kg		8/4/2021 20:26
PCB-1248	< 0.175	mg/Kg		8/4/2021 20:26
PCB-1254	< 0.175	mg/Kg		8/4/2021 20:26
PCB-1260	< 0.175	mg/Kg		8/4/2021 20:26
PCB-1262	< 0.175	mg/Kg		8/4/2021 20:26
PCB-1268	< 0.175	mg/Kg		8/4/2021 20:26

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-05-BLT-B		
Lab Sample ID:	213459-05	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	**56.6**	18.5 - 93.4		8/4/2021 20:26

Method Reference(s): EPA 8082A
EPA 3546
Preparation Date: 8/4/2021

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 321	ug/Kg		8/6/2021 17:00
1,2,4,5-Tetrachlorobenzene	< 321	ug/Kg		8/6/2021 17:00
1,2,4-Trichlorobenzene	< 321	ug/Kg		8/6/2021 17:00
1,2-Dichlorobenzene	< 321	ug/Kg		8/6/2021 17:00
1,3-Dichlorobenzene	< 321	ug/Kg		8/6/2021 17:00
1,4-Dichlorobenzene	< 321	ug/Kg		8/6/2021 17:00
2,2-Oxybis (1-chloropropane)	< 321	ug/Kg		8/6/2021 17:00
2,3,4,6-Tetrachlorophenol	< 321	ug/Kg		8/6/2021 17:00
2,4,5-Trichlorophenol	< 321	ug/Kg		8/6/2021 17:00
2,4,6-Trichlorophenol	< 321	ug/Kg		8/6/2021 17:00
2,4-Dichlorophenol	< 321	ug/Kg		8/6/2021 17:00
2,4-Dimethylphenol	< 321	ug/Kg		8/6/2021 17:00
2,4-Dinitrophenol	< 1290	ug/Kg		8/6/2021 17:00
2,4-Dinitrotoluene	< 321	ug/Kg		8/6/2021 17:00
2,6-Dinitrotoluene	< 321	ug/Kg		8/6/2021 17:00
2-Chloronaphthalene	< 321	ug/Kg		8/6/2021 17:00
2-Chlorophenol	< 321	ug/Kg		8/6/2021 17:00
2-Methylnapthalene	**497**	ug/Kg		8/6/2021 17:00
2-Methylphenol	< 321	ug/Kg		8/6/2021 17:00
2-Nitroaniline	< 321	ug/Kg		8/6/2021 17:00
2-Nitrophenol	< 321	ug/Kg		8/6/2021 17:00
3&4-Methylphenol	< 321	ug/Kg		8/6/2021 17:00
3,3'-Dichlorobenzidine	< 321	ug/Kg		8/6/2021 17:00

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-05-BLT-B		
Lab Sample ID:	213459-05	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

3-Nitroaniline	< 321	ug/Kg	8/6/2021 17:00
4,6-Dinitro-2-methylphenol	< 430	ug/Kg	8/6/2021 17:00
4-Bromophenyl phenyl ether	< 321	ug/Kg	8/6/2021 17:00
4-Chloro-3-methylphenol	< 321	ug/Kg	8/6/2021 17:00
4-Chloroaniline	< 321	ug/Kg	8/6/2021 17:00
4-Chlorophenyl phenyl ether	< 321	ug/Kg	8/6/2021 17:00
4-Nitroaniline	< 321	ug/Kg	8/6/2021 17:00
4-Nitrophenol	< 321	ug/Kg	8/6/2021 17:00
Acenaphthene	< 321	ug/Kg	8/6/2021 17:00
Acenaphthylene	< 321	ug/Kg	8/6/2021 17:00
Acetophenone	< 321	ug/Kg	8/6/2021 17:00
Anthracene	< 321	ug/Kg	8/6/2021 17:00
Atrazine	< 321	ug/Kg	8/6/2021 17:00
Benzaldehyde	< 321	ug/Kg	8/6/2021 17:00
Benzo (a) anthracene	< 321	ug/Kg	8/6/2021 17:00
Benzo (a) pyrene	< 321	ug/Kg	8/6/2021 17:00
Benzo (b) fluoranthene	**432**	ug/Kg	8/6/2021 17:00
Benzo (g,h,i) perylene	< 321	ug/Kg	8/6/2021 17:00
Benzo (k) fluoranthene	< 321	ug/Kg	8/6/2021 17:00
Bis (2-chloroethoxy) methane	< 321	ug/Kg	8/6/2021 17:00
Bis (2-chloroethyl) ether	< 321	ug/Kg	8/6/2021 17:00
Bis (2-ethylhexyl) phthalate	< 321	ug/Kg	8/6/2021 17:00
Butylbenzylphthalate	< 321	ug/Kg	8/6/2021 17:00
Caprolactam	< 321	ug/Kg	8/6/2021 17:00
Carbazole	< 321	ug/Kg	8/6/2021 17:00
Chrysene	**390**	ug/Kg	8/6/2021 17:00
Dibenz (a,h) anthracene	< 321	ug/Kg	8/6/2021 17:00
Dibenzofuran	< 321	ug/Kg	8/6/2021 17:00
Diethyl phthalate	< 321	ug/Kg	8/6/2021 17:00
Dimethyl phthalate	< 321	ug/Kg	8/6/2021 17:00

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-05-BLT-B
Lab Sample ID: 213459-05 **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Di-n-butyl phthalate	< 321	ug/Kg	8/6/2021	17:00
Di-n-octylphthalate	< 321	ug/Kg	8/6/2021	17:00
Fluoranthene	**602**	ug/Kg	8/6/2021	17:00
Fluorene	< 321	ug/Kg	8/6/2021	17:00
Hexachlorobenzene	< 321	ug/Kg	8/6/2021	17:00
Hexachlorobutadiene	< 321	ug/Kg	8/6/2021	17:00
Hexachlorocyclopentadiene	< 1290	ug/Kg	8/6/2021	17:00
Hexachloroethane	< 321	ug/Kg	8/6/2021	17:00
Indeno (1,2,3-cd) pyrene	< 321	ug/Kg	8/6/2021	17:00
Isophorone	< 321	ug/Kg	8/6/2021	17:00
Naphthalene	**331**	ug/Kg	8/6/2021	17:00
Nitrobenzene	< 321	ug/Kg	8/6/2021	17:00
N-Nitroso-di-n-propylamine	< 321	ug/Kg	8/6/2021	17:00
N-Nitrosodiphenylamine	< 321	ug/Kg	8/6/2021	17:00
Pentachlorophenol	< 643	ug/Kg	8/6/2021	17:00
Phenanthrene	**745**	ug/Kg	8/6/2021	17:00
Phenol	< 321	ug/Kg	8/6/2021	17:00
Pyrene	**353**	ug/Kg	8/6/2021	17:00

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	**52.4**	36.4 - 87.2		8/6/2021	17:00
2-Fluorobiphenyl	**57.8**	44 - 84		8/6/2021	17:00
2-Fluorophenol	**46.0**	43.2 - 82.1		8/6/2021	17:00
Nitrobenzene-d5	**51.4**	36.4 - 82.2		8/6/2021	17:00
Phenol-d5	**49.8**	41.1 - 81.4		8/6/2021	17:00
Terphenyl-d14	**64.9**	43.8 - 103		8/6/2021	17:00

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 8/5/2021
Data File: B55998.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-05-BLT-A		
Lab Sample ID:	213459-05A	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 8.86	ug/Kg		8/4/2021 16:53
1,1,2,2-Tetrachloroethane	< 8.86	ug/Kg		8/4/2021 16:53
1,1,2-Trichloroethane	< 8.86	ug/Kg		8/4/2021 16:53
1,1-Dichloroethane	< 8.86	ug/Kg		8/4/2021 16:53
1,1-Dichloroethene	< 8.86	ug/Kg		8/4/2021 16:53
1,2,3-Trichlorobenzene	< 22.1	ug/Kg		8/4/2021 16:53
1,2,4-Trichlorobenzene	< 22.1	ug/Kg		8/4/2021 16:53
1,2,4-Trimethylbenzene	< 8.86	ug/Kg		8/4/2021 16:53
1,2-Dibromo-3-Chloropropane	< 44.3	ug/Kg		8/4/2021 16:53
1,2-Dibromoethane	< 8.86	ug/Kg		8/4/2021 16:53
1,2-Dichlorobenzene	< 8.86	ug/Kg		8/4/2021 16:53
1,2-Dichloroethane	< 8.86	ug/Kg		8/4/2021 16:53
1,2-Dichloropropane	< 8.86	ug/Kg		8/4/2021 16:53
1,3,5-Trimethylbenzene	< 8.86	ug/Kg		8/4/2021 16:53
1,3-Dichlorobenzene	< 8.86	ug/Kg		8/4/2021 16:53
1,4-Dichlorobenzene	< 8.86	ug/Kg		8/4/2021 16:53
1,4-Dioxane	< 44.3	ug/Kg		8/4/2021 16:53
2-Butanone	< 44.3	ug/Kg		8/4/2021 16:53
2-Hexanone	< 22.1	ug/Kg		8/4/2021 16:53
4-Methyl-2-pentanone	< 22.1	ug/Kg		8/4/2021 16:53
Acetone	< 44.3	ug/Kg		8/4/2021 16:53
Benzene	< 8.86	ug/Kg		8/4/2021 16:53
Bromochloromethane	< 22.1	ug/Kg		8/4/2021 16:53
Bromodichloromethane	< 8.86	ug/Kg		8/4/2021 16:53
Bromoform	< 22.1	ug/Kg		8/4/2021 16:53
Bromomethane	< 8.86	ug/Kg		8/4/2021 16:53
Carbon disulfide	< 8.86	ug/Kg		8/4/2021 16:53
Carbon Tetrachloride	< 8.86	ug/Kg		8/4/2021 16:53

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-05-BLT-A
Lab Sample ID: 213459-05A **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Chlorobenzene	< 8.86	ug/Kg	8/4/2021	16:53
Chloroethane	< 8.86	ug/Kg	8/4/2021	16:53
Chloroform	< 8.86	ug/Kg	8/4/2021	16:53
Chloromethane	< 8.86	ug/Kg	8/4/2021	16:53
cis-1,2-Dichloroethene	< 8.86	ug/Kg	8/4/2021	16:53
cis-1,3-Dichloropropene	< 8.86	ug/Kg	8/4/2021	16:53
Cyclohexane	< 44.3	ug/Kg	8/4/2021	16:53
Dibromochloromethane	< 8.86	ug/Kg	8/4/2021	16:53
Dichlorodifluoromethane	< 8.86	ug/Kg	8/4/2021	16:53
Ethylbenzene	< 8.86	ug/Kg	8/4/2021	16:53
Freon 113	< 8.86	ug/Kg	8/4/2021	16:53
Isopropylbenzene	< 8.86	ug/Kg	8/4/2021	16:53
m,p-Xylene	< 8.86	ug/Kg	8/4/2021	16:53
Methyl acetate	< 8.86	ug/Kg	8/4/2021	16:53
Methyl tert-butyl Ether	< 8.86	ug/Kg	8/4/2021	16:53
Methylcyclohexane	< 8.86	ug/Kg	8/4/2021	16:53
Methylene chloride	< 22.1	ug/Kg	8/4/2021	16:53
Naphthalene	< 22.1	ug/Kg	8/4/2021	16:53
n-Butylbenzene	< 8.86	ug/Kg	8/4/2021	16:53
n-Propylbenzene	< 8.86	ug/Kg	8/4/2021	16:53
o-Xylene	< 8.86	ug/Kg	8/4/2021	16:53
p-Isopropyltoluene	< 8.86	ug/Kg	8/4/2021	16:53
sec-Butylbenzene	< 8.86	ug/Kg	8/4/2021	16:53
Styrene	< 22.1	ug/Kg	8/4/2021	16:53
tert-Butylbenzene	< 8.86	ug/Kg	8/4/2021	16:53
Tetrachloroethene	< 8.86	ug/Kg	8/4/2021	16:53
Toluene	< 8.86	ug/Kg	8/4/2021	16:53
trans-1,2-Dichloroethene	< 8.86	ug/Kg	8/4/2021	16:53
trans-1,3-Dichloropropene	< 8.86	ug/Kg	8/4/2021	16:53
Trichloroethene	< 8.86	ug/Kg	8/4/2021	16:53

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-05-BLT-A		
Lab Sample ID:	213459-05A	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Trichlorofluoromethane	< 8.86	ug/Kg		8/4/2021 16:53
Vinyl chloride	< 8.86	ug/Kg		8/4/2021 16:53

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**99.9**	88.8 - 123		8/4/2021 16:53
4-Bromofluorobenzene	**70.3**	68.7 - 115		8/4/2021 16:53
Pentafluorobenzene	**100**	80.2 - 112		8/4/2021 16:53
Toluene-D8	**93.3**	83.5 - 123		8/4/2021 16:53

Internal standard outliers indicate probable matrix interference

Method Reference(s): EPA 8260C
EPA 5035A - L

Data File: z03391.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-08-BLT-B
Lab Sample ID: 213459-06 **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.0198**	mg/Kg		8/6/2021 10:43

Method Reference(s): EPA 7471B
Preparation Date: 8/5/2021
Data File: Hg210806A

RCRA Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**5.16**	mg/Kg		8/5/2021 20:42
Barium	**58.8**	mg/Kg		8/5/2021 20:42
Cadmium	< 0.291	mg/Kg		8/5/2021 20:42
Chromium	**14.2**	mg/Kg		8/5/2021 20:42
Lead	**9.08**	mg/Kg		8/5/2021 20:42
Selenium	< 1.17	mg/Kg		8/5/2021 20:42
Silver	< 0.583	mg/Kg		8/5/2021 20:42

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 8/5/2021
Data File: 210805D

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.164	mg/Kg		8/4/2021 23:31
PCB-1221	< 0.164	mg/Kg		8/4/2021 23:31
PCB-1232	< 0.164	mg/Kg		8/4/2021 23:31
PCB-1242	< 0.164	mg/Kg		8/4/2021 23:31
PCB-1248	< 0.164	mg/Kg		8/4/2021 23:31
PCB-1254	< 0.164	mg/Kg		8/4/2021 23:31
PCB-1260	< 0.164	mg/Kg		8/4/2021 23:31
PCB-1262	< 0.164	mg/Kg		8/4/2021 23:31
PCB-1268	< 0.164	mg/Kg		8/4/2021 23:31

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-08-BLT-B		
Lab Sample ID:	213459-06	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	**69.8**	18.5 - 93.4		8/4/2021 23:31

Method Reference(s): EPA 8082A
EPA 3546
Preparation Date: 8/4/2021

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 305	ug/Kg		8/6/2021 17:30
1,2,4,5-Tetrachlorobenzene	< 305	ug/Kg		8/6/2021 17:30
1,2,4-Trichlorobenzene	< 305	ug/Kg		8/6/2021 17:30
1,2-Dichlorobenzene	< 305	ug/Kg		8/6/2021 17:30
1,3-Dichlorobenzene	< 305	ug/Kg		8/6/2021 17:30
1,4-Dichlorobenzene	< 305	ug/Kg		8/6/2021 17:30
2,2-Oxybis (1-chloropropane)	< 305	ug/Kg		8/6/2021 17:30
2,3,4,6-Tetrachlorophenol	< 305	ug/Kg		8/6/2021 17:30
2,4,5-Trichlorophenol	< 305	ug/Kg		8/6/2021 17:30
2,4,6-Trichlorophenol	< 305	ug/Kg		8/6/2021 17:30
2,4-Dichlorophenol	< 305	ug/Kg		8/6/2021 17:30
2,4-Dimethylphenol	< 305	ug/Kg		8/6/2021 17:30
2,4-Dinitrophenol	< 1220	ug/Kg		8/6/2021 17:30
2,4-Dinitrotoluene	< 305	ug/Kg		8/6/2021 17:30
2,6-Dinitrotoluene	< 305	ug/Kg		8/6/2021 17:30
2-Chloronaphthalene	< 305	ug/Kg		8/6/2021 17:30
2-Chlorophenol	< 305	ug/Kg		8/6/2021 17:30
2-Methylnapthalene	< 305	ug/Kg		8/6/2021 17:30
2-Methylphenol	< 305	ug/Kg		8/6/2021 17:30
2-Nitroaniline	< 305	ug/Kg		8/6/2021 17:30
2-Nitrophenol	< 305	ug/Kg		8/6/2021 17:30
3&4-Methylphenol	< 305	ug/Kg		8/6/2021 17:30
3,3'-Dichlorobenzidine	< 305	ug/Kg		8/6/2021 17:30

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-08-BLT-B
Lab Sample ID: 213459-06 **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

3-Nitroaniline	< 305	ug/Kg	8/6/2021	17:30
4,6-Dinitro-2-methylphenol	< 408	ug/Kg	8/6/2021	17:30
4-Bromophenyl phenyl ether	< 305	ug/Kg	8/6/2021	17:30
4-Chloro-3-methylphenol	< 305	ug/Kg	8/6/2021	17:30
4-Chloroaniline	< 305	ug/Kg	8/6/2021	17:30
4-Chlorophenyl phenyl ether	< 305	ug/Kg	8/6/2021	17:30
4-Nitroaniline	< 305	ug/Kg	8/6/2021	17:30
4-Nitrophenol	< 305	ug/Kg	8/6/2021	17:30
Acenaphthene	< 305	ug/Kg	8/6/2021	17:30
Acenaphthylene	< 305	ug/Kg	8/6/2021	17:30
Acetophenone	< 305	ug/Kg	8/6/2021	17:30
Anthracene	< 305	ug/Kg	8/6/2021	17:30
Atrazine	< 305	ug/Kg	8/6/2021	17:30
Benzaldehyde	< 305	ug/Kg	8/6/2021	17:30
Benzo (a) anthracene	< 305	ug/Kg	8/6/2021	17:30
Benzo (a) pyrene	< 305	ug/Kg	8/6/2021	17:30
Benzo (b) fluoranthene	< 305	ug/Kg	8/6/2021	17:30
Benzo (g,h,i) perylene	< 305	ug/Kg	8/6/2021	17:30
Benzo (k) fluoranthene	< 305	ug/Kg	8/6/2021	17:30
Bis (2-chloroethoxy) methane	< 305	ug/Kg	8/6/2021	17:30
Bis (2-chloroethyl) ether	< 305	ug/Kg	8/6/2021	17:30
Bis (2-ethylhexyl) phthalate	< 305	ug/Kg	8/6/2021	17:30
Butylbenzylphthalate	< 305	ug/Kg	8/6/2021	17:30
Caprolactam	< 305	ug/Kg	8/6/2021	17:30
Carbazole	< 305	ug/Kg	8/6/2021	17:30
Chrysene	< 305	ug/Kg	8/6/2021	17:30
Dibenz (a,h) anthracene	< 305	ug/Kg	8/6/2021	17:30
Dibenzofuran	< 305	ug/Kg	8/6/2021	17:30
Diethyl phthalate	< 305	ug/Kg	8/6/2021	17:30
Dimethyl phthalate	< 305	ug/Kg	8/6/2021	17:30

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-08-BLT-B
Lab Sample ID: 213459-06 **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Di-n-butyl phthalate	< 305	ug/Kg	8/6/2021	17:30
Di-n-octylphthalate	< 305	ug/Kg	8/6/2021	17:30
Fluoranthene	< 305	ug/Kg	8/6/2021	17:30
Fluorene	< 305	ug/Kg	8/6/2021	17:30
Hexachlorobenzene	< 305	ug/Kg	8/6/2021	17:30
Hexachlorobutadiene	< 305	ug/Kg	8/6/2021	17:30
Hexachlorocyclopentadiene	< 1220	ug/Kg	8/6/2021	17:30
Hexachloroethane	< 305	ug/Kg	8/6/2021	17:30
Indeno (1,2,3-cd) pyrene	< 305	ug/Kg	8/6/2021	17:30
Isophorone	< 305	ug/Kg	8/6/2021	17:30
Naphthalene	< 305	ug/Kg	8/6/2021	17:30
Nitrobenzene	< 305	ug/Kg	8/6/2021	17:30
N-Nitroso-di-n-propylamine	< 305	ug/Kg	8/6/2021	17:30
N-Nitrosodiphenylamine	< 305	ug/Kg	8/6/2021	17:30
Pentachlorophenol	< 610	ug/Kg	8/6/2021	17:30
Phenanthrene	< 305	ug/Kg	8/6/2021	17:30
Phenol	< 305	ug/Kg	8/6/2021	17:30
Pyrene	< 305	ug/Kg	8/6/2021	17:30

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	**70.8**	36.4 - 87.2		8/6/2021	17:30
2-Fluorobiphenyl	**59.4**	44 - 84		8/6/2021	17:30
2-Fluorophenol	**58.3**	43.2 - 82.1		8/6/2021	17:30
Nitrobenzene-d5	**55.3**	36.4 - 82.2		8/6/2021	17:30
Phenol-d5	**59.3**	41.1 - 81.4		8/6/2021	17:30
Terphenyl-d14	**76.2**	43.8 - 103		8/6/2021	17:30

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 8/5/2021
Data File: B55999.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-08-BLT-A		
Lab Sample ID:	213459-06A	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 7.19	ug/Kg		8/4/2021 17:12
1,1,2,2-Tetrachloroethane	< 7.19	ug/Kg		8/4/2021 17:12
1,1,2-Trichloroethane	< 7.19	ug/Kg		8/4/2021 17:12
1,1-Dichloroethane	< 7.19	ug/Kg		8/4/2021 17:12
1,1-Dichloroethene	< 7.19	ug/Kg		8/4/2021 17:12
1,2,3-Trichlorobenzene	< 18.0	ug/Kg		8/4/2021 17:12
1,2,4-Trichlorobenzene	< 18.0	ug/Kg		8/4/2021 17:12
1,2,4-Trimethylbenzene	< 7.19	ug/Kg		8/4/2021 17:12
1,2-Dibromo-3-Chloropropane	< 36.0	ug/Kg		8/4/2021 17:12
1,2-Dibromoethane	< 7.19	ug/Kg		8/4/2021 17:12
1,2-Dichlorobenzene	< 7.19	ug/Kg		8/4/2021 17:12
1,2-Dichloroethane	< 7.19	ug/Kg		8/4/2021 17:12
1,2-Dichloropropane	< 7.19	ug/Kg		8/4/2021 17:12
1,3,5-Trimethylbenzene	< 7.19	ug/Kg		8/4/2021 17:12
1,3-Dichlorobenzene	< 7.19	ug/Kg		8/4/2021 17:12
1,4-Dichlorobenzene	< 7.19	ug/Kg		8/4/2021 17:12
1,4-Dioxane	< 36.0	ug/Kg		8/4/2021 17:12
2-Butanone	< 36.0	ug/Kg		8/4/2021 17:12
2-Hexanone	< 18.0	ug/Kg		8/4/2021 17:12
4-Methyl-2-pentanone	< 18.0	ug/Kg		8/4/2021 17:12
Acetone	< 36.0	ug/Kg		8/4/2021 17:12
Benzene	< 7.19	ug/Kg		8/4/2021 17:12
Bromochloromethane	< 18.0	ug/Kg		8/4/2021 17:12
Bromodichloromethane	< 7.19	ug/Kg		8/4/2021 17:12
Bromoform	< 18.0	ug/Kg		8/4/2021 17:12
Bromomethane	< 7.19	ug/Kg		8/4/2021 17:12
Carbon disulfide	< 7.19	ug/Kg		8/4/2021 17:12
Carbon Tetrachloride	< 7.19	ug/Kg		8/4/2021 17:12

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-08-BLT-A
Lab Sample ID: 213459-06A **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Chlorobenzene	< 7.19	ug/Kg	8/4/2021	17:12
Chloroethane	< 7.19	ug/Kg	8/4/2021	17:12
Chloroform	< 7.19	ug/Kg	8/4/2021	17:12
Chloromethane	< 7.19	ug/Kg	8/4/2021	17:12
cis-1,2-Dichloroethene	< 7.19	ug/Kg	8/4/2021	17:12
cis-1,3-Dichloropropene	< 7.19	ug/Kg	8/4/2021	17:12
Cyclohexane	< 36.0	ug/Kg	8/4/2021	17:12
Dibromochloromethane	< 7.19	ug/Kg	8/4/2021	17:12
Dichlorodifluoromethane	< 7.19	ug/Kg	8/4/2021	17:12
Ethylbenzene	< 7.19	ug/Kg	8/4/2021	17:12
Freon 113	< 7.19	ug/Kg	8/4/2021	17:12
Isopropylbenzene	< 7.19	ug/Kg	8/4/2021	17:12
m,p-Xylene	< 7.19	ug/Kg	8/4/2021	17:12
Methyl acetate	< 7.19	ug/Kg	8/4/2021	17:12
Methyl tert-butyl Ether	< 7.19	ug/Kg	8/4/2021	17:12
Methylcyclohexane	< 7.19	ug/Kg	8/4/2021	17:12
Methylene chloride	< 18.0	ug/Kg	8/4/2021	17:12
Naphthalene	< 18.0	ug/Kg	8/4/2021	17:12
n-Butylbenzene	< 7.19	ug/Kg	8/4/2021	17:12
n-Propylbenzene	< 7.19	ug/Kg	8/4/2021	17:12
o-Xylene	< 7.19	ug/Kg	8/4/2021	17:12
p-Isopropyltoluene	< 7.19	ug/Kg	8/4/2021	17:12
sec-Butylbenzene	< 7.19	ug/Kg	8/4/2021	17:12
Styrene	< 18.0	ug/Kg	8/4/2021	17:12
tert-Butylbenzene	< 7.19	ug/Kg	8/4/2021	17:12
Tetrachloroethene	< 7.19	ug/Kg	8/4/2021	17:12
Toluene	< 7.19	ug/Kg	8/4/2021	17:12
trans-1,2-Dichloroethene	< 7.19	ug/Kg	8/4/2021	17:12
trans-1,3-Dichloropropene	< 7.19	ug/Kg	8/4/2021	17:12
Trichloroethene	< 7.19	ug/Kg	8/4/2021	17:12

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-08-BLT-A		
Lab Sample ID:	213459-06A	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Trichlorofluoromethane	< 7.19	ug/Kg			8/4/2021 17:12
Vinyl chloride	< 7.19	ug/Kg			8/4/2021 17:12

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**101**	88.8 - 123		8/4/2021 17:12
4-Bromofluorobenzene	**80.3**	68.7 - 115		8/4/2021 17:12
Pentafluorobenzene	**99.5**	80.2 - 112		8/4/2021 17:12
Toluene-D8	**97.4**	83.5 - 123		8/4/2021 17:12

Method Reference(s): EPA 8260C
EPA 5035A - L

Data File: z03392.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-09-BLT-B		
Lab Sample ID:	213459-07	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	< 0.00840	mg/Kg		8/6/2021 10:45

Method Reference(s): EPA 7471B
Preparation Date: 8/5/2021
Data File: Hg210806A

RCRA Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**2.05**	mg/Kg	D	8/5/2021 20:56
Barium	**36.2**	mg/Kg	D	8/5/2021 20:56
Cadmium	< 0.275	mg/Kg		8/5/2021 20:56
Chromium	**7.05**	mg/Kg	D	8/5/2021 20:56
Lead	**4.76**	mg/Kg	D	8/5/2021 20:56
Selenium	< 1.10	mg/Kg		8/5/2021 20:56
Silver	< 0.549	mg/Kg		8/5/2021 20:56

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 8/5/2021
Data File: 210805D

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.149	mg/Kg		8/4/2021 23:54
PCB-1221	< 0.149	mg/Kg		8/4/2021 23:54
PCB-1232	< 0.149	mg/Kg		8/4/2021 23:54
PCB-1242	< 0.149	mg/Kg		8/4/2021 23:54
PCB-1248	< 0.149	mg/Kg		8/4/2021 23:54
PCB-1254	< 0.149	mg/Kg		8/4/2021 23:54
PCB-1260	< 0.149	mg/Kg		8/4/2021 23:54
PCB-1262	< 0.149	mg/Kg		8/4/2021 23:54
PCB-1268	< 0.149	mg/Kg		8/4/2021 23:54

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-09-BLT-B		
Lab Sample ID:	213459-07	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	**70.6**	18.5 - 93.4		8/4/2021 23:54

Method Reference(s): EPA 8082A
EPA 3546
Preparation Date: 8/4/2021

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 294	ug/Kg		8/6/2021 18:00
1,2,4,5-Tetrachlorobenzene	< 294	ug/Kg		8/6/2021 18:00
1,2,4-Trichlorobenzene	< 294	ug/Kg		8/6/2021 18:00
1,2-Dichlorobenzene	< 294	ug/Kg		8/6/2021 18:00
1,3-Dichlorobenzene	< 294	ug/Kg		8/6/2021 18:00
1,4-Dichlorobenzene	< 294	ug/Kg		8/6/2021 18:00
2,2-Oxybis (1-chloropropane)	< 294	ug/Kg		8/6/2021 18:00
2,3,4,6-Tetrachlorophenol	< 294	ug/Kg		8/6/2021 18:00
2,4,5-Trichlorophenol	< 294	ug/Kg		8/6/2021 18:00
2,4,6-Trichlorophenol	< 294	ug/Kg		8/6/2021 18:00
2,4-Dichlorophenol	< 294	ug/Kg		8/6/2021 18:00
2,4-Dimethylphenol	< 294	ug/Kg		8/6/2021 18:00
2,4-Dinitrophenol	< 1170	ug/Kg		8/6/2021 18:00
2,4-Dinitrotoluene	< 294	ug/Kg		8/6/2021 18:00
2,6-Dinitrotoluene	< 294	ug/Kg		8/6/2021 18:00
2-Chloronaphthalene	< 294	ug/Kg		8/6/2021 18:00
2-Chlorophenol	< 294	ug/Kg		8/6/2021 18:00
2-Methylnapthalene	< 294	ug/Kg		8/6/2021 18:00
2-Methylphenol	< 294	ug/Kg		8/6/2021 18:00
2-Nitroaniline	< 294	ug/Kg		8/6/2021 18:00
2-Nitrophenol	< 294	ug/Kg		8/6/2021 18:00
3&4-Methylphenol	< 294	ug/Kg		8/6/2021 18:00
3,3'-Dichlorobenzidine	< 294	ug/Kg		8/6/2021 18:00

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-09-BLT-B
Lab Sample ID: 213459-07 **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

3-Nitroaniline	< 294	ug/Kg	8/6/2021	18:00
4,6-Dinitro-2-methylphenol	< 393	ug/Kg	8/6/2021	18:00
4-Bromophenyl phenyl ether	< 294	ug/Kg	8/6/2021	18:00
4-Chloro-3-methylphenol	< 294	ug/Kg	8/6/2021	18:00
4-Chloroaniline	< 294	ug/Kg	8/6/2021	18:00
4-Chlorophenyl phenyl ether	< 294	ug/Kg	8/6/2021	18:00
4-Nitroaniline	< 294	ug/Kg	8/6/2021	18:00
4-Nitrophenol	< 294	ug/Kg	8/6/2021	18:00
Acenaphthene	< 294	ug/Kg	8/6/2021	18:00
Acenaphthylene	< 294	ug/Kg	8/6/2021	18:00
Acetophenone	< 294	ug/Kg	8/6/2021	18:00
Anthracene	< 294	ug/Kg	8/6/2021	18:00
Atrazine	< 294	ug/Kg	8/6/2021	18:00
Benzaldehyde	< 294	ug/Kg	8/6/2021	18:00
Benzo (a) anthracene	< 294	ug/Kg	8/6/2021	18:00
Benzo (a) pyrene	< 294	ug/Kg	8/6/2021	18:00
Benzo (b) fluoranthene	< 294	ug/Kg	8/6/2021	18:00
Benzo (g,h,i) perylene	< 294	ug/Kg	8/6/2021	18:00
Benzo (k) fluoranthene	< 294	ug/Kg	8/6/2021	18:00
Bis (2-chloroethoxy) methane	< 294	ug/Kg	8/6/2021	18:00
Bis (2-chloroethyl) ether	< 294	ug/Kg	8/6/2021	18:00
Bis (2-ethylhexyl) phthalate	< 294	ug/Kg	8/6/2021	18:00
Butylbenzylphthalate	< 294	ug/Kg	8/6/2021	18:00
Caprolactam	< 294	ug/Kg	8/6/2021	18:00
Carbazole	< 294	ug/Kg	8/6/2021	18:00
Chrysene	< 294	ug/Kg	8/6/2021	18:00
Dibenz (a,h) anthracene	< 294	ug/Kg	8/6/2021	18:00
Dibenzofuran	< 294	ug/Kg	8/6/2021	18:00
Diethyl phthalate	< 294	ug/Kg	8/6/2021	18:00
Dimethyl phthalate	< 294	ug/Kg	8/6/2021	18:00

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-09-BLT-B
Lab Sample ID: 213459-07 **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Di-n-butyl phthalate	< 294	ug/Kg	8/6/2021	18:00
Di-n-octylphthalate	< 294	ug/Kg	8/6/2021	18:00
Fluoranthene	< 294	ug/Kg	8/6/2021	18:00
Fluorene	< 294	ug/Kg	8/6/2021	18:00
Hexachlorobenzene	< 294	ug/Kg	8/6/2021	18:00
Hexachlorobutadiene	< 294	ug/Kg	8/6/2021	18:00
Hexachlorocyclopentadiene	< 1170	ug/Kg	8/6/2021	18:00
Hexachloroethane	< 294	ug/Kg	8/6/2021	18:00
Indeno (1,2,3-cd) pyrene	< 294	ug/Kg	8/6/2021	18:00
Isophorone	< 294	ug/Kg	8/6/2021	18:00
Naphthalene	< 294	ug/Kg	8/6/2021	18:00
Nitrobenzene	< 294	ug/Kg	8/6/2021	18:00
N-Nitroso-di-n-propylamine	< 294	ug/Kg	8/6/2021	18:00
N-Nitrosodiphenylamine	< 294	ug/Kg	8/6/2021	18:00
Pentachlorophenol	< 587	ug/Kg	8/6/2021	18:00
Phenanthrene	< 294	ug/Kg	8/6/2021	18:00
Phenol	< 294	ug/Kg	8/6/2021	18:00
Pyrene	< 294	ug/Kg	8/6/2021	18:00

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	**72.6**	36.4 - 87.2		8/6/2021	18:00
2-Fluorobiphenyl	**61.4**	44 - 84		8/6/2021	18:00
2-Fluorophenol	**61.3**	43.2 - 82.1		8/6/2021	18:00
Nitrobenzene-d5	**58.3**	36.4 - 82.2		8/6/2021	18:00
Phenol-d5	**61.2**	41.1 - 81.4		8/6/2021	18:00
Terphenyl-d14	**79.4**	43.8 - 103		8/6/2021	18:00

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 8/5/2021
Data File: B56000.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-09-BLT-A		
Lab Sample ID:	213459-07A	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 7.58	ug/Kg		8/4/2021 18:01
1,1,2,2-Tetrachloroethane	< 7.58	ug/Kg		8/4/2021 18:01
1,1,2-Trichloroethane	< 7.58	ug/Kg		8/4/2021 18:01
1,1-Dichloroethane	< 7.58	ug/Kg		8/4/2021 18:01
1,1-Dichloroethene	< 7.58	ug/Kg		8/4/2021 18:01
1,2,3-Trichlorobenzene	< 18.9	ug/Kg		8/4/2021 18:01
1,2,4-Trichlorobenzene	< 18.9	ug/Kg		8/4/2021 18:01
1,2,4-Trimethylbenzene	< 7.58	ug/Kg		8/4/2021 18:01
1,2-Dibromo-3-Chloropropane	< 37.9	ug/Kg		8/4/2021 18:01
1,2-Dibromoethane	< 7.58	ug/Kg		8/4/2021 18:01
1,2-Dichlorobenzene	< 7.58	ug/Kg		8/4/2021 18:01
1,2-Dichloroethane	< 7.58	ug/Kg		8/4/2021 18:01
1,2-Dichloropropane	< 7.58	ug/Kg		8/4/2021 18:01
1,3,5-Trimethylbenzene	< 7.58	ug/Kg		8/4/2021 18:01
1,3-Dichlorobenzene	< 7.58	ug/Kg		8/4/2021 18:01
1,4-Dichlorobenzene	< 7.58	ug/Kg		8/4/2021 18:01
1,4-Dioxane	< 37.9	ug/Kg		8/4/2021 18:01
2-Butanone	< 37.9	ug/Kg		8/4/2021 18:01
2-Hexanone	< 18.9	ug/Kg		8/4/2021 18:01
4-Methyl-2-pentanone	< 18.9	ug/Kg		8/4/2021 18:01
Acetone	< 37.9	ug/Kg		8/4/2021 18:01
Benzene	< 7.58	ug/Kg		8/4/2021 18:01
Bromochloromethane	< 18.9	ug/Kg		8/4/2021 18:01
Bromodichloromethane	< 7.58	ug/Kg		8/4/2021 18:01
Bromoform	< 18.9	ug/Kg		8/4/2021 18:01
Bromomethane	< 7.58	ug/Kg		8/4/2021 18:01
Carbon disulfide	< 7.58	ug/Kg		8/4/2021 18:01
Carbon Tetrachloride	< 7.58	ug/Kg		8/4/2021 18:01

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-09-BLT-A
Lab Sample ID: 213459-07A **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Chlorobenzene	< 7.58	ug/Kg	8/4/2021	18:01
Chloroethane	< 7.58	ug/Kg	8/4/2021	18:01
Chloroform	< 7.58	ug/Kg	8/4/2021	18:01
Chloromethane	< 7.58	ug/Kg	8/4/2021	18:01
cis-1,2-Dichloroethene	< 7.58	ug/Kg	8/4/2021	18:01
cis-1,3-Dichloropropene	< 7.58	ug/Kg	8/4/2021	18:01
Cyclohexane	< 37.9	ug/Kg	8/4/2021	18:01
Dibromochloromethane	< 7.58	ug/Kg	8/4/2021	18:01
Dichlorodifluoromethane	< 7.58	ug/Kg	8/4/2021	18:01
Ethylbenzene	< 7.58	ug/Kg	8/4/2021	18:01
Freon 113	< 7.58	ug/Kg	8/4/2021	18:01
Isopropylbenzene	< 7.58	ug/Kg	8/4/2021	18:01
m,p-Xylene	< 7.58	ug/Kg	8/4/2021	18:01
Methyl acetate	< 7.58	ug/Kg	8/4/2021	18:01
Methyl tert-butyl Ether	< 7.58	ug/Kg	8/4/2021	18:01
Methylcyclohexane	< 7.58	ug/Kg	8/4/2021	18:01
Methylene chloride	< 18.9	ug/Kg	8/4/2021	18:01
Naphthalene	< 18.9	ug/Kg	8/4/2021	18:01
n-Butylbenzene	< 7.58	ug/Kg	8/4/2021	18:01
n-Propylbenzene	< 7.58	ug/Kg	8/4/2021	18:01
o-Xylene	< 7.58	ug/Kg	8/4/2021	18:01
p-Isopropyltoluene	< 7.58	ug/Kg	8/4/2021	18:01
sec-Butylbenzene	< 7.58	ug/Kg	8/4/2021	18:01
Styrene	< 18.9	ug/Kg	8/4/2021	18:01
tert-Butylbenzene	< 7.58	ug/Kg	8/4/2021	18:01
Tetrachloroethene	< 7.58	ug/Kg	8/4/2021	18:01
Toluene	< 7.58	ug/Kg	8/4/2021	18:01
trans-1,2-Dichloroethene	< 7.58	ug/Kg	8/4/2021	18:01
trans-1,3-Dichloropropene	< 7.58	ug/Kg	8/4/2021	18:01
Trichloroethene	< 7.58	ug/Kg	8/4/2021	18:01

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-09-BLT-A		
Lab Sample ID:	213459-07A	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Trichlorofluoromethane	< 7.58	ug/Kg	8/4/2021	18:01
Vinyl chloride	< 7.58	ug/Kg	8/4/2021	18:01

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	**108**	88.8 - 123		8/4/2021	18:01
4-Bromofluorobenzene	**94.9**	68.7 - 115		8/4/2021	18:01
Pentafluorobenzene	**103**	80.2 - 112		8/4/2021	18:01
Toluene-D8	**107**	83.5 - 123		8/4/2021	18:01

Method Reference(s): EPA 8260C
EPA 5035A - L

Data File: z03393.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-11-BLT-B
Lab Sample ID: 213459-08 **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.117**	mg/Kg		8/6/2021 10:50

Method Reference(s): EPA 7471B
Preparation Date: 8/5/2021
Data File: Hg210806A

RCRA Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**2.96**	mg/Kg		8/5/2021 21:09
Barium	**39.5**	mg/Kg		8/5/2021 21:09
Cadmium	**0.490**	mg/Kg		8/5/2021 21:09
Chromium	**10.8**	mg/Kg		8/5/2021 21:09
Lead	**44.7**	mg/Kg		8/5/2021 21:09
Selenium	< 1.08	mg/Kg		8/5/2021 21:09
Silver	< 0.541	mg/Kg		8/5/2021 21:09

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 8/5/2021
Data File: 210805D

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.134	mg/Kg		8/5/2021 00:17
PCB-1221	< 0.134	mg/Kg		8/5/2021 00:17
PCB-1232	< 0.134	mg/Kg		8/5/2021 00:17
PCB-1242	< 0.134	mg/Kg		8/5/2021 00:17
PCB-1248	< 0.134	mg/Kg		8/5/2021 00:17
PCB-1254	< 0.134	mg/Kg		8/5/2021 00:17
PCB-1260	< 0.134	mg/Kg		8/5/2021 00:17
PCB-1262	< 0.134	mg/Kg		8/5/2021 00:17
PCB-1268	< 0.134	mg/Kg		8/5/2021 00:17

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-11-BLT-B		
Lab Sample ID:	213459-08	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	**69.4**	18.5 - 93.4		8/5/2021 00:17

Method Reference(s): EPA 8082A
EPA 3546
Preparation Date: 8/4/2021

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 284	ug/Kg		8/6/2021 18:30
1,2,4,5-Tetrachlorobenzene	< 284	ug/Kg		8/6/2021 18:30
1,2,4-Trichlorobenzene	< 284	ug/Kg		8/6/2021 18:30
1,2-Dichlorobenzene	< 284	ug/Kg		8/6/2021 18:30
1,3-Dichlorobenzene	< 284	ug/Kg		8/6/2021 18:30
1,4-Dichlorobenzene	< 284	ug/Kg		8/6/2021 18:30
2,2-Oxybis (1-chloropropane)	< 284	ug/Kg		8/6/2021 18:30
2,3,4,6-Tetrachlorophenol	< 284	ug/Kg		8/6/2021 18:30
2,4,5-Trichlorophenol	< 284	ug/Kg		8/6/2021 18:30
2,4,6-Trichlorophenol	< 284	ug/Kg		8/6/2021 18:30
2,4-Dichlorophenol	< 284	ug/Kg		8/6/2021 18:30
2,4-Dimethylphenol	< 284	ug/Kg		8/6/2021 18:30
2,4-Dinitrophenol	< 1140	ug/Kg		8/6/2021 18:30
2,4-Dinitrotoluene	< 284	ug/Kg		8/6/2021 18:30
2,6-Dinitrotoluene	< 284	ug/Kg		8/6/2021 18:30
2-Chloronaphthalene	< 284	ug/Kg		8/6/2021 18:30
2-Chlorophenol	< 284	ug/Kg		8/6/2021 18:30
2-Methylnapthalene	< 284	ug/Kg		8/6/2021 18:30
2-Methylphenol	< 284	ug/Kg		8/6/2021 18:30
2-Nitroaniline	< 284	ug/Kg		8/6/2021 18:30
2-Nitrophenol	< 284	ug/Kg		8/6/2021 18:30
3&4-Methylphenol	< 284	ug/Kg		8/6/2021 18:30
3,3'-Dichlorobenzidine	< 284	ug/Kg		8/6/2021 18:30

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-11-BLT-B
Lab Sample ID: 213459-08 **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

3-Nitroaniline	< 284	ug/Kg	8/6/2021	18:30
4,6-Dinitro-2-methylphenol	< 381	ug/Kg	8/6/2021	18:30
4-Bromophenyl phenyl ether	< 284	ug/Kg	8/6/2021	18:30
4-Chloro-3-methylphenol	< 284	ug/Kg	8/6/2021	18:30
4-Chloroaniline	< 284	ug/Kg	8/6/2021	18:30
4-Chlorophenyl phenyl ether	< 284	ug/Kg	8/6/2021	18:30
4-Nitroaniline	< 284	ug/Kg	8/6/2021	18:30
4-Nitrophenol	< 284	ug/Kg	8/6/2021	18:30
Acenaphthene	< 284	ug/Kg	8/6/2021	18:30
Acenaphthylene	< 284	ug/Kg	8/6/2021	18:30
Acetophenone	< 284	ug/Kg	8/6/2021	18:30
Anthracene	< 284	ug/Kg	8/6/2021	18:30
Atrazine	< 284	ug/Kg	8/6/2021	18:30
Benzaldehyde	< 284	ug/Kg	8/6/2021	18:30
Benzo (a) anthracene	< 284	ug/Kg	8/6/2021	18:30
Benzo (a) pyrene	< 284	ug/Kg	8/6/2021	18:30
Benzo (b) fluoranthene	< 284	ug/Kg	8/6/2021	18:30
Benzo (g,h,i) perylene	< 284	ug/Kg	8/6/2021	18:30
Benzo (k) fluoranthene	< 284	ug/Kg	8/6/2021	18:30
Bis (2-chloroethoxy) methane	< 284	ug/Kg	8/6/2021	18:30
Bis (2-chloroethyl) ether	< 284	ug/Kg	8/6/2021	18:30
Bis (2-ethylhexyl) phthalate	< 284	ug/Kg	8/6/2021	18:30
Butylbenzylphthalate	< 284	ug/Kg	8/6/2021	18:30
Caprolactam	< 284	ug/Kg	8/6/2021	18:30
Carbazole	< 284	ug/Kg	8/6/2021	18:30
Chrysene	< 284	ug/Kg	8/6/2021	18:30
Dibenz (a,h) anthracene	< 284	ug/Kg	8/6/2021	18:30
Dibenzofuran	< 284	ug/Kg	8/6/2021	18:30
Diethyl phthalate	< 284	ug/Kg	8/6/2021	18:30
Dimethyl phthalate	< 284	ug/Kg	8/6/2021	18:30

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-11-BLT-B
Lab Sample ID: 213459-08 **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Di-n-butyl phthalate	< 284	ug/Kg	8/6/2021	18:30
Di-n-octylphthalate	< 284	ug/Kg	8/6/2021	18:30
Fluoranthene	**359**	ug/Kg	8/6/2021	18:30
Fluorene	< 284	ug/Kg	8/6/2021	18:30
Hexachlorobenzene	< 284	ug/Kg	8/6/2021	18:30
Hexachlorobutadiene	< 284	ug/Kg	8/6/2021	18:30
Hexachlorocyclopentadiene	< 1140	ug/Kg	8/6/2021	18:30
Hexachloroethane	< 284	ug/Kg	8/6/2021	18:30
Indeno (1,2,3-cd) pyrene	< 284	ug/Kg	8/6/2021	18:30
Isophorone	< 284	ug/Kg	8/6/2021	18:30
Naphthalene	< 284	ug/Kg	8/6/2021	18:30
Nitrobenzene	< 284	ug/Kg	8/6/2021	18:30
N-Nitroso-di-n-propylamine	< 284	ug/Kg	8/6/2021	18:30
N-Nitrosodiphenylamine	< 284	ug/Kg	8/6/2021	18:30
Pentachlorophenol	< 569	ug/Kg	8/6/2021	18:30
Phenanthrene	< 284	ug/Kg	8/6/2021	18:30
Phenol	< 284	ug/Kg	8/6/2021	18:30
Pyrene	**307**	ug/Kg	8/6/2021	18:30

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	**70.3**	36.4 - 87.2		8/6/2021	18:30
2-Fluorobiphenyl	**64.1**	44 - 84		8/6/2021	18:30
2-Fluorophenol	**58.3**	43.2 - 82.1		8/6/2021	18:30
Nitrobenzene-d5	**55.7**	36.4 - 82.2		8/6/2021	18:30
Phenol-d5	**59.7**	41.1 - 81.4		8/6/2021	18:30
Terphenyl-d14	**73.8**	43.8 - 103		8/6/2021	18:30

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 8/5/2021
Data File: B56001.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-11-BLT-A		
Lab Sample ID:	213459-08A	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 8.14	ug/Kg		8/5/2021 16:06
1,1,2,2-Tetrachloroethane	< 8.14	ug/Kg		8/5/2021 16:06
1,1,2-Trichloroethane	< 8.14	ug/Kg		8/5/2021 16:06
1,1-Dichloroethane	< 8.14	ug/Kg		8/5/2021 16:06
1,1-Dichloroethene	< 8.14	ug/Kg		8/5/2021 16:06
1,2,3-Trichlorobenzene	< 20.3	ug/Kg		8/5/2021 16:06
1,2,4-Trichlorobenzene	< 20.3	ug/Kg		8/5/2021 16:06
1,2,4-Trimethylbenzene	< 8.14	ug/Kg		8/5/2021 16:06
1,2-Dibromo-3-Chloropropane	< 40.7	ug/Kg		8/5/2021 16:06
1,2-Dibromoethane	< 8.14	ug/Kg		8/5/2021 16:06
1,2-Dichlorobenzene	< 8.14	ug/Kg		8/5/2021 16:06
1,2-Dichloroethane	< 8.14	ug/Kg		8/5/2021 16:06
1,2-Dichloropropane	< 8.14	ug/Kg		8/5/2021 16:06
1,3,5-Trimethylbenzene	< 8.14	ug/Kg		8/5/2021 16:06
1,3-Dichlorobenzene	< 8.14	ug/Kg		8/5/2021 16:06
1,4-Dichlorobenzene	< 8.14	ug/Kg		8/5/2021 16:06
1,4-Dioxane	< 40.7	ug/Kg		8/5/2021 16:06
2-Butanone	< 40.7	ug/Kg		8/5/2021 16:06
2-Hexanone	< 20.3	ug/Kg		8/5/2021 16:06
4-Methyl-2-pentanone	< 20.3	ug/Kg		8/5/2021 16:06
Acetone	< 40.7	ug/Kg		8/5/2021 16:06
Benzene	< 8.14	ug/Kg		8/5/2021 16:06
Bromochloromethane	< 20.3	ug/Kg		8/5/2021 16:06
Bromodichloromethane	< 8.14	ug/Kg		8/5/2021 16:06
Bromoform	< 20.3	ug/Kg		8/5/2021 16:06
Bromomethane	< 8.14	ug/Kg		8/5/2021 16:06
Carbon disulfide	< 8.14	ug/Kg		8/5/2021 16:06
Carbon Tetrachloride	< 8.14	ug/Kg		8/5/2021 16:06

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-11-BLT-A
Lab Sample ID: 213459-08A **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Chlorobenzene	< 8.14	ug/Kg	8/5/2021	16:06
Chloroethane	< 8.14	ug/Kg	8/5/2021	16:06
Chloroform	< 8.14	ug/Kg	8/5/2021	16:06
Chloromethane	< 8.14	ug/Kg	8/5/2021	16:06
cis-1,2-Dichloroethene	< 8.14	ug/Kg	8/5/2021	16:06
cis-1,3-Dichloropropene	< 8.14	ug/Kg	8/5/2021	16:06
Cyclohexane	< 40.7	ug/Kg	8/5/2021	16:06
Dibromochloromethane	< 8.14	ug/Kg	8/5/2021	16:06
Dichlorodifluoromethane	< 8.14	ug/Kg	8/5/2021	16:06
Ethylbenzene	< 8.14	ug/Kg	8/5/2021	16:06
Freon 113	< 8.14	ug/Kg	8/5/2021	16:06
Isopropylbenzene	< 8.14	ug/Kg	8/5/2021	16:06
m,p-Xylene	< 8.14	ug/Kg	8/5/2021	16:06
Methyl acetate	< 8.14	ug/Kg	8/5/2021	16:06
Methyl tert-butyl Ether	< 8.14	ug/Kg	8/5/2021	16:06
Methylcyclohexane	< 8.14	ug/Kg	8/5/2021	16:06
Methylene chloride	< 20.3	ug/Kg	8/5/2021	16:06
Naphthalene	< 20.3	ug/Kg	8/5/2021	16:06
n-Butylbenzene	< 8.14	ug/Kg	8/5/2021	16:06
n-Propylbenzene	< 8.14	ug/Kg	8/5/2021	16:06
o-Xylene	< 8.14	ug/Kg	8/5/2021	16:06
p-Isopropyltoluene	< 8.14	ug/Kg	8/5/2021	16:06
sec-Butylbenzene	< 8.14	ug/Kg	8/5/2021	16:06
Styrene	< 20.3	ug/Kg	8/5/2021	16:06
tert-Butylbenzene	< 8.14	ug/Kg	8/5/2021	16:06
Tetrachloroethene	< 8.14	ug/Kg	8/5/2021	16:06
Toluene	< 8.14	ug/Kg	8/5/2021	16:06
trans-1,2-Dichloroethene	< 8.14	ug/Kg	8/5/2021	16:06
trans-1,3-Dichloropropene	< 8.14	ug/Kg	8/5/2021	16:06
Trichloroethene	< 8.14	ug/Kg	8/5/2021	16:06

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-11-BLT-A		
Lab Sample ID:	213459-08A	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Trichlorofluoromethane	< 8.14	ug/Kg			8/5/2021 16:06
Vinyl chloride	< 8.14	ug/Kg			8/5/2021 16:06

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**100**	88.8 - 123		8/5/2021 16:06
4-Bromofluorobenzene	**84.0**	68.7 - 115		8/5/2021 16:06
Pentafluorobenzene	**103**	80.2 - 112		8/5/2021 16:06
Toluene-D8	**97.3**	83.5 - 123		8/5/2021 16:06

Method Reference(s): EPA 8260C
EPA 5035A - L

Data File: z03413.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: RRS-01-BLT-B
Lab Sample ID: 213459-09 **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.409**	mg/Kg		8/6/2021 10:51

Method Reference(s): EPA 7471B
Preparation Date: 8/5/2021
Data File: Hg210806A

RCRA Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**21.4**	mg/Kg		8/5/2021 21:14
Barium	**82.5**	mg/Kg		8/5/2021 21:14
Cadmium	**0.315**	mg/Kg		8/5/2021 21:14
Chromium	**10.1**	mg/Kg		8/5/2021 21:14
Lead	**88.7**	mg/Kg		8/5/2021 21:14
Selenium	**1.20**	mg/Kg		8/5/2021 21:14
Silver	< 0.564	mg/Kg		8/5/2021 21:14

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 8/5/2021
Data File: 210805D

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.184	mg/Kg		8/5/2021 00:40
PCB-1221	< 0.184	mg/Kg		8/5/2021 00:40
PCB-1232	< 0.184	mg/Kg		8/5/2021 00:40
PCB-1242	< 0.184	mg/Kg		8/5/2021 00:40
PCB-1248	< 0.184	mg/Kg		8/5/2021 00:40
PCB-1254	< 0.184	mg/Kg		8/5/2021 00:40
PCB-1260	< 0.184	mg/Kg		8/5/2021 00:40
PCB-1262	< 0.184	mg/Kg		8/5/2021 00:40
PCB-1268	< 0.184	mg/Kg		8/5/2021 00:40

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	RRS-01-BLT-B		
Lab Sample ID:	213459-09	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	**61.1**	18.5 - 93.4		8/5/2021 00:40

Method Reference(s): EPA 8082A
EPA 3546
Preparation Date: 8/4/2021

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 327	ug/Kg		8/6/2021 18:59
1,2,4,5-Tetrachlorobenzene	< 327	ug/Kg		8/6/2021 18:59
1,2,4-Trichlorobenzene	< 327	ug/Kg		8/6/2021 18:59
1,2-Dichlorobenzene	< 327	ug/Kg		8/6/2021 18:59
1,3-Dichlorobenzene	< 327	ug/Kg		8/6/2021 18:59
1,4-Dichlorobenzene	< 327	ug/Kg		8/6/2021 18:59
2,2-Oxybis (1-chloropropane)	< 327	ug/Kg		8/6/2021 18:59
2,3,4,6-Tetrachlorophenol	< 327	ug/Kg		8/6/2021 18:59
2,4,5-Trichlorophenol	< 327	ug/Kg		8/6/2021 18:59
2,4,6-Trichlorophenol	< 327	ug/Kg		8/6/2021 18:59
2,4-Dichlorophenol	< 327	ug/Kg		8/6/2021 18:59
2,4-Dimethylphenol	< 327	ug/Kg		8/6/2021 18:59
2,4-Dinitrophenol	< 1310	ug/Kg		8/6/2021 18:59
2,4-Dinitrotoluene	< 327	ug/Kg		8/6/2021 18:59
2,6-Dinitrotoluene	< 327	ug/Kg		8/6/2021 18:59
2-Chloronaphthalene	< 327	ug/Kg		8/6/2021 18:59
2-Chlorophenol	< 327	ug/Kg		8/6/2021 18:59
2-Methylnapthalene	< 327	ug/Kg		8/6/2021 18:59
2-Methylphenol	< 327	ug/Kg		8/6/2021 18:59
2-Nitroaniline	< 327	ug/Kg		8/6/2021 18:59
2-Nitrophenol	< 327	ug/Kg		8/6/2021 18:59
3&4-Methylphenol	< 327	ug/Kg		8/6/2021 18:59
3,3'-Dichlorobenzidine	< 327	ug/Kg		8/6/2021 18:59

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	RRS-01-BLT-B		
Lab Sample ID:	213459-09	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

3-Nitroaniline	< 327	ug/Kg	8/6/2021 18:59
4,6-Dinitro-2-methylphenol	< 437	ug/Kg	8/6/2021 18:59
4-Bromophenyl phenyl ether	< 327	ug/Kg	8/6/2021 18:59
4-Chloro-3-methylphenol	< 327	ug/Kg	8/6/2021 18:59
4-Chloroaniline	< 327	ug/Kg	8/6/2021 18:59
4-Chlorophenyl phenyl ether	< 327	ug/Kg	8/6/2021 18:59
4-Nitroaniline	< 327	ug/Kg	8/6/2021 18:59
4-Nitrophenol	< 327	ug/Kg	8/6/2021 18:59
Acenaphthene	< 327	ug/Kg	8/6/2021 18:59
Acenaphthylene	**445**	ug/Kg	8/6/2021 18:59
Acetophenone	< 327	ug/Kg	8/6/2021 18:59
Anthracene	**436**	ug/Kg	8/6/2021 18:59
Atrazine	< 327	ug/Kg	8/6/2021 18:59
Benzaldehyde	< 327	ug/Kg	8/6/2021 18:59
Benzo (a) anthracene	**1110**	ug/Kg	8/6/2021 18:59
Benzo (a) pyrene	**805**	ug/Kg	8/6/2021 18:59
Benzo (b) fluoranthene	**1470**	ug/Kg	8/6/2021 18:59
Benzo (g,h,i) perylene	**499**	ug/Kg	8/6/2021 18:59
Benzo (k) fluoranthene	**781**	ug/Kg	8/6/2021 18:59
Bis (2-chloroethoxy) methane	< 327	ug/Kg	8/6/2021 18:59
Bis (2-chloroethyl) ether	< 327	ug/Kg	8/6/2021 18:59
Bis (2-ethylhexyl) phthalate	< 327	ug/Kg	8/6/2021 18:59
Butylbenzylphthalate	< 327	ug/Kg	8/6/2021 18:59
Caprolactam	< 327	ug/Kg	8/6/2021 18:59
Carbazole	< 327	ug/Kg	8/6/2021 18:59
Chrysene	**1330**	ug/Kg	8/6/2021 18:59
Dibenz (a,h) anthracene	< 327	ug/Kg	8/6/2021 18:59
Dibenzofuran	< 327	ug/Kg	8/6/2021 18:59
Diethyl phthalate	< 327	ug/Kg	8/6/2021 18:59
Dimethyl phthalate	< 327	ug/Kg	8/6/2021 18:59

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: RRS-01-BLT-B
Lab Sample ID: 213459-09 **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Di-n-butyl phthalate	< 327	ug/Kg	8/6/2021	18:59
Di-n-octylphthalate	< 327	ug/Kg	8/6/2021	18:59
Fluoranthene	**2130**	ug/Kg	8/6/2021	18:59
Fluorene	< 327	ug/Kg	8/6/2021	18:59
Hexachlorobenzene	< 327	ug/Kg	8/6/2021	18:59
Hexachlorobutadiene	< 327	ug/Kg	8/6/2021	18:59
Hexachlorocyclopentadiene	< 1310	ug/Kg	8/6/2021	18:59
Hexachloroethane	< 327	ug/Kg	8/6/2021	18:59
Indeno (1,2,3-cd) pyrene	**621**	ug/Kg	8/6/2021	18:59
Isophorone	< 327	ug/Kg	8/6/2021	18:59
Naphthalene	< 327	ug/Kg	8/6/2021	18:59
Nitrobenzene	< 327	ug/Kg	8/6/2021	18:59
N-Nitroso-di-n-propylamine	< 327	ug/Kg	8/6/2021	18:59
N-Nitrosodiphenylamine	< 327	ug/Kg	8/6/2021	18:59
Pentachlorophenol	< 654	ug/Kg	8/6/2021	18:59
Phenanthrene	**912**	ug/Kg	8/6/2021	18:59
Phenol	< 327	ug/Kg	8/6/2021	18:59
Pyrene	**1770**	ug/Kg	8/6/2021	18:59

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	**52.8**	36.4 - 87.2		8/6/2021	18:59
2-Fluorobiphenyl	**50.7**	44 - 84		8/6/2021	18:59
2-Fluorophenol	**40.3**	43.2 - 82.1	*	8/6/2021	18:59
Nitrobenzene-d5	**40.8**	36.4 - 82.2		8/6/2021	18:59
Phenol-d5	**45.7**	41.1 - 81.4		8/6/2021	18:59
Terphenyl-d14	**55.2**	43.8 - 103		8/6/2021	18:59

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 8/5/2021
Data File: B56002.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	RRS-01-BLT-A		
Lab Sample ID:	213459-09A	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 9.39	ug/Kg		8/5/2021 16:26
1,1,2,2-Tetrachloroethane	< 9.39	ug/Kg		8/5/2021 16:26
1,1,2-Trichloroethane	< 9.39	ug/Kg		8/5/2021 16:26
1,1-Dichloroethane	< 9.39	ug/Kg		8/5/2021 16:26
1,1-Dichloroethene	< 9.39	ug/Kg		8/5/2021 16:26
1,2,3-Trichlorobenzene	< 23.5	ug/Kg		8/5/2021 16:26
1,2,4-Trichlorobenzene	< 23.5	ug/Kg		8/5/2021 16:26
1,2,4-Trimethylbenzene	< 9.39	ug/Kg		8/5/2021 16:26
1,2-Dibromo-3-Chloropropane	< 47.0	ug/Kg		8/5/2021 16:26
1,2-Dibromoethane	< 9.39	ug/Kg		8/5/2021 16:26
1,2-Dichlorobenzene	< 9.39	ug/Kg		8/5/2021 16:26
1,2-Dichloroethane	< 9.39	ug/Kg		8/5/2021 16:26
1,2-Dichloropropane	< 9.39	ug/Kg		8/5/2021 16:26
1,3,5-Trimethylbenzene	< 9.39	ug/Kg		8/5/2021 16:26
1,3-Dichlorobenzene	< 9.39	ug/Kg		8/5/2021 16:26
1,4-Dichlorobenzene	< 9.39	ug/Kg		8/5/2021 16:26
1,4-Dioxane	< 47.0	ug/Kg		8/5/2021 16:26
2-Butanone	< 47.0	ug/Kg		8/5/2021 16:26
2-Hexanone	< 23.5	ug/Kg		8/5/2021 16:26
4-Methyl-2-pentanone	< 23.5	ug/Kg		8/5/2021 16:26
Acetone	< 47.0	ug/Kg		8/5/2021 16:26
Benzene	< 9.39	ug/Kg		8/5/2021 16:26
Bromochloromethane	< 23.5	ug/Kg		8/5/2021 16:26
Bromodichloromethane	< 9.39	ug/Kg		8/5/2021 16:26
Bromoform	< 23.5	ug/Kg		8/5/2021 16:26
Bromomethane	< 9.39	ug/Kg		8/5/2021 16:26
Carbon disulfide	< 9.39	ug/Kg		8/5/2021 16:26
Carbon Tetrachloride	< 9.39	ug/Kg		8/5/2021 16:26

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: RRS-01-BLT-A
Lab Sample ID: 213459-09A **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Chlorobenzene	< 9.39	ug/Kg	8/5/2021	16:26
Chloroethane	< 9.39	ug/Kg	8/5/2021	16:26
Chloroform	< 9.39	ug/Kg	8/5/2021	16:26
Chloromethane	< 9.39	ug/Kg	8/5/2021	16:26
cis-1,2-Dichloroethene	< 9.39	ug/Kg	8/5/2021	16:26
cis-1,3-Dichloropropene	< 9.39	ug/Kg	8/5/2021	16:26
Cyclohexane	< 47.0	ug/Kg	8/5/2021	16:26
Dibromochloromethane	< 9.39	ug/Kg	8/5/2021	16:26
Dichlorodifluoromethane	< 9.39	ug/Kg	8/5/2021	16:26
Ethylbenzene	< 9.39	ug/Kg	8/5/2021	16:26
Freon 113	< 9.39	ug/Kg	8/5/2021	16:26
Isopropylbenzene	< 9.39	ug/Kg	8/5/2021	16:26
m,p-Xylene	< 9.39	ug/Kg	8/5/2021	16:26
Methyl acetate	< 9.39	ug/Kg	8/5/2021	16:26
Methyl tert-butyl Ether	< 9.39	ug/Kg	8/5/2021	16:26
Methylcyclohexane	< 9.39	ug/Kg	8/5/2021	16:26
Methylene chloride	< 23.5	ug/Kg	8/5/2021	16:26
Naphthalene	< 23.5	ug/Kg	8/5/2021	16:26
n-Butylbenzene	< 9.39	ug/Kg	8/5/2021	16:26
n-Propylbenzene	< 9.39	ug/Kg	8/5/2021	16:26
o-Xylene	< 9.39	ug/Kg	8/5/2021	16:26
p-Isopropyltoluene	< 9.39	ug/Kg	8/5/2021	16:26
sec-Butylbenzene	< 9.39	ug/Kg	8/5/2021	16:26
Styrene	< 23.5	ug/Kg	8/5/2021	16:26
tert-Butylbenzene	< 9.39	ug/Kg	8/5/2021	16:26
Tetrachloroethene	< 9.39	ug/Kg	8/5/2021	16:26
Toluene	< 9.39	ug/Kg	8/5/2021	16:26
trans-1,2-Dichloroethene	< 9.39	ug/Kg	8/5/2021	16:26
trans-1,3-Dichloropropene	< 9.39	ug/Kg	8/5/2021	16:26
Trichloroethene	< 9.39	ug/Kg	8/5/2021	16:26

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	RRS-01-BLT-A		
Lab Sample ID:	213459-09A	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Trichlorofluoromethane	< 9.39	ug/Kg			8/5/2021 16:26
Vinyl chloride	< 9.39	ug/Kg			8/5/2021 16:26

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**99.3**	88.8 - 123		8/5/2021 16:26
4-Bromofluorobenzene	**74.4**	68.7 - 115		8/5/2021 16:26
Pentafluorobenzene	**96.2**	80.2 - 112		8/5/2021 16:26
Toluene-D8	**88.1**	83.5 - 123		8/5/2021 16:26

Method Reference(s): EPA 8260C
EPA 5035A - L

Data File: z03414.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: RRS-02-BLT-B
Lab Sample ID: 213459-10 **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.306**	mg/Kg		8/6/2021 10:53

Method Reference(s): EPA 7471B
Preparation Date: 8/5/2021
Data File: Hg210806A

RCRA Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**8.63**	mg/Kg		8/5/2021 21:19
Barium	**68.5**	mg/Kg		8/5/2021 21:19
Cadmium	< 0.289	mg/Kg		8/5/2021 21:19
Chromium	**10.8**	mg/Kg		8/5/2021 21:19
Lead	**87.2**	mg/Kg		8/5/2021 21:19
Selenium	< 1.15	mg/Kg		8/5/2021 21:19
Silver	< 0.577	mg/Kg		8/5/2021 21:19

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 8/5/2021
Data File: 210805D

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.179	mg/Kg		8/5/2021 01:03
PCB-1221	< 0.179	mg/Kg		8/5/2021 01:03
PCB-1232	< 0.179	mg/Kg		8/5/2021 01:03
PCB-1242	< 0.179	mg/Kg		8/5/2021 01:03
PCB-1248	< 0.179	mg/Kg		8/5/2021 01:03
PCB-1254	< 0.179	mg/Kg		8/5/2021 01:03
PCB-1260	< 0.179	mg/Kg		8/5/2021 01:03
PCB-1262	< 0.179	mg/Kg		8/5/2021 01:03
PCB-1268	< 0.179	mg/Kg		8/5/2021 01:03

Report Prepared Tuesday, August 10, 2021

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	RRS-02-BLT-B		
Lab Sample ID:	213459-10	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	**65.0**	18.5 - 93.4		8/5/2021 01:03

Method Reference(s): EPA 8082A
EPA 3546
Preparation Date: 8/4/2021

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 316	ug/Kg		8/6/2021 19:29
1,2,4,5-Tetrachlorobenzene	< 316	ug/Kg		8/6/2021 19:29
1,2,4-Trichlorobenzene	< 316	ug/Kg		8/6/2021 19:29
1,2-Dichlorobenzene	< 316	ug/Kg		8/6/2021 19:29
1,3-Dichlorobenzene	< 316	ug/Kg		8/6/2021 19:29
1,4-Dichlorobenzene	< 316	ug/Kg		8/6/2021 19:29
2,2-Oxybis (1-chloropropane)	< 316	ug/Kg		8/6/2021 19:29
2,3,4,6-Tetrachlorophenol	< 316	ug/Kg		8/6/2021 19:29
2,4,5-Trichlorophenol	< 316	ug/Kg		8/6/2021 19:29
2,4,6-Trichlorophenol	< 316	ug/Kg		8/6/2021 19:29
2,4-Dichlorophenol	< 316	ug/Kg		8/6/2021 19:29
2,4-Dimethylphenol	< 316	ug/Kg		8/6/2021 19:29
2,4-Dinitrophenol	< 1260	ug/Kg		8/6/2021 19:29
2,4-Dinitrotoluene	< 316	ug/Kg		8/6/2021 19:29
2,6-Dinitrotoluene	< 316	ug/Kg		8/6/2021 19:29
2-Chloronaphthalene	< 316	ug/Kg		8/6/2021 19:29
2-Chlorophenol	< 316	ug/Kg		8/6/2021 19:29
2-Methylnapthalene	< 316	ug/Kg		8/6/2021 19:29
2-Methylphenol	< 316	ug/Kg		8/6/2021 19:29
2-Nitroaniline	< 316	ug/Kg		8/6/2021 19:29
2-Nitrophenol	< 316	ug/Kg		8/6/2021 19:29
3&4-Methylphenol	< 316	ug/Kg		8/6/2021 19:29
3,3'-Dichlorobenzidine	< 316	ug/Kg		8/6/2021 19:29

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	RRS-02-BLT-B		
Lab Sample ID:	213459-10	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

3-Nitroaniline	< 316	ug/Kg	8/6/2021 19:29
4,6-Dinitro-2-methylphenol	< 423	ug/Kg	8/6/2021 19:29
4-Bromophenyl phenyl ether	< 316	ug/Kg	8/6/2021 19:29
4-Chloro-3-methylphenol	< 316	ug/Kg	8/6/2021 19:29
4-Chloroaniline	< 316	ug/Kg	8/6/2021 19:29
4-Chlorophenyl phenyl ether	< 316	ug/Kg	8/6/2021 19:29
4-Nitroaniline	< 316	ug/Kg	8/6/2021 19:29
4-Nitrophenol	< 316	ug/Kg	8/6/2021 19:29
Acenaphthene	< 316	ug/Kg	8/6/2021 19:29
Acenaphthylene	< 316	ug/Kg	8/6/2021 19:29
Acetophenone	< 316	ug/Kg	8/6/2021 19:29
Anthracene	< 316	ug/Kg	8/6/2021 19:29
Atrazine	< 316	ug/Kg	8/6/2021 19:29
Benzaldehyde	< 316	ug/Kg	8/6/2021 19:29
Benzo (a) anthracene	< 316	ug/Kg	8/6/2021 19:29
Benzo (a) pyrene	< 316	ug/Kg	8/6/2021 19:29
Benzo (b) fluoranthene	< 316	ug/Kg	8/6/2021 19:29
Benzo (g,h,i) perylene	< 316	ug/Kg	8/6/2021 19:29
Benzo (k) fluoranthene	< 316	ug/Kg	8/6/2021 19:29
Bis (2-chloroethoxy) methane	< 316	ug/Kg	8/6/2021 19:29
Bis (2-chloroethyl) ether	< 316	ug/Kg	8/6/2021 19:29
Bis (2-ethylhexyl) phthalate	< 316	ug/Kg	8/6/2021 19:29
Butylbenzylphthalate	< 316	ug/Kg	8/6/2021 19:29
Caprolactam	< 316	ug/Kg	8/6/2021 19:29
Carbazole	< 316	ug/Kg	8/6/2021 19:29
Chrysene	< 316	ug/Kg	8/6/2021 19:29
Dibenz (a,h) anthracene	< 316	ug/Kg	8/6/2021 19:29
Dibenzofuran	< 316	ug/Kg	8/6/2021 19:29
Diethyl phthalate	< 316	ug/Kg	8/6/2021 19:29
Dimethyl phthalate	< 316	ug/Kg	8/6/2021 19:29

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: RRS-02-BLT-B
Lab Sample ID: 213459-10 **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Di-n-butyl phthalate	< 316	ug/Kg	8/6/2021	19:29
Di-n-octylphthalate	< 316	ug/Kg	8/6/2021	19:29
Fluoranthene	< 316	ug/Kg	8/6/2021	19:29
Fluorene	< 316	ug/Kg	8/6/2021	19:29
Hexachlorobenzene	< 316	ug/Kg	8/6/2021	19:29
Hexachlorobutadiene	< 316	ug/Kg	8/6/2021	19:29
Hexachlorocyclopentadiene	< 1260	ug/Kg	8/6/2021	19:29
Hexachloroethane	< 316	ug/Kg	8/6/2021	19:29
Indeno (1,2,3-cd) pyrene	< 316	ug/Kg	8/6/2021	19:29
Isophorone	< 316	ug/Kg	8/6/2021	19:29
Naphthalene	< 316	ug/Kg	8/6/2021	19:29
Nitrobenzene	< 316	ug/Kg	8/6/2021	19:29
N-Nitroso-di-n-propylamine	< 316	ug/Kg	8/6/2021	19:29
N-Nitrosodiphenylamine	< 316	ug/Kg	8/6/2021	19:29
Pentachlorophenol	< 632	ug/Kg	8/6/2021	19:29
Phenanthrene	< 316	ug/Kg	8/6/2021	19:29
Phenol	< 316	ug/Kg	8/6/2021	19:29
Pyrene	< 316	ug/Kg	8/6/2021	19:29

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	**52.6**	36.4 - 87.2		8/6/2021	19:29
2-Fluorobiphenyl	**55.3**	44 - 84		8/6/2021	19:29
2-Fluorophenol	**45.0**	43.2 - 82.1		8/6/2021	19:29
Nitrobenzene-d5	**47.6**	36.4 - 82.2		8/6/2021	19:29
Phenol-d5	**49.6**	41.1 - 81.4		8/6/2021	19:29
Terphenyl-d14	**58.4**	43.8 - 103		8/6/2021	19:29

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 8/5/2021
Data File: B56003.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	RRS-02-BLT-A		
Lab Sample ID:	213459-10A	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 7.41	ug/Kg		8/5/2021 16:45
1,1,2,2-Tetrachloroethane	< 7.41	ug/Kg		8/5/2021 16:45
1,1,2-Trichloroethane	< 7.41	ug/Kg		8/5/2021 16:45
1,1-Dichloroethane	< 7.41	ug/Kg		8/5/2021 16:45
1,1-Dichloroethene	< 7.41	ug/Kg		8/5/2021 16:45
1,2,3-Trichlorobenzene	< 18.5	ug/Kg		8/5/2021 16:45
1,2,4-Trichlorobenzene	< 18.5	ug/Kg		8/5/2021 16:45
1,2,4-Trimethylbenzene	< 7.41	ug/Kg		8/5/2021 16:45
1,2-Dibromo-3-Chloropropane	< 37.1	ug/Kg		8/5/2021 16:45
1,2-Dibromoethane	< 7.41	ug/Kg		8/5/2021 16:45
1,2-Dichlorobenzene	< 7.41	ug/Kg		8/5/2021 16:45
1,2-Dichloroethane	< 7.41	ug/Kg		8/5/2021 16:45
1,2-Dichloropropane	< 7.41	ug/Kg		8/5/2021 16:45
1,3,5-Trimethylbenzene	< 7.41	ug/Kg		8/5/2021 16:45
1,3-Dichlorobenzene	< 7.41	ug/Kg		8/5/2021 16:45
1,4-Dichlorobenzene	< 7.41	ug/Kg		8/5/2021 16:45
1,4-Dioxane	< 37.1	ug/Kg		8/5/2021 16:45
2-Butanone	< 37.1	ug/Kg		8/5/2021 16:45
2-Hexanone	< 18.5	ug/Kg		8/5/2021 16:45
4-Methyl-2-pentanone	< 18.5	ug/Kg		8/5/2021 16:45
Acetone	< 37.1	ug/Kg		8/5/2021 16:45
Benzene	< 7.41	ug/Kg		8/5/2021 16:45
Bromochloromethane	< 18.5	ug/Kg		8/5/2021 16:45
Bromodichloromethane	< 7.41	ug/Kg		8/5/2021 16:45
Bromoform	< 18.5	ug/Kg		8/5/2021 16:45
Bromomethane	< 7.41	ug/Kg		8/5/2021 16:45
Carbon disulfide	< 7.41	ug/Kg		8/5/2021 16:45
Carbon Tetrachloride	< 7.41	ug/Kg		8/5/2021 16:45

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: RRS-02-BLT-A
Lab Sample ID: 213459-10A **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Chlorobenzene	< 7.41	ug/Kg	8/5/2021	16:45
Chloroethane	< 7.41	ug/Kg	8/5/2021	16:45
Chloroform	< 7.41	ug/Kg	8/5/2021	16:45
Chloromethane	< 7.41	ug/Kg	8/5/2021	16:45
cis-1,2-Dichloroethene	< 7.41	ug/Kg	8/5/2021	16:45
cis-1,3-Dichloropropene	< 7.41	ug/Kg	8/5/2021	16:45
Cyclohexane	< 37.1	ug/Kg	8/5/2021	16:45
Dibromochloromethane	< 7.41	ug/Kg	8/5/2021	16:45
Dichlorodifluoromethane	< 7.41	ug/Kg	8/5/2021	16:45
Ethylbenzene	< 7.41	ug/Kg	8/5/2021	16:45
Freon 113	< 7.41	ug/Kg	8/5/2021	16:45
Isopropylbenzene	< 7.41	ug/Kg	8/5/2021	16:45
m,p-Xylene	< 7.41	ug/Kg	8/5/2021	16:45
Methyl acetate	< 7.41	ug/Kg	8/5/2021	16:45
Methyl tert-butyl Ether	< 7.41	ug/Kg	8/5/2021	16:45
Methylcyclohexane	< 7.41	ug/Kg	8/5/2021	16:45
Methylene chloride	< 18.5	ug/Kg	8/5/2021	16:45
Naphthalene	< 18.5	ug/Kg	8/5/2021	16:45
n-Butylbenzene	< 7.41	ug/Kg	8/5/2021	16:45
n-Propylbenzene	< 7.41	ug/Kg	8/5/2021	16:45
o-Xylene	< 7.41	ug/Kg	8/5/2021	16:45
p-Isopropyltoluene	< 7.41	ug/Kg	8/5/2021	16:45
sec-Butylbenzene	< 7.41	ug/Kg	8/5/2021	16:45
Styrene	< 18.5	ug/Kg	8/5/2021	16:45
tert-Butylbenzene	< 7.41	ug/Kg	8/5/2021	16:45
Tetrachloroethene	< 7.41	ug/Kg	8/5/2021	16:45
Toluene	< 7.41	ug/Kg	8/5/2021	16:45
trans-1,2-Dichloroethene	< 7.41	ug/Kg	8/5/2021	16:45
trans-1,3-Dichloropropene	< 7.41	ug/Kg	8/5/2021	16:45
Trichloroethene	< 7.41	ug/Kg	8/5/2021	16:45

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	RRS-02-BLT-A		
Lab Sample ID:	213459-10A	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Trichlorofluoromethane	< 7.41	ug/Kg			8/5/2021 16:45
Vinyl chloride	< 7.41	ug/Kg			8/5/2021 16:45

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**102**	88.8 - 123		8/5/2021 16:45
4-Bromofluorobenzene	**77.3**	68.7 - 115		8/5/2021 16:45
Pentafluorobenzene	**99.3**	80.2 - 112		8/5/2021 16:45
Toluene-D8	**92.4**	83.5 - 123		8/5/2021 16:45

Internal standard outliers indicate probable matrix interference

Method Reference(s): EPA 8260C
EPA 5035A - L

Data File: z03415.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	RRT-01-BLT		
Lab Sample ID:	213459-11	**Date Sampled:**	7/30/2021
Matrix:	Solid	**Date Received:**	8/3/2021

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.0320**	mg/Kg		8/6/2021 10:54

Method Reference(s): EPA 7471B
Preparation Date: 8/5/2021
Data File: Hg210806A

RCRA Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**1.76**	mg/Kg		8/5/2021 21:23
Barium	**23.3**	mg/Kg		8/5/2021 21:23
Cadmium	< 0.231	mg/Kg		8/5/2021 21:23
Chromium	**3.06**	mg/Kg		8/5/2021 21:23
Lead	**16.7**	mg/Kg		8/5/2021 21:23
Selenium	< 0.926	mg/Kg		8/5/2021 21:23
Silver	< 0.463	mg/Kg		8/5/2021 21:23

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 8/5/2021
Data File: 210805D

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 45400	ug/Kg		8/10/2021 15:46
1,2,4,5-Tetrachlorobenzene	< 45400	ug/Kg		8/10/2021 15:46
1,2,4-Trichlorobenzene	< 45400	ug/Kg		8/10/2021 15:46
1,2-Dichlorobenzene	< 45400	ug/Kg		8/10/2021 15:46
1,3-Dichlorobenzene	< 45400	ug/Kg		8/10/2021 15:46
1,4-Dichlorobenzene	< 45400	ug/Kg		8/10/2021 15:46
2,2-Oxybis (1-chloropropane)	< 45400	ug/Kg		8/10/2021 15:46
2,3,4,6-Tetrachlorophenol	< 45400	ug/Kg		8/10/2021 15:46
2,4,5-Trichlorophenol	< 45400	ug/Kg		8/10/2021 15:46

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: RRT-01-BLT
Lab Sample ID: 213459-11 **Date Sampled:** 7/30/2021
Matrix: Solid **Date Received:** 8/3/2021

2,4,6-Trichlorophenol	< 45400	ug/Kg	8/10/2021	15:46
2,4-Dichlorophenol	< 45400	ug/Kg	8/10/2021	15:46
2,4-Dimethylphenol	< 45400	ug/Kg	8/10/2021	15:46
2,4-Dinitrophenol	< 181000	ug/Kg	8/10/2021	15:46
2,4-Dinitrotoluene	< 45400	ug/Kg	8/10/2021	15:46
2,6-Dinitrotoluene	< 45400	ug/Kg	8/10/2021	15:46
2-Chloronaphthalene	< 45400	ug/Kg	8/10/2021	15:46
2-Chlorophenol	< 45400	ug/Kg	8/10/2021	15:46
2-Methylnapthalene	< 45400	ug/Kg	8/10/2021	15:46
2-Methylphenol	< 45400	ug/Kg	8/10/2021	15:46
2-Nitroaniline	< 45400	ug/Kg	8/10/2021	15:46
2-Nitrophenol	< 45400	ug/Kg	8/10/2021	15:46
3&4-Methylphenol	< 45400	ug/Kg	8/10/2021	15:46
3,3'-Dichlorobenzidine	< 45400	ug/Kg	8/10/2021	15:46
3-Nitroaniline	< 45400	ug/Kg	8/10/2021	15:46
4,6-Dinitro-2-methylphenol	< 60700	ug/Kg	8/10/2021	15:46
4-Bromophenyl phenyl ether	< 45400	ug/Kg	8/10/2021	15:46
4-Chloro-3-methylphenol	< 45400	ug/Kg	8/10/2021	15:46
4-Chloroaniline	< 45400	ug/Kg	8/10/2021	15:46
4-Chlorophenyl phenyl ether	< 45400	ug/Kg	8/10/2021	15:46
4-Nitroaniline	< 45400	ug/Kg	8/10/2021	15:46
4-Nitrophenol	< 45400	ug/Kg	8/10/2021	15:46
Acenaphthene	< 45400	ug/Kg	8/10/2021	15:46
Acenaphthylene	< 45400	ug/Kg	8/10/2021	15:46
Acetophenone	< 45400	ug/Kg	8/10/2021	15:46
Anthracene	**70500**	ug/Kg	8/10/2021	15:46
Atrazine	< 45400	ug/Kg	8/10/2021	15:46
Benzaldehyde	< 45400	ug/Kg	8/10/2021	15:46
Benzo (a) anthracene	**287000**	ug/Kg	8/10/2021	15:46
Benzo (a) pyrene	**142000**	ug/Kg	8/10/2021	15:46

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: RRT-01-BLT
Lab Sample ID: 213459-11 **Date Sampled:** 7/30/2021
Matrix: Solid **Date Received:** 8/3/2021

Benzo (b) fluoranthene	**331000**	ug/Kg	8/10/2021	15:46
Benzo (g,h,i) perylene	< 45400	ug/Kg	8/10/2021	15:46
Benzo (k) fluoranthene	**105000**	ug/Kg	8/10/2021	15:46
Bis (2-chloroethoxy) methane	< 45400	ug/Kg	8/10/2021	15:46
Bis (2-chloroethyl) ether	< 45400	ug/Kg	8/10/2021	15:46
Bis (2-ethylhexyl) phthalate	< 45400	ug/Kg	8/10/2021	15:46
Butylbenzylphthalate	< 45400	ug/Kg	8/10/2021	15:46
Caprolactam	< 45400	ug/Kg	8/10/2021	15:46
Carbazole	< 45400	ug/Kg	8/10/2021	15:46
Chrysene	**358000**	ug/Kg	8/10/2021	15:46
Dibenz (a,h) anthracene	< 45400	ug/Kg	8/10/2021	15:46
Dibenzofuran	< 45400	ug/Kg	8/10/2021	15:46
Diethyl phthalate	< 45400	ug/Kg	8/10/2021	15:46
Dimethyl phthalate	< 45400	ug/Kg	8/10/2021	15:46
Di-n-butyl phthalate	< 45400	ug/Kg	8/10/2021	15:46
Di-n-octylphthalate	< 45400	ug/Kg	8/10/2021	15:46
Fluoranthene	**622000**	ug/Kg	8/10/2021	15:46
Fluorene	< 45400	ug/Kg	8/10/2021	15:46
Hexachlorobenzene	< 45400	ug/Kg	8/10/2021	15:46
Hexachlorobutadiene	< 45400	ug/Kg	8/10/2021	15:46
Hexachlorocyclopentadiene	< 181000	ug/Kg	8/10/2021	15:46
Hexachloroethane	< 45400	ug/Kg	8/10/2021	15:46
Indeno (1,2,3-cd) pyrene	**54800**	ug/Kg	8/10/2021	15:46
Isophorone	< 45400	ug/Kg	8/10/2021	15:46
Naphthalene	< 45400	ug/Kg	8/10/2021	15:46
Nitrobenzene	< 45400	ug/Kg	8/10/2021	15:46
N-Nitroso-di-n-propylamine	< 45400	ug/Kg	8/10/2021	15:46
N-Nitrosodiphenylamine	< 45400	ug/Kg	8/10/2021	15:46
Pentachlorophenol	< 90700	ug/Kg	8/10/2021	15:46
Phenanthrene	< 45400	ug/Kg	8/10/2021	15:46

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: RRT-01-BLT

Lab Sample ID: 213459-11 **Date Sampled:** 7/30/2021

Matrix: Solid **Date Received:** 8/3/2021

Phenol	< 45400	ug/Kg	8/10/2021	15:46
Pyrene	**923000**	ug/Kg	8/10/2021	15:46

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	NC	36.4 - 87.2		8/10/2021	15:46
2-Fluorobiphenyl	NC	44 - 84		8/10/2021	15:46
2-Fluorophenol	NC	43.2 - 82.1		8/10/2021	15:46
Nitrobenzene-d5	NC	36.4 - 82.2		8/10/2021	15:46
Phenol-d5	NC	41.1 - 81.4		8/10/2021	15:46
Terphenyl-d14	NC	43.8 - 103		8/10/2021	15:46

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 8/5/2021
Data File: B56075.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Method Blank Report

Client: **Stantec**

Project Reference: 213414039.400

Lab Project ID: 213459

Matrix: Soil

RCRA Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed	
Arsenic	<0.500	mg/Kg		8/5/2021	20:05
Barium	<5.00	mg/Kg		8/5/2021	20:05
Cadmium	<0.250	mg/Kg		8/5/2021	20:05
Chromium	<0.500	mg/Kg		8/5/2021	20:05
Lead	<0.500	mg/Kg		8/5/2021	20:05
Selenium	<1.00	mg/Kg		8/5/2021	20:05
Silver	<0.500	mg/Kg		8/5/2021	20:05

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 8/5/2021
Data File: 210805D
QC Batch ID: QC210805soil
QC Number: Blk 1

Report Prepared Monday, August 9, 2021

PARADIGM ENVIRONMENTAL SERVICES, INC.

QC Report for Laboratory Control Sample and Control Sample Duplicate

Client: **Stantec**

Project Reference: 213414039.400

Lab Project ID: 213459

Matrix: Soil

RCRA Metals (ICP)

Analyte	LCS Added	LCSD Added	Spike Units	LCS Result	LCSD Result	LCS % Recovery	LCSD % Recovery	% Rec Limits	LCS Outliers	LCSD Outliers	Relative % Difference	RPD Limit	RPD Outliers	Date Analyzed
Arsenic	123	123	mg/Kg	113	112	92.5	91.4	80 - 120			1.11	20		8/5/2021
Barium	123	123	mg/Kg	136	132	111	108	80 - 120			2.90	20		8/5/2021
Cadmium	49.0	49.0	mg/Kg	51.1	49.7	104	101	80 - 120			2.71	20		8/5/2021
Chromium	123	123	mg/Kg	127	123	103	100	80 - 120			2.92	20		8/5/2021
Lead	123	123	mg/Kg	127	125	104	102	80 - 120			1.63	20		8/5/2021
Selenium	123	123	mg/Kg	111	110	90.9	89.7	80 - 120			1.41	20		8/5/2021
Silver	12.3	12.3	mg/Kg	11.5	11.2	93.7	91.4	80 - 120			2.50	20		8/5/2021

Method Reference(s): EPA 6010C
EPA 3050B

Preparation Date: 8/5/2021

Data File: 210805D

QC Number: 1

QC Batch ID: QC210805soil

Report Prepared Monday, August 9, 2021

PARADIGM ENVIRONMENTAL SERVICES, INC.

QC Report for Sample Spike and Sample Duplicate

Client: **Stantec** **Lab Project ID:** 213459

Project Reference: 213414039.400

Lab Sample ID: 213459-07 **Date Sampled:** 8/2/2021
Sample Identifier: SB-09-BLT-B **Date Received:** 8/3/2021
Matrix: Soil

RCRA Metals (ICP)

Analyte	Sample Results	Result Units	Spike Added	Spike Result	Spike % Recovery	% Rec Limits	Spike Outliers	Duplicate Result	Relative % Difference	RPD Limit	RPD Outliers	Date Analyzed
Arsenic	**2.05**	mg/Kg	136	115	82.8	75 - 125		1.11	59.5	20	*	8/5/2021
Barium	**36.2**	mg/Kg	136	147	81.5	75 - 125		22.8	45.6	20	*	8/5/2021
Cadmium	< 0.275	mg/Kg	54.4	41.8	76.9	75 - 125		<0.275	NC	20		8/5/2021
Chromium	**7.05**	mg/Kg	136	115	79.6	75 - 125		4.20	50.6	20	*	8/5/2021
Lead	**4.76**	mg/Kg	136	109	76.8	75 - 125		2.82	51.1	20	*	8/5/2021
Selenium	< 1.10	mg/Kg	136	112	82.2	75 - 125		<1.10	NC	20		8/5/2021
Silver	< 0.549	mg/Kg	13.6	12.0	88.0	75 - 125		<0.549	NC	20		8/5/2021

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 8/5/2021
210805D
QC Batch ID: QC210805soil

NC = Not Calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added.

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.
"E" = Result has been estimated, calibration limit exceeded.
"Z" = See case narrative.
"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.
"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.
"B" = Method blank contained trace levels of analyte. Refer to included method blank report.
"J" = Result estimated between the quantitation limit and half the quantitation limit.
"L" = Laboratory Control Sample recovery outside accepted QC limits.
"P" = Concentration differs by more than 40% between the primary and secondary analytical columns.
"NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.
"" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted.*
"(1)" = Indicates data from primary column used for QC calculation.
"A" = denotes a parameter for which ELAP does not offer approval as part of their laboratory certification program.
"F" = denotes a parameter for which Paradigm does not carry certification, the results for which should therefore only be used where ELAP certification is not required, such as personal exposure assessment.

GENERAL TERMS AND CONDITIONS
LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, tern or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty. Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.

Scope and Compensation. LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB wi use LAB default method for all tests unless specified otherwise on the Work Order.

Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.

Prices. Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs may incur additional fees.

Limitations of Liability. In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re-perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services.

LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results.

All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB.

Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.

Hazard Disclosure. Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.

Sample Handling. Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises.

Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on th final report.

Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples.

LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.

Legal Responsibility. LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.

Assignment. LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.

Force Majeure. LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.

Law. This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

PARADIGM

CHAIN OF CUSTODY

REPORT TO:	INVOICE TO:	
CLIENT: Stantec	CLIENT:	LAB PROJECT ID: 213459
ADDRESS: 61 Commercial St. Suite 100	ADDRESS:	Quotation #:
CITY: Rochester STATE: NY ZIP: 14614	CITY: STATE: ZIP:	Email:
PHONE: 585-775-3835	PHONE:	
ATTN: Steve Campbell	ATTN:	

PROJECT REFERENCE: 213414039.400

Matrix Codes:
AQ - Aqueous Liquid; NQ - Non-Aqueous Liquid; WA - Water; WG - Groundwater; DW - Drinking Water; WW - Wastewater; SO - Soil; SL - Sludge; SD - Solid; PT - Paint; WP - Wipe; CK - Caulk; OL - Oil; AR - Air

REQUESTED ANALYSIS

DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	8260C TCL + CP51	8270D TCL + CP51	8082A	6010B/7471B 8 RCRA metals						REMARKS	PARADIGM LAB SAMPLE NUMBER
8/2/2021	0834		X	SB-01-BLT	SO	2	X	X	X	X						Per email add (-A) to	01A
8/2/2021	0855		X	SB-02-BLT	SO	2	X	X	X	X						Sample IDs for VOA jars	02A
8/2/2021	0915		X	SB-03-BLT	SO	2	X	X	X	X						and (-B) to sample IDs	03A
8/2/2021	0950		X	SB-04-BLT	SO	2	X	X	X	X						for SVOA/PCB/metals jars.	04A
8/2/2021	1014		X	SB-05-BLT	SO	2	X	X	X	X						A for VOA aliquots.	05A
8/2/2021	1118		X	SB-08-BLT	SO	2	X	X	X	X						GP 8/4/21	06A
8/2/2021	1143		X	SB-09-BLT	SO	2	X	X	X	X							07A
8/2/2021	1030		X	SB-11-BLT	SO	2	X	X	X	X							08A
~~8/2/2021~~	~~[illegible]~~																
																10°C ice started in field	

Implicit 8/2/21

Turnaround Time		Report Supplements			
Availability contingent upon lab approval; additional fees may apply.					
Standard 5 day	X	None Required	X	None Required	
10 day		Batch QC		Basic EDD	
Rush 3 day		Category A		NYSDEC EDD	
Rush 2 day		Category B			
Rush 1 day					
Date Needed _____ please indicate date needed: _____		Other please indicate package needed: _____		Other EDD please indicate EDD needed: Stantec EDD	

Sampled By: [signature] Date/Time: 8/2/2021 1600

Total Cost: 1640

Relinquished By: [signature] Date/Time: 8/2/21 1636

Received By: [signature] Date/Time: 8/3/21 1201

Received @ Lab By: Date/Time

P.I.F.

By signing this form, client agrees to Paradigm Terms and Conditions (reverse).

See additional page for sample conditions.

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

Page 2 of 2
2 of 3

PARADIGM

CHAIN OF CUSTODY

REPORT TO:	INVOICE TO:	
CLIENT:	CLIENT:	LAB PROJECT ID: 213459
ADDRESS:	ADDRESS:	
CITY: SAME STATE: AS ZIP Page 1	CITY: STATE: ZIP:	Quotation #:
PHONE:	PHONE:	Email:
ATTN:	ATTN:	

PROJECT REFERENCE: 21341439.400

Matrix Codes:
AQ - Aqueous Liquid; NQ - Non-Aqueous Liquid; WA - Water; WG - Groundwater; DW - Drinking Water; WW - Wastewater; SO - Soil; SL - Sludge; SD - Solid; PT - Paint; WP - Wipe; CK - Caulk; OL - Oil; AR - Air

REQUESTED ANALYSIS

DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	8260C TCL+CPSI	82700 TCL+CPSI	8082A	6010D/7471B Metals							REMARKS	PARADIGM LAB SAMPLE NUMBER
8/2/2021	1403		X	RRS-01-BLT	So	2	X	X	X	X								09 A
8/2/2021	1350		X	RRS-02-BLT	So	2	X	X	X	X								10 A
7/30/2021	1052		X	RRT-01-BLT	Wood	1		X		X								11 A
					Solid	8/3/21												GP 8/4/21

Turnaround Time		Report Supplements			
Availability contingent upon lab approval; additional fees may apply.					
Standard 5 day	X	None Required	X	None Required	
10 day		Batch QC		Basic EDD	
Rush 3 day		Category A		NYSDEC EDD	
Rush 2 day		Category B			
Rush 1 day					
Date Needed _____ please indicate date needed: _____		Other please indicate package needed: _____		Other EDD please indicate EDD needed: Stantec EDP	X

Sampled By — Date/Time — Total Cost:

Relinquished By — Date/Time

Received By: Molly Kail 8/3/21 — Date/Time: 1201 — P.I.F.

Received @ Lab By — Date/Time

By signing this form, client agrees to Paradigm Terms and Conditions (reverse).

See additional page for sample conditions.

PARADIGM

Chain of Custody Supplement

Client: Stantec **Completed by:** MolyPaul

Lab Project ID: 213459 **Date:** 8/3/21

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

Condition	NELAC compliance with the sample condition requirements upon receipt: Yes	No	N/A
Container Type	✓	5035	
Comments			
Transferred to method-compliant container			✓
Headspace (<1 mL)			✓
Comments			
Preservation			✓
Comments			
Chlorine Absent (<0.10 ppm per test strip)			✓
Comments			
Holding Time	✓		
Comments			
Temperature	✓		met
Comments	10°C iced started in field		
Compliant Sample Quantity/Type	✓		
Comments			

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

Analytical Report For

Stantec

For Lab Project ID

213618

Referencing

213414039.400

Prepared

Friday, August 13, 2021

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213618

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-04-BLT-B		
Lab Sample ID:	213618-01	**Date Sampled:**	8/2/2021
Matrix:	TCLP Extract	**Date Received:**	8/11/2021

TCLP Metals (ICP)

Analyte	Result	Units	Regulatory Limit	Qualifier	Date Analyzed
Lead	< 0.500	mg/L	5		8/12/2021 15:05

Method Reference(s): EPA 6010C
EPA 1311 / 3005A
Preparation Date: 8/12/2021
Data File: 210812B

Report Prepared Friday, August 13, 2021

Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.
"E" = Result has been estimated, calibration limit exceeded.
"Z" = See case narrative.
"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.
"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.
"B" = Method blank contained trace levels of analyte. Refer to included method blank report.
"J" = Result estimated between the quantitation limit and half the quantitation limit.
"L" = Laboratory Control Sample recovery outside accepted QC limits.
"P" = Concentration differs by more than 40% between the primary and secondary analytical columns.
"NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.
"" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted.*
"(1)" = Indicates data from primary column used for QC calculation.
"A" = denotes a parameter for which ELAP does not offer approval as part of their laboratory certification program.
"F" = denotes a parameter for which Paradigm does not carry certification, the results for which should therefore only be used where ELAP certification is not required, such as personal exposure assessment.

GENERAL TERMS AND CONDITIONS
LABORATORY SERVICES

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LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results.

All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB.

Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.

Hazard Disclosure. Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.

Sample Handling. Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises.

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Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples.

LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.

Legal Responsibility. LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.

Assignment. LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.

Force Majeure. LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.

Law. This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

PARADIGM

CHAIN OF CUSTODY

Relog: 213618

REPORT TO:	INVOICE TO:	
CLIENT: Stantec	CLIENT:	LAB PROJECT ID: 213459
ADDRESS: 61 Commercial St. Suite 100	ADDRESS:	Quotation #:
CITY: Rochester STATE: NY ZIP: 14614	CITY: STATE: ZIP:	Email:
PHONE: 585-775-3835	PHONE:	
ATTN: Steve Campbell	ATTN:	

PROJECT REFERENCE: 213414039.400

Matrix Codes:
AQ - Aqueous Liquid; NQ - Non-Aqueous Liquid; WA - Water; WG - Groundwater; DW - Drinking Water; WW - Wastewater; SO - Soil; SL - Sludge; SD - Solid; PT - Paint; WP - Wipe; CK - Caulk; OL - Oil; AR - Air

REQUESTED ANALYSIS

DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	8260C TCLP	8270D TCLP	8082A	6010B/7471B TCLP						REMARKS	PARADIGM LAB SAMPLE NUMBER
			X													Per email relog 213459-04 for TCLP Lead on a 2 day turn. CP 8/11/21	
8/2/2021	0834		X	SB-01-BLT	So	2	X	X	X	X						Per email add (-A) to	01 A
8/2/2021	0855		X	SB-02-BLT	So	2	X	X	X	X						Sample ID s for VOA jars	02 A
8/2/2021	0915		X	SB-03-BLT	So	2	X	X	X	X						and (-B) to sample ID s	03 A
8/2/2021	0950		X	SB-04-BLT	So	2	X	X	X	X						for SVOA/PCB/metals jars	04 A - 01
8/2/2021	1014		X	SB-05-BLT	So	2	X	X	X	X						A for VOA aliquots	05 A
8/2/2021	1118		X	SB-08-BLT	So	2	X	X	X	X						CP 8/4/21	06 A
8/2/2021	1143		X	SB-09-BLT	So	2	X	X	X	X							07 A
8/2/2021	1030		X	SB-11-BLT	So	2	X	X	X	X							08 A
~~8/2/2021~~	~~[illegible]~~																
																Logical started in Lims [illegible] 8/2/21	

Turnaround Time		Report Supplements			
Availability contingent upon lab approval; additional fees may apply.					
Standard 5 day	X	None Required	X	None Required	
10 day		Batch QC		Basic EDD	
Rush 3 day		Category A		NYSDEC EDD	
Rush 2 day		Category B			
Rush 1 day					
Date Needed _____ please indicate date needed: _____		Other please indicate package needed: _____		Other EDD please indicate EDD needed: Stantec EDD	

Sampled By: [signature] Date/Time: 8/2/2021 1600

Total Cost: 1640

Relinquished By: [signature] Date/Time: 8/2/21 1636

Received By: [signature] Date/Time: 8/3/21 1201

P.I.F.

Received @ Lab By: Relog: [signature] Date/Time: 8/11/21 10:37

By signing this form, client agrees to Paradigm Terms and Conditions (reverse).

See additional page for sample conditions.

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

Page 2 of 2

2 of 3

PARADIGM

CHAIN OF CUSTODY

REPORT TO:	INVOICE TO:	
CLIENT:	CLIENT:	LAB PROJECT ID: 213459
ADDRESS:	ADDRESS:	
CITY: SAME STATE: AS ZIP Page 1	CITY: STATE: ZIP:	Quotation #:
PHONE:	PHONE:	Email:
ATTN:	ATTN:	

PROJECT REFERENCE: 21341439.400

Matrix Codes:
AQ - Aqueous Liquid; NQ - Non-Aqueous Liquid; WA - Water; WG - Groundwater; DW - Drinking Water; WW - Wastewater; SO - Soil; SL - Sludge; SD - Solid; PT - Paint; WP - Wipe; CK - Caulk; OL - Oil; AR - Air

REQUESTED ANALYSIS

DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	BTEX TVH+ CPSI	8270D TVH+ LPSI	8082A	6300/7470B SPLP							REMARKS	PARADIGM LAB SAMPLE NUMBER
8/2/2021	1403		X	RRS-01-BLT	So	2	X	X	X	X								09 A
8/2/2021	1350		X	RRS-02-BLT	So	2	X	X	X	X								10 A
7/30/2021	1052		X	RRT-01-BLT	Wood	1		X		X								11 A
					Solid on 8/3/21													SF 8/4/21

Turnaround Time		Report Supplements			
Availability contingent upon lab approval; additional fees may apply.					
Standard 5 day	X	None Required	X	None Required	
10 day		Batch QC		Basic EDD	
Rush 3 day		Category A		NYSDEC EDD	
Rush 2 day		Category B			
Rush 1 day					
Date Needed _____ please indicate date needed: _____		Other please indicate package needed _____		Other EDD please indicate EDD needed: State EDD	X

Sampled By	Date/Time	Total Cost:
Relinquished By	Date/Time	
Received By: Michael	Date/Time: 8/3/21 1201	P.I.F.
Received @ Lab By	Date/Time	

By signing this form, client agrees to Paradigm Terms and Conditions (reverse).

See additional page for sample conditions.

Relog: 213618

PARADIGM

Chain of Custody Supplement

Client: Stantec **Completed by:** McCyrd

Lab Project ID: 213459 **Date:** 8/3/21

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

Condition	NELAC compliance with the sample condition requirements upon receipt: Yes	No	N/A
Container Type	✓	5035	
Comments			
Transferred to method-compliant container			✓
Headspace (<1 mL)			✓
Comments			
Preservation			✓
Comments			
Chlorine Absent (<0.10 ppm per test strip)			✓
Comments			
Holding Time	✓		
Comments			
Temperature	✓		met
Comments	10°C and started in field		
Compliant Sample Quantity/Type	✓		
Comments			

129 Lake Avenue • Rochester NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID # 10950

Analytical Report For

Stantec

For Lab Project ID

213619

Referencing

213414039.400

Prepared

Friday, August 13, 2021

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213619

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	TE-01-BLT-B		
Lab Sample ID:	213619-01	**Date Sampled:**	8/3/2021
Matrix:	TCLP Extract	**Date Received:**	8/11/2021

TCLP Metals (ICP)

Analyte	Result	Units	Regulatory Limit	Qualifier	Date Analyzed
Lead	**68.2**	mg/L	5		8/12/2021 15:14

Method Reference(s): EPA 6010C
EPA 1311 / 3005A
Preparation Date: 8/12/2021
Data File: 210812B

Report Prepared Friday, August 13, 2021

Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.
"E" = Result has been estimated, calibration limit exceeded.
"Z" = See case narrative.
"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.
"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.
"B" = Method blank contained trace levels of analyte. Refer to included method blank report.
"J" = Result estimated between the quantitation limit and half the quantitation limit.
"L" = Laboratory Control Sample recovery outside accepted QC limits.
"P" = Concentration differs by more than 40% between the primary and secondary analytical columns.
"NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.
"" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted.*
"(1)" = Indicates data from primary column used for QC calculation.
"A" = denotes a parameter for which ELAP does not offer approval as part of their laboratory certification program.
"F" = denotes a parameter for which Paradigm does not carry certification, the results for which should therefore only be used where ELAP certification is not required, such as personal exposure assessment.

GENERAL TERMS AND CONDITIONS
LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, tern or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty. Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.

Scope and Compensation. LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB wi use LAB default method for all tests unless specified otherwise on the Work Order.

Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.

Prices. Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs may incur additional fees.

Limitations of Liability. In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re-perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services.

LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results.

All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB.

Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.

Hazard Disclosure. Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.

Sample Handling. Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises.

Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on th final report.

Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples.

LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.

Legal Responsibility. LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.

Assignment. LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.

Force Majeure. LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.

Law. This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

1 of 2

CHAIN OF CUSTODY

Relog: 213619

PARADIGM

REPORT TO:	INVOICE TO:	
CLIENT: Stantec	CLIENT:	LAB PROJECT ID: 213480
ADDRESS: 61 Commercial St. Suite 100	ADDRESS: SAME	Quotation #:
CITY: Rochester STATE: NY ZIP: 14614	CITY: STATE: ZIP:	Email:
PHONE: 585-775-3835	PHONE:	
ATTN: Steve Campbell	ATTN:	

PROJECT REFERENCE: 213414039.400

Matrix Codes:
AQ - Aqueous Liquid; NQ - Non-Aqueous Liquid; WA - Water; WG - Groundwater; DW - Drinking Water; WW - Wastewater; SO - Soil; SL - Sludge; SD - Solid; PT - Paint; WP - Wipe; CK - Caulk; OL - Oil; AR - Air

REQUESTED ANALYSIS

DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	8260C TCLP	8270D TCLP	8082A	6010D/7470 TCLP						REMARKS	PARADIGM LAB SAMPLE NUMBER
																Per email relog 213480-01 for TCLP Lead on a 2 day turn. GP 8/11/21	
8/3/21	0828		X	TE-01-BLT	So	2	X	X	X	X						Per email add (-A) to	01A -01
8/3/21	0900		X	TE-02-BLT	So	2	X	X	X	X						Sample IDs for VOA jars	02A
8/3/21	0935		X	TE-03-BLT	So	2	X	X	X	X						and (-B) to sample IDs	03A
8/3/21	1011		X	TE-04-BLT	So	2	X	X	X	X						for SVOA/PCB/metals jars	04A
																A for VOA aliquots. GP 8/4/21	
																11°C iced trailer field	
																MW 8/3/21 1520	

Turnaround Time		Report Supplements			
Availability contingent upon lab approval; additional fees may apply.					
Standard 5 day	X	None Required	X	None Required	
10 day		Batch QC		Basic EDD	
Rush 3 day		Category A		NYSDEC EDD	
Rush 2 day		Category B			
Rush 1 day					
Date Needed _____ please indicate date needed		Other please indicate package needed _____		Other EDD please indicate EDD needed: Stantec EDD	X

Sampled By: [signature] Date/Time: 8/3/2021 1515

Total Cost:

Relinquished By: [signature] Date/Time: 8/3/21 1515

Received By: [signature] Date/Time: 8/3/21 1521

P.I.F.

Received @ Lab By: Relog: [signature] Date/Time: 8/11/21 10:40

By signing this form, client agrees to Paradigm Terms and Conditions (reverse).

See additional page for sample conditions.

Relog: 213619

PARADIGM

Chain of Custody Supplement

Client: Stantec **Completed by:** Molly Reid

Lab Project ID: 213480 **Date:** 8/3/21

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

Condition	*NELAC compliance with the sample condition requirements upon receipt* Yes	No	N/A
Container Type	✓	5035	
Comments			
Transferred to method-compliant container			✓
Headspace (<1 mL)			✓
Comments			
Preservation			✓
Comments			
Chlorine Absent (<0.10 ppm per test strip)			✓
Comments			
Holding Time	✓		
Comments			
Temperature	✓		met
Comments	11°C iced started in field		
Compliant Sample Quantity/Type	✓		
Comments			

Analytical Report For

Stantec

For Lab Project ID

213480

Referencing

213414039.400

Prepared

Tuesday, August 10, 2021

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: TE-01-BLT-B
Lab Sample ID: 213480-01 **Date Sampled:** 8/3/2021
Matrix: Soil **Date Received:** 8/3/2021

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**1.91**	mg/Kg		8/6/2021 11:11

Method Reference(s): EPA 7471B
Preparation Date: 8/5/2021
Data File: Hg210806B

RCRA Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**41.7**	mg/Kg		8/4/2021 20:54
Barium	**3510**	mg/Kg		8/5/2021 18:57
Cadmium	**9.47**	mg/Kg		8/4/2021 20:54
Chromium	**126**	mg/Kg		8/4/2021 20:54
Lead	**11400**	mg/Kg		8/5/2021 18:57
Selenium	**2.62**	mg/Kg		8/4/2021 20:54
Silver	< 0.598	mg/Kg		8/4/2021 20:54

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 8/4/2021
Data File: 210804C

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.180	mg/Kg		8/6/2021 14:25
PCB-1221	< 0.180	mg/Kg		8/6/2021 14:25
PCB-1232	< 0.180	mg/Kg		8/6/2021 14:25
PCB-1242	< 0.180	mg/Kg		8/6/2021 14:25
PCB-1248	< 0.180	mg/Kg		8/6/2021 14:25
PCB-1254	< 0.180	mg/Kg		8/6/2021 14:25
PCB-1260	< 0.180	mg/Kg		8/6/2021 14:25
PCB-1262	< 0.180	mg/Kg		8/6/2021 14:25
PCB-1268	< 0.180	mg/Kg		8/6/2021 14:25

Report Prepared Tuesday, August 10, 2021

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	TE-01-BLT-B		
Lab Sample ID:	213480-01	**Date Sampled:**	8/3/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	**60.3**	18.5 - 93.4		8/6/2021 14:25

Method Reference(s): EPA 8082A
EPA 3546
Preparation Date: 8/5/2021

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 311	ug/Kg		8/6/2021 20:58
1,2,4,5-Tetrachlorobenzene	< 311	ug/Kg		8/6/2021 20:58
1,2,4-Trichlorobenzene	< 311	ug/Kg		8/6/2021 20:58
1,2-Dichlorobenzene	< 311	ug/Kg		8/6/2021 20:58
1,3-Dichlorobenzene	< 311	ug/Kg		8/6/2021 20:58
1,4-Dichlorobenzene	< 311	ug/Kg		8/6/2021 20:58
2,2-Oxybis (1-chloropropane)	< 311	ug/Kg		8/6/2021 20:58
2,3,4,6-Tetrachlorophenol	< 311	ug/Kg		8/6/2021 20:58
2,4,5-Trichlorophenol	< 311	ug/Kg		8/6/2021 20:58
2,4,6-Trichlorophenol	< 311	ug/Kg		8/6/2021 20:58
2,4-Dichlorophenol	< 311	ug/Kg		8/6/2021 20:58
2,4-Dimethylphenol	< 311	ug/Kg		8/6/2021 20:58
2,4-Dinitrophenol	< 1250	ug/Kg		8/6/2021 20:58
2,4-Dinitrotoluene	< 311	ug/Kg		8/6/2021 20:58
2,6-Dinitrotoluene	< 311	ug/Kg		8/6/2021 20:58
2-Chloronaphthalene	< 311	ug/Kg		8/6/2021 20:58
2-Chlorophenol	< 311	ug/Kg		8/6/2021 20:58
2-Methylnapthalene	**505**	ug/Kg		8/6/2021 20:58
2-Methylphenol	< 311	ug/Kg		8/6/2021 20:58
2-Nitroaniline	< 311	ug/Kg		8/6/2021 20:58
2-Nitrophenol	< 311	ug/Kg		8/6/2021 20:58
3&4-Methylphenol	< 311	ug/Kg		8/6/2021 20:58
3,3'-Dichlorobenzidine	< 311	ug/Kg		8/6/2021 20:58

Report Prepared Tuesday, August 10, 2021

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: TE-01-BLT-B
Lab Sample ID: 213480-01 **Date Sampled:** 8/3/2021
Matrix: Soil **Date Received:** 8/3/2021

3-Nitroaniline	< 311	ug/Kg	8/6/2021	20:58
4,6-Dinitro-2-methylphenol	< 416	ug/Kg	8/6/2021	20:58
4-Bromophenyl phenyl ether	< 311	ug/Kg	8/6/2021	20:58
4-Chloro-3-methylphenol	< 311	ug/Kg	8/6/2021	20:58
4-Chloroaniline	< 311	ug/Kg	8/6/2021	20:58
4-Chlorophenyl phenyl ether	< 311	ug/Kg	8/6/2021	20:58
4-Nitroaniline	< 311	ug/Kg	8/6/2021	20:58
4-Nitrophenol	< 311	ug/Kg	8/6/2021	20:58
Acenaphthene	< 311	ug/Kg	8/6/2021	20:58
Acenaphthylene	**940**	ug/Kg	8/6/2021	20:58
Acetophenone	< 311	ug/Kg	8/6/2021	20:58
Anthracene	**1130**	ug/Kg	8/6/2021	20:58
Atrazine	< 311	ug/Kg	8/6/2021	20:58
Benzaldehyde	< 311	ug/Kg	8/6/2021	20:58
Benzo (a) anthracene	**3910**	ug/Kg	8/6/2021	20:58
Benzo (a) pyrene	**2830**	ug/Kg	8/6/2021	20:58
Benzo (b) fluoranthene	**4080**	ug/Kg	8/6/2021	20:58
Benzo (g,h,i) perylene	**1950**	ug/Kg	8/6/2021	20:58
Benzo (k) fluoranthene	**2000**	ug/Kg	8/6/2021	20:58
Bis (2-chloroethoxy) methane	< 311	ug/Kg	8/6/2021	20:58
Bis (2-chloroethyl) ether	< 311	ug/Kg	8/6/2021	20:58
Bis (2-ethylhexyl) phthalate	< 311	ug/Kg	8/6/2021	20:58
Butylbenzylphthalate	< 311	ug/Kg	8/6/2021	20:58
Caprolactam	< 311	ug/Kg	8/6/2021	20:58
Carbazole	**501**	ug/Kg	8/6/2021	20:58
Chrysene	**3690**	ug/Kg	8/6/2021	20:58
Dibenz (a,h) anthracene	**573**	ug/Kg	8/6/2021	20:58
Dibenzofuran	**336**	ug/Kg	8/6/2021	20:58
Diethyl phthalate	< 311	ug/Kg	8/6/2021	20:58
Dimethyl phthalate	< 311	ug/Kg	8/6/2021	20:58

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: TE-01-BLT-B
Lab Sample ID: 213480-01 **Date Sampled:** 8/3/2021
Matrix: Soil **Date Received:** 8/3/2021

Di-n-butyl phthalate	< 311	ug/Kg	8/6/2021	20:58
Di-n-octylphthalate	< 311	ug/Kg	8/6/2021	20:58
Fluoranthene	**6190**	ug/Kg	8/6/2021	20:58
Fluorene	< 311	ug/Kg	8/6/2021	20:58
Hexachlorobenzene	< 311	ug/Kg	8/6/2021	20:58
Hexachlorobutadiene	< 311	ug/Kg	8/6/2021	20:58
Hexachlorocyclopentadiene	< 1250	ug/Kg	8/6/2021	20:58
Hexachloroethane	< 311	ug/Kg	8/6/2021	20:58
Indeno (1,2,3-cd) pyrene	**2090**	ug/Kg	8/6/2021	20:58
Isophorone	< 311	ug/Kg	8/6/2021	20:58
Naphthalene	**686**	ug/Kg	8/6/2021	20:58
Nitrobenzene	< 311	ug/Kg	8/6/2021	20:58
N-Nitroso-di-n-propylamine	< 311	ug/Kg	8/6/2021	20:58
N-Nitrosodiphenylamine	< 311	ug/Kg	8/6/2021	20:58
Pentachlorophenol	< 623	ug/Kg	8/6/2021	20:58
Phenanthrene	**2310**	ug/Kg	8/6/2021	20:58
Phenol	< 311	ug/Kg	8/6/2021	20:58
Pyrene	**4620**	ug/Kg	8/6/2021	20:58

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	**47.8**	36.4 - 87.2		8/6/2021	20:58
2-Fluorobiphenyl	**47.3**	44 - 84		8/6/2021	20:58
2-Fluorophenol	**38.7**	43.2 - 82.1	*	8/6/2021	20:58
Nitrobenzene-d5	**40.2**	36.4 - 82.2		8/6/2021	20:58
Phenol-d5	**41.6**	41.1 - 81.4		8/6/2021	20:58
Terphenyl-d14	**48.7**	43.8 - 103		8/6/2021	20:58

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 8/5/2021
Data File: B56006.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	TE-01-BLT-A		
Lab Sample ID:	213480-01A	**Date Sampled:**	8/3/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 11.1	ug/Kg		8/4/2021 14:19
1,1,2,2-Tetrachloroethane	< 11.1	ug/Kg		8/4/2021 14:19
1,1,2-Trichloroethane	< 11.1	ug/Kg		8/4/2021 14:19
1,1-Dichloroethane	< 11.1	ug/Kg		8/4/2021 14:19
1,1-Dichloroethene	< 11.1	ug/Kg		8/4/2021 14:19
1,2,3-Trichlorobenzene	< 27.7	ug/Kg		8/4/2021 14:19
1,2,4-Trichlorobenzene	< 27.7	ug/Kg		8/4/2021 14:19
1,2,4-Trimethylbenzene	< 11.1	ug/Kg		8/4/2021 14:19
1,2-Dibromo-3-Chloropropane	< 55.4	ug/Kg		8/4/2021 14:19
1,2-Dibromoethane	< 11.1	ug/Kg		8/4/2021 14:19
1,2-Dichlorobenzene	< 11.1	ug/Kg		8/4/2021 14:19
1,2-Dichloroethane	< 11.1	ug/Kg		8/4/2021 14:19
1,2-Dichloropropane	< 11.1	ug/Kg		8/4/2021 14:19
1,3,5-Trimethylbenzene	< 11.1	ug/Kg		8/4/2021 14:19
1,3-Dichlorobenzene	< 11.1	ug/Kg		8/4/2021 14:19
1,4-Dichlorobenzene	< 11.1	ug/Kg		8/4/2021 14:19
1,4-Dioxane	< 55.4	ug/Kg		8/4/2021 14:19
2-Butanone	< 55.4	ug/Kg		8/4/2021 14:19
2-Hexanone	< 27.7	ug/Kg		8/4/2021 14:19
4-Methyl-2-pentanone	< 27.7	ug/Kg		8/4/2021 14:19
Acetone	< 55.4	ug/Kg		8/4/2021 14:19
Benzene	< 11.1	ug/Kg		8/4/2021 14:19
Bromochloromethane	< 27.7	ug/Kg		8/4/2021 14:19
Bromodichloromethane	< 11.1	ug/Kg		8/4/2021 14:19
Bromoform	< 27.7	ug/Kg		8/4/2021 14:19
Bromomethane	< 11.1	ug/Kg		8/4/2021 14:19
Carbon disulfide	< 11.1	ug/Kg		8/4/2021 14:19
Carbon Tetrachloride	< 11.1	ug/Kg		8/4/2021 14:19

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: TE-01-BLT-A
Lab Sample ID: 213480-01A **Date Sampled:** 8/3/2021
Matrix: Soil **Date Received:** 8/3/2021

Chlorobenzene	< 11.1	ug/Kg	8/4/2021	14:19
Chloroethane	< 11.1	ug/Kg	8/4/2021	14:19
Chloroform	< 11.1	ug/Kg	8/4/2021	14:19
Chloromethane	< 11.1	ug/Kg	8/4/2021	14:19
cis-1,2-Dichloroethene	< 11.1	ug/Kg	8/4/2021	14:19
cis-1,3-Dichloropropene	< 11.1	ug/Kg	8/4/2021	14:19
Cyclohexane	< 55.4	ug/Kg	8/4/2021	14:19
Dibromochloromethane	< 11.1	ug/Kg	8/4/2021	14:19
Dichlorodifluoromethane	< 11.1	ug/Kg	8/4/2021	14:19
Ethylbenzene	< 11.1	ug/Kg	8/4/2021	14:19
Freon 113	< 11.1	ug/Kg	8/4/2021	14:19
Isopropylbenzene	< 11.1	ug/Kg	8/4/2021	14:19
m,p-Xylene	< 11.1	ug/Kg	8/4/2021	14:19
Methyl acetate	< 11.1	ug/Kg	8/4/2021	14:19
Methyl tert-butyl Ether	< 11.1	ug/Kg	8/4/2021	14:19
Methylcyclohexane	< 11.1	ug/Kg	8/4/2021	14:19
Methylene chloride	< 27.7	ug/Kg	8/4/2021	14:19
Naphthalene	< 27.7	ug/Kg	8/4/2021	14:19
n-Butylbenzene	< 11.1	ug/Kg	8/4/2021	14:19
n-Propylbenzene	< 11.1	ug/Kg	8/4/2021	14:19
o-Xylene	< 11.1	ug/Kg	8/4/2021	14:19
p-Isopropyltoluene	**11.5**	ug/Kg	8/4/2021	14:19
sec-Butylbenzene	< 11.1	ug/Kg	8/4/2021	14:19
Styrene	< 27.7	ug/Kg	8/4/2021	14:19
tert-Butylbenzene	< 11.1	ug/Kg	8/4/2021	14:19
Tetrachloroethene	< 11.1	ug/Kg	8/4/2021	14:19
Toluene	< 11.1	ug/Kg	8/4/2021	14:19
trans-1,2-Dichloroethene	< 11.1	ug/Kg	8/4/2021	14:19
trans-1,3-Dichloropropene	< 11.1	ug/Kg	8/4/2021	14:19
Trichloroethene	< 11.1	ug/Kg	8/4/2021	14:19

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	TE-01-BLT-A		
Lab Sample ID:	213480-01A	**Date Sampled:**	8/3/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Trichlorofluoromethane	< 11.1	ug/Kg			8/4/2021 14:19
Vinyl chloride	< 11.1	ug/Kg			8/4/2021 14:19

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**96.4**	88.8 - 123		8/4/2021 14:19
4-Bromofluorobenzene	**73.3**	68.7 - 115		8/4/2021 14:19
Pentafluorobenzene	**105**	80.2 - 112		8/4/2021 14:19
Toluene-D8	**100**	83.5 - 123		8/4/2021 14:19

Method Reference(s): EPA 8260C
EPA 5035A - L

Data File: z03383.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: TE-02-BLT-B
Lab Sample ID: 213480-02 **Date Sampled:** 8/3/2021
Matrix: Soil **Date Received:** 8/3/2021

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.0773**	mg/Kg		8/6/2021 10:57

Method Reference(s): EPA 7471B
Preparation Date: 8/5/2021
Data File: Hg210806A

RCRA Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**2.77**	mg/Kg		8/4/2021 20:57
Barium	**69.6**	mg/Kg		8/4/2021 20:57
Cadmium	< 0.271	mg/Kg		8/4/2021 20:57
Chromium	**10.7**	mg/Kg		8/4/2021 20:57
Lead	**22.7**	mg/Kg		8/4/2021 20:57
Selenium	< 1.08	mg/Kg		8/4/2021 20:57
Silver	< 0.542	mg/Kg		8/4/2021 20:57

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 8/4/2021
Data File: 210804C

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.181	mg/Kg		8/6/2021 14:49
PCB-1221	< 0.181	mg/Kg		8/6/2021 14:49
PCB-1232	< 0.181	mg/Kg		8/6/2021 14:49
PCB-1242	< 0.181	mg/Kg		8/6/2021 14:49
PCB-1248	< 0.181	mg/Kg		8/6/2021 14:49
PCB-1254	< 0.181	mg/Kg		8/6/2021 14:49
PCB-1260	< 0.181	mg/Kg		8/6/2021 14:49
PCB-1262	< 0.181	mg/Kg		8/6/2021 14:49
PCB-1268	< 0.181	mg/Kg		8/6/2021 14:49

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	TE-02-BLT-B		
Lab Sample ID:	213480-02	**Date Sampled:**	8/3/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	**74.3**	18.5 - 93.4		8/6/2021 14:49

Method Reference(s): EPA 8082A
EPA 3546
Preparation Date: 8/5/2021

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 321	ug/Kg		8/6/2021 21:28
1,2,4,5-Tetrachlorobenzene	< 321	ug/Kg		8/6/2021 21:28
1,2,4-Trichlorobenzene	< 321	ug/Kg		8/6/2021 21:28
1,2-Dichlorobenzene	< 321	ug/Kg		8/6/2021 21:28
1,3-Dichlorobenzene	< 321	ug/Kg		8/6/2021 21:28
1,4-Dichlorobenzene	< 321	ug/Kg	M	8/6/2021 21:28
2,2-Oxybis (1-chloropropane)	< 321	ug/Kg		8/6/2021 21:28
2,3,4,6-Tetrachlorophenol	< 321	ug/Kg		8/6/2021 21:28
2,4,5-Trichlorophenol	< 321	ug/Kg		8/6/2021 21:28
2,4,6-Trichlorophenol	< 321	ug/Kg		8/6/2021 21:28
2,4-Dichlorophenol	< 321	ug/Kg		8/6/2021 21:28
2,4-Dimethylphenol	< 321	ug/Kg		8/6/2021 21:28
2,4-Dinitrophenol	< 1280	ug/Kg		8/6/2021 21:28
2,4-Dinitrotoluene	< 321	ug/Kg		8/6/2021 21:28
2,6-Dinitrotoluene	< 321	ug/Kg		8/6/2021 21:28
2-Chloronaphthalene	< 321	ug/Kg		8/6/2021 21:28
2-Chlorophenol	< 321	ug/Kg	MD	8/6/2021 21:28
2-Methylnapthalene	< 321	ug/Kg		8/6/2021 21:28
2-Methylphenol	< 321	ug/Kg		8/6/2021 21:28
2-Nitroaniline	< 321	ug/Kg		8/6/2021 21:28
2-Nitrophenol	< 321	ug/Kg		8/6/2021 21:28
3&4-Methylphenol	< 321	ug/Kg		8/6/2021 21:28
3,3'-Dichlorobenzidine	< 321	ug/Kg		8/6/2021 21:28

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: TE-02-BLT-B
Lab Sample ID: 213480-02 **Date Sampled:** 8/3/2021
Matrix: Soil **Date Received:** 8/3/2021

3-Nitroaniline	< 321	ug/Kg		8/6/2021	21:28
4,6-Dinitro-2-methylphenol	< 429	ug/Kg		8/6/2021	21:28
4-Bromophenyl phenyl ether	< 321	ug/Kg		8/6/2021	21:28
4-Chloro-3-methylphenol	< 321	ug/Kg		8/6/2021	21:28
4-Chloroaniline	< 321	ug/Kg		8/6/2021	21:28
4-Chlorophenyl phenyl ether	< 321	ug/Kg		8/6/2021	21:28
4-Nitroaniline	< 321	ug/Kg		8/6/2021	21:28
4-Nitrophenol	< 321	ug/Kg	M	8/6/2021	21:28
Acenaphthene	< 321	ug/Kg		8/6/2021	21:28
Acenaphthylene	< 321	ug/Kg		8/6/2021	21:28
Acetophenone	< 321	ug/Kg		8/6/2021	21:28
Anthracene	< 321	ug/Kg		8/6/2021	21:28
Atrazine	< 321	ug/Kg		8/6/2021	21:28
Benzaldehyde	< 321	ug/Kg		8/6/2021	21:28
Benzo (a) anthracene	< 321	ug/Kg		8/6/2021	21:28
Benzo (a) pyrene	< 321	ug/Kg		8/6/2021	21:28
Benzo (b) fluoranthene	< 321	ug/Kg		8/6/2021	21:28
Benzo (g,h,i) perylene	< 321	ug/Kg		8/6/2021	21:28
Benzo (k) fluoranthene	< 321	ug/Kg		8/6/2021	21:28
Bis (2-chloroethoxy) methane	< 321	ug/Kg		8/6/2021	21:28
Bis (2-chloroethyl) ether	< 321	ug/Kg		8/6/2021	21:28
Bis (2-ethylhexyl) phthalate	< 321	ug/Kg		8/6/2021	21:28
Butylbenzylphthalate	< 321	ug/Kg		8/6/2021	21:28
Caprolactam	< 321	ug/Kg		8/6/2021	21:28
Carbazole	< 321	ug/Kg		8/6/2021	21:28
Chrysene	< 321	ug/Kg		8/6/2021	21:28
Dibenz (a,h) anthracene	< 321	ug/Kg		8/6/2021	21:28
Dibenzofuran	< 321	ug/Kg		8/6/2021	21:28
Diethyl phthalate	< 321	ug/Kg		8/6/2021	21:28
Dimethyl phthalate	< 321	ug/Kg		8/6/2021	21:28

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: TE-02-BLT-B
Lab Sample ID: 213480-02 **Date Sampled:** 8/3/2021
Matrix: Soil **Date Received:** 8/3/2021

Di-n-butyl phthalate	< 321	ug/Kg		8/6/2021	21:28
Di-n-octylphthalate	< 321	ug/Kg		8/6/2021	21:28
Fluoranthene	< 321	ug/Kg		8/6/2021	21:28
Fluorene	< 321	ug/Kg		8/6/2021	21:28
Hexachlorobenzene	< 321	ug/Kg		8/6/2021	21:28
Hexachlorobutadiene	< 321	ug/Kg		8/6/2021	21:28
Hexachlorocyclopentadiene	< 1280	ug/Kg		8/6/2021	21:28
Hexachloroethane	< 321	ug/Kg		8/6/2021	21:28
Indeno (1,2,3-cd) pyrene	< 321	ug/Kg		8/6/2021	21:28
Isophorone	< 321	ug/Kg		8/6/2021	21:28
Naphthalene	< 321	ug/Kg		8/6/2021	21:28
Nitrobenzene	< 321	ug/Kg		8/6/2021	21:28
N-Nitroso-di-n-propylamine	< 321	ug/Kg		8/6/2021	21:28
N-Nitrosodiphenylamine	< 321	ug/Kg		8/6/2021	21:28
Pentachlorophenol	< 642	ug/Kg		8/6/2021	21:28
Phenanthrene	< 321	ug/Kg		8/6/2021	21:28
Phenol	< 321	ug/Kg	M	8/6/2021	21:28
Pyrene	< 321	ug/Kg		8/6/2021	21:28

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	**65.1**	36.4 - 87.2		8/6/2021	21:28
2-Fluorobiphenyl	**55.7**	44 - 84		8/6/2021	21:28
2-Fluorophenol	**50.5**	43.2 - 82.1		8/6/2021	21:28
Nitrobenzene-d5	**48.2**	36.4 - 82.2		8/6/2021	21:28
Phenol-d5	**52.4**	41.1 - 81.4		8/6/2021	21:28
Terphenyl-d14	**62.9**	43.8 - 103		8/6/2021	21:28

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 8/5/2021
Data File: B56007.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	TE-02-BLT-A		
Lab Sample ID:	213480-02A	**Date Sampled:**	8/3/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 9.86	ug/Kg		8/4/2021 14:38
1,1,2,2-Tetrachloroethane	< 9.86	ug/Kg		8/4/2021 14:38
1,1,2-Trichloroethane	< 9.86	ug/Kg		8/4/2021 14:38
1,1-Dichloroethane	< 9.86	ug/Kg		8/4/2021 14:38
1,1-Dichloroethene	< 9.86	ug/Kg		8/4/2021 14:38
1,2,3-Trichlorobenzene	< 24.7	ug/Kg		8/4/2021 14:38
1,2,4-Trichlorobenzene	< 24.7	ug/Kg		8/4/2021 14:38
1,2,4-Trimethylbenzene	< 9.86	ug/Kg		8/4/2021 14:38
1,2-Dibromo-3-Chloropropane	< 49.3	ug/Kg		8/4/2021 14:38
1,2-Dibromoethane	< 9.86	ug/Kg		8/4/2021 14:38
1,2-Dichlorobenzene	< 9.86	ug/Kg		8/4/2021 14:38
1,2-Dichloroethane	< 9.86	ug/Kg		8/4/2021 14:38
1,2-Dichloropropane	< 9.86	ug/Kg		8/4/2021 14:38
1,3,5-Trimethylbenzene	< 9.86	ug/Kg		8/4/2021 14:38
1,3-Dichlorobenzene	< 9.86	ug/Kg		8/4/2021 14:38
1,4-Dichlorobenzene	< 9.86	ug/Kg		8/4/2021 14:38
1,4-Dioxane	< 49.3	ug/Kg		8/4/2021 14:38
2-Butanone	< 49.3	ug/Kg		8/4/2021 14:38
2-Hexanone	< 24.7	ug/Kg		8/4/2021 14:38
4-Methyl-2-pentanone	< 24.7	ug/Kg		8/4/2021 14:38
Acetone	< 49.3	ug/Kg		8/4/2021 14:38
Benzene	< 9.86	ug/Kg		8/4/2021 14:38
Bromochloromethane	< 24.7	ug/Kg		8/4/2021 14:38
Bromodichloromethane	< 9.86	ug/Kg		8/4/2021 14:38
Bromoform	< 24.7	ug/Kg		8/4/2021 14:38
Bromomethane	< 9.86	ug/Kg		8/4/2021 14:38
Carbon disulfide	< 9.86	ug/Kg		8/4/2021 14:38
Carbon Tetrachloride	< 9.86	ug/Kg		8/4/2021 14:38

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: TE-02-BLT-A
Lab Sample ID: 213480-02A **Date Sampled:** 8/3/2021
Matrix: Soil **Date Received:** 8/3/2021

Chlorobenzene	< 9.86	ug/Kg	8/4/2021	14:38
Chloroethane	< 9.86	ug/Kg	8/4/2021	14:38
Chloroform	< 9.86	ug/Kg	8/4/2021	14:38
Chloromethane	< 9.86	ug/Kg	8/4/2021	14:38
cis-1,2-Dichloroethene	< 9.86	ug/Kg	8/4/2021	14:38
cis-1,3-Dichloropropene	< 9.86	ug/Kg	8/4/2021	14:38
Cyclohexane	< 49.3	ug/Kg	8/4/2021	14:38
Dibromochloromethane	< 9.86	ug/Kg	8/4/2021	14:38
Dichlorodifluoromethane	< 9.86	ug/Kg	8/4/2021	14:38
Ethylbenzene	< 9.86	ug/Kg	8/4/2021	14:38
Freon 113	< 9.86	ug/Kg	8/4/2021	14:38
Isopropylbenzene	< 9.86	ug/Kg	8/4/2021	14:38
m,p-Xylene	< 9.86	ug/Kg	8/4/2021	14:38
Methyl acetate	< 9.86	ug/Kg	8/4/2021	14:38
Methyl tert-butyl Ether	< 9.86	ug/Kg	8/4/2021	14:38
Methylcyclohexane	< 9.86	ug/Kg	8/4/2021	14:38
Methylene chloride	< 24.7	ug/Kg	8/4/2021	14:38
Naphthalene	< 24.7	ug/Kg	8/4/2021	14:38
n-Butylbenzene	< 9.86	ug/Kg	8/4/2021	14:38
n-Propylbenzene	< 9.86	ug/Kg	8/4/2021	14:38
o-Xylene	< 9.86	ug/Kg	8/4/2021	14:38
p-Isopropyltoluene	< 9.86	ug/Kg	8/4/2021	14:38
sec-Butylbenzene	< 9.86	ug/Kg	8/4/2021	14:38
Styrene	< 24.7	ug/Kg	8/4/2021	14:38
tert-Butylbenzene	< 9.86	ug/Kg	8/4/2021	14:38
Tetrachloroethene	< 9.86	ug/Kg	8/4/2021	14:38
Toluene	< 9.86	ug/Kg	8/4/2021	14:38
trans-1,2-Dichloroethene	< 9.86	ug/Kg	8/4/2021	14:38
trans-1,3-Dichloropropene	< 9.86	ug/Kg	8/4/2021	14:38
Trichloroethene	< 9.86	ug/Kg	8/4/2021	14:38

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	TE-02-BLT-A		
Lab Sample ID:	213480-02A	**Date Sampled:**	8/3/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Trichlorofluoromethane	< 9.86	ug/Kg			8/4/2021 14:38
Vinyl chloride	< 9.86	ug/Kg			8/4/2021 14:38

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**96.4**	88.8 - 123		8/4/2021 14:38
4-Bromofluorobenzene	**78.2**	68.7 - 115		8/4/2021 14:38
Pentafluorobenzene	**95.5**	80.2 - 112		8/4/2021 14:38
Toluene-D8	**91.5**	83.5 - 123		8/4/2021 14:38

Method Reference(s): EPA 8260C
EPA 5035A - L

Data File: z03384.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: TE-03-BLT-B
Lab Sample ID: 213480-03 **Date Sampled:** 8/3/2021
Matrix: Soil **Date Received:** 8/3/2021

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.175**	mg/Kg		8/6/2021 11:03

Method Reference(s): EPA 7471B
Preparation Date: 8/5/2021
Data File: Hg210806A

RCRA Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**5.76**	mg/Kg		8/4/2021 21:02
Barium	**53.5**	mg/Kg		8/4/2021 21:02
Cadmium	**0.289**	mg/Kg		8/4/2021 21:02
Chromium	**10.1**	mg/Kg		8/4/2021 21:02
Lead	**59.5**	mg/Kg		8/4/2021 21:02
Selenium	< 1.11	mg/Kg		8/4/2021 21:02
Silver	< 0.553	mg/Kg		8/4/2021 21:02

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 8/4/2021
Data File: 210804C

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.143	mg/Kg		8/6/2021 16:04
PCB-1221	< 0.143	mg/Kg		8/6/2021 16:04
PCB-1232	< 0.143	mg/Kg		8/6/2021 16:04
PCB-1242	< 0.143	mg/Kg		8/6/2021 16:04
PCB-1248	< 0.143	mg/Kg		8/6/2021 16:04
PCB-1254	< 0.143	mg/Kg		8/6/2021 16:04
PCB-1260	< 0.143	mg/Kg		8/6/2021 16:04
PCB-1262	< 0.143	mg/Kg		8/6/2021 16:04
PCB-1268	< 0.143	mg/Kg		8/6/2021 16:04

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	TE-03-BLT-B		
Lab Sample ID:	213480-03	**Date Sampled:**	8/3/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	**75.5**	18.5 - 93.4		8/6/2021 16:04

Method Reference(s): EPA 8082A
EPA 3546
Preparation Date: 8/5/2021

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 296	ug/Kg		8/6/2021 22:57
1,2,4,5-Tetrachlorobenzene	< 296	ug/Kg		8/6/2021 22:57
1,2,4-Trichlorobenzene	< 296	ug/Kg		8/6/2021 22:57
1,2-Dichlorobenzene	< 296	ug/Kg		8/6/2021 22:57
1,3-Dichlorobenzene	< 296	ug/Kg		8/6/2021 22:57
1,4-Dichlorobenzene	< 296	ug/Kg		8/6/2021 22:57
2,2-Oxybis (1-chloropropane)	< 296	ug/Kg		8/6/2021 22:57
2,3,4,6-Tetrachlorophenol	< 296	ug/Kg		8/6/2021 22:57
2,4,5-Trichlorophenol	< 296	ug/Kg		8/6/2021 22:57
2,4,6-Trichlorophenol	< 296	ug/Kg		8/6/2021 22:57
2,4-Dichlorophenol	< 296	ug/Kg		8/6/2021 22:57
2,4-Dimethylphenol	< 296	ug/Kg		8/6/2021 22:57
2,4-Dinitrophenol	< 1190	ug/Kg		8/6/2021 22:57
2,4-Dinitrotoluene	< 296	ug/Kg		8/6/2021 22:57
2,6-Dinitrotoluene	< 296	ug/Kg		8/6/2021 22:57
2-Chloronaphthalene	< 296	ug/Kg		8/6/2021 22:57
2-Chlorophenol	< 296	ug/Kg		8/6/2021 22:57
2-Methylnapthalene	< 296	ug/Kg		8/6/2021 22:57
2-Methylphenol	< 296	ug/Kg		8/6/2021 22:57
2-Nitroaniline	< 296	ug/Kg		8/6/2021 22:57
2-Nitrophenol	< 296	ug/Kg		8/6/2021 22:57
3&4-Methylphenol	< 296	ug/Kg		8/6/2021 22:57
3,3'-Dichlorobenzidine	< 296	ug/Kg		8/6/2021 22:57

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: TE-03-BLT-B
Lab Sample ID: 213480-03 **Date Sampled:** 8/3/2021
Matrix: Soil **Date Received:** 8/3/2021

3-Nitroaniline	< 296	ug/Kg	8/6/2021	22:57
4,6-Dinitro-2-methylphenol	< 396	ug/Kg	8/6/2021	22:57
4-Bromophenyl phenyl ether	< 296	ug/Kg	8/6/2021	22:57
4-Chloro-3-methylphenol	< 296	ug/Kg	8/6/2021	22:57
4-Chloroaniline	< 296	ug/Kg	8/6/2021	22:57
4-Chlorophenyl phenyl ether	< 296	ug/Kg	8/6/2021	22:57
4-Nitroaniline	< 296	ug/Kg	8/6/2021	22:57
4-Nitrophenol	< 296	ug/Kg	8/6/2021	22:57
Acenaphthene	< 296	ug/Kg	8/6/2021	22:57
Acenaphthylene	< 296	ug/Kg	8/6/2021	22:57
Acetophenone	< 296	ug/Kg	8/6/2021	22:57
Anthracene	< 296	ug/Kg	8/6/2021	22:57
Atrazine	< 296	ug/Kg	8/6/2021	22:57
Benzaldehyde	< 296	ug/Kg	8/6/2021	22:57
Benzo (a) anthracene	< 296	ug/Kg	8/6/2021	22:57
Benzo (a) pyrene	< 296	ug/Kg	8/6/2021	22:57
Benzo (b) fluoranthene	< 296	ug/Kg	8/6/2021	22:57
Benzo (g,h,i) perylene	< 296	ug/Kg	8/6/2021	22:57
Benzo (k) fluoranthene	< 296	ug/Kg	8/6/2021	22:57
Bis (2-chloroethoxy) methane	< 296	ug/Kg	8/6/2021	22:57
Bis (2-chloroethyl) ether	< 296	ug/Kg	8/6/2021	22:57
Bis (2-ethylhexyl) phthalate	< 296	ug/Kg	8/6/2021	22:57
Butylbenzylphthalate	< 296	ug/Kg	8/6/2021	22:57
Caprolactam	< 296	ug/Kg	8/6/2021	22:57
Carbazole	< 296	ug/Kg	8/6/2021	22:57
Chrysene	< 296	ug/Kg	8/6/2021	22:57
Dibenz (a,h) anthracene	< 296	ug/Kg	8/6/2021	22:57
Dibenzofuran	< 296	ug/Kg	8/6/2021	22:57
Diethyl phthalate	< 296	ug/Kg	8/6/2021	22:57
Dimethyl phthalate	< 296	ug/Kg	8/6/2021	22:57

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: TE-03-BLT-B
Lab Sample ID: 213480-03 **Date Sampled:** 8/3/2021
Matrix: Soil **Date Received:** 8/3/2021

Di-n-butyl phthalate	< 296	ug/Kg	8/6/2021	22:57
Di-n-octylphthalate	< 296	ug/Kg	8/6/2021	22:57
Fluoranthene	< 296	ug/Kg	8/6/2021	22:57
Fluorene	< 296	ug/Kg	8/6/2021	22:57
Hexachlorobenzene	< 296	ug/Kg	8/6/2021	22:57
Hexachlorobutadiene	< 296	ug/Kg	8/6/2021	22:57
Hexachlorocyclopentadiene	< 1190	ug/Kg	8/6/2021	22:57
Hexachloroethane	< 296	ug/Kg	8/6/2021	22:57
Indeno (1,2,3-cd) pyrene	< 296	ug/Kg	8/6/2021	22:57
Isophorone	< 296	ug/Kg	8/6/2021	22:57
Naphthalene	< 296	ug/Kg	8/6/2021	22:57
Nitrobenzene	< 296	ug/Kg	8/6/2021	22:57
N-Nitroso-di-n-propylamine	< 296	ug/Kg	8/6/2021	22:57
N-Nitrosodiphenylamine	< 296	ug/Kg	8/6/2021	22:57
Pentachlorophenol	< 593	ug/Kg	8/6/2021	22:57
Phenanthrene	< 296	ug/Kg	8/6/2021	22:57
Phenol	< 296	ug/Kg	8/6/2021	22:57
Pyrene	< 296	ug/Kg	8/6/2021	22:57

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	**57.5**	36.4 - 87.2		8/6/2021	22:57
2-Fluorobiphenyl	**54.7**	44 - 84		8/6/2021	22:57
2-Fluorophenol	**49.6**	43.2 - 82.1		8/6/2021	22:57
Nitrobenzene-d5	**48.2**	36.4 - 82.2		8/6/2021	22:57
Phenol-d5	**50.0**	41.1 - 81.4		8/6/2021	22:57
Terphenyl-d14	**59.1**	43.8 - 103		8/6/2021	22:57

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 8/5/2021
Data File: B56010.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	TE-03-BLT-A		
Lab Sample ID:	213480-03A	**Date Sampled:**	8/3/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 7.04	ug/Kg		8/4/2021 14:57
1,1,2,2-Tetrachloroethane	< 7.04	ug/Kg		8/4/2021 14:57
1,1,2-Trichloroethane	< 7.04	ug/Kg		8/4/2021 14:57
1,1-Dichloroethane	< 7.04	ug/Kg		8/4/2021 14:57
1,1-Dichloroethene	< 7.04	ug/Kg		8/4/2021 14:57
1,2,3-Trichlorobenzene	< 17.6	ug/Kg		8/4/2021 14:57
1,2,4-Trichlorobenzene	< 17.6	ug/Kg		8/4/2021 14:57
1,2,4-Trimethylbenzene	< 7.04	ug/Kg		8/4/2021 14:57
1,2-Dibromo-3-Chloropropane	< 35.2	ug/Kg		8/4/2021 14:57
1,2-Dibromoethane	< 7.04	ug/Kg		8/4/2021 14:57
1,2-Dichlorobenzene	< 7.04	ug/Kg		8/4/2021 14:57
1,2-Dichloroethane	< 7.04	ug/Kg		8/4/2021 14:57
1,2-Dichloropropane	< 7.04	ug/Kg		8/4/2021 14:57
1,3,5-Trimethylbenzene	< 7.04	ug/Kg		8/4/2021 14:57
1,3-Dichlorobenzene	< 7.04	ug/Kg		8/4/2021 14:57
1,4-Dichlorobenzene	< 7.04	ug/Kg		8/4/2021 14:57
1,4-Dioxane	< 35.2	ug/Kg		8/4/2021 14:57
2-Butanone	< 35.2	ug/Kg		8/4/2021 14:57
2-Hexanone	< 17.6	ug/Kg		8/4/2021 14:57
4-Methyl-2-pentanone	< 17.6	ug/Kg		8/4/2021 14:57
Acetone	< 35.2	ug/Kg		8/4/2021 14:57
Benzene	< 7.04	ug/Kg		8/4/2021 14:57
Bromochloromethane	< 17.6	ug/Kg		8/4/2021 14:57
Bromodichloromethane	< 7.04	ug/Kg		8/4/2021 14:57
Bromoform	< 17.6	ug/Kg		8/4/2021 14:57
Bromomethane	< 7.04	ug/Kg		8/4/2021 14:57
Carbon disulfide	< 7.04	ug/Kg		8/4/2021 14:57
Carbon Tetrachloride	< 7.04	ug/Kg		8/4/2021 14:57

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: TE-03-BLT-A
Lab Sample ID: 213480-03A **Date Sampled:** 8/3/2021
Matrix: Soil **Date Received:** 8/3/2021

Chlorobenzene	< 7.04	ug/Kg	8/4/2021	14:57
Chloroethane	< 7.04	ug/Kg	8/4/2021	14:57
Chloroform	< 7.04	ug/Kg	8/4/2021	14:57
Chloromethane	< 7.04	ug/Kg	8/4/2021	14:57
cis-1,2-Dichloroethene	< 7.04	ug/Kg	8/4/2021	14:57
cis-1,3-Dichloropropene	< 7.04	ug/Kg	8/4/2021	14:57
Cyclohexane	< 35.2	ug/Kg	8/4/2021	14:57
Dibromochloromethane	< 7.04	ug/Kg	8/4/2021	14:57
Dichlorodifluoromethane	< 7.04	ug/Kg	8/4/2021	14:57
Ethylbenzene	< 7.04	ug/Kg	8/4/2021	14:57
Freon 113	< 7.04	ug/Kg	8/4/2021	14:57
Isopropylbenzene	< 7.04	ug/Kg	8/4/2021	14:57
m,p-Xylene	< 7.04	ug/Kg	8/4/2021	14:57
Methyl acetate	< 7.04	ug/Kg	8/4/2021	14:57
Methyl tert-butyl Ether	< 7.04	ug/Kg	8/4/2021	14:57
Methylcyclohexane	< 7.04	ug/Kg	8/4/2021	14:57
Methylene chloride	< 17.6	ug/Kg	8/4/2021	14:57
Naphthalene	< 17.6	ug/Kg	8/4/2021	14:57
n-Butylbenzene	< 7.04	ug/Kg	8/4/2021	14:57
n-Propylbenzene	< 7.04	ug/Kg	8/4/2021	14:57
o-Xylene	< 7.04	ug/Kg	8/4/2021	14:57
p-Isopropyltoluene	< 7.04	ug/Kg	8/4/2021	14:57
sec-Butylbenzene	< 7.04	ug/Kg	8/4/2021	14:57
Styrene	< 17.6	ug/Kg	8/4/2021	14:57
tert-Butylbenzene	< 7.04	ug/Kg	8/4/2021	14:57
Tetrachloroethene	< 7.04	ug/Kg	8/4/2021	14:57
Toluene	< 7.04	ug/Kg	8/4/2021	14:57
trans-1,2-Dichloroethene	< 7.04	ug/Kg	8/4/2021	14:57
trans-1,3-Dichloropropene	< 7.04	ug/Kg	8/4/2021	14:57
Trichloroethene	< 7.04	ug/Kg	8/4/2021	14:57

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	TE-03-BLT-A		
Lab Sample ID:	213480-03A	**Date Sampled:**	8/3/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Trichlorofluoromethane	< 7.04	ug/Kg			8/4/2021 14:57
Vinyl chloride	< 7.04	ug/Kg			8/4/2021 14:57

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**103**	88.8 - 123		8/4/2021 14:57
4-Bromofluorobenzene	**81.1**	68.7 - 115		8/4/2021 14:57
Pentafluorobenzene	**104**	80.2 - 112		8/4/2021 14:57
Toluene-D8	**102**	83.5 - 123		8/4/2021 14:57

Method Reference(s): EPA 8260C
EPA 5035A - L

Data File: z03385.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: TE-04-BLT-B
Lab Sample ID: 213480-04 **Date Sampled:** 8/3/2021
Matrix: Soil **Date Received:** 8/3/2021

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.285**	mg/Kg		8/6/2021 11:04

Method Reference(s): EPA 7471B
Preparation Date: 8/5/2021
Data File: Hg210806A

RCRA Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**3.71**	mg/Kg	D	8/4/2021 21:16
Barium	**60.1**	mg/Kg		8/4/2021 21:16
Cadmium	**0.289**	mg/Kg	D	8/4/2021 21:16
Chromium	**9.69**	mg/Kg		8/4/2021 21:16
Lead	**62.7**	mg/Kg		8/4/2021 21:16
Selenium	< 1.10	mg/Kg		8/4/2021 21:16
Silver	< 0.550	mg/Kg		8/4/2021 21:16

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 8/4/2021
Data File: 210804C

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.175	mg/Kg		8/6/2021 16:28
PCB-1221	< 0.175	mg/Kg		8/6/2021 16:28
PCB-1232	< 0.175	mg/Kg		8/6/2021 16:28
PCB-1242	< 0.175	mg/Kg		8/6/2021 16:28
PCB-1248	< 0.175	mg/Kg		8/6/2021 16:28
PCB-1254	< 0.175	mg/Kg		8/6/2021 16:28
PCB-1260	< 0.175	mg/Kg		8/6/2021 16:28
PCB-1262	< 0.175	mg/Kg		8/6/2021 16:28
PCB-1268	< 0.175	mg/Kg		8/6/2021 16:28

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	TE-04-BLT-B		
Lab Sample ID:	213480-04	**Date Sampled:**	8/3/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	**76.4**	18.5 - 93.4		8/6/2021 16:28

Method Reference(s): EPA 8082A
EPA 3546
Preparation Date: 8/5/2021

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 294	ug/Kg		8/6/2021 23:26
1,2,4,5-Tetrachlorobenzene	< 294	ug/Kg		8/6/2021 23:26
1,2,4-Trichlorobenzene	< 294	ug/Kg		8/6/2021 23:26
1,2-Dichlorobenzene	< 294	ug/Kg		8/6/2021 23:26
1,3-Dichlorobenzene	< 294	ug/Kg		8/6/2021 23:26
1,4-Dichlorobenzene	< 294	ug/Kg		8/6/2021 23:26
2,2-Oxybis (1-chloropropane)	< 294	ug/Kg		8/6/2021 23:26
2,3,4,6-Tetrachlorophenol	< 294	ug/Kg		8/6/2021 23:26
2,4,5-Trichlorophenol	< 294	ug/Kg		8/6/2021 23:26
2,4,6-Trichlorophenol	< 294	ug/Kg		8/6/2021 23:26
2,4-Dichlorophenol	< 294	ug/Kg		8/6/2021 23:26
2,4-Dimethylphenol	< 294	ug/Kg		8/6/2021 23:26
2,4-Dinitrophenol	< 1180	ug/Kg		8/6/2021 23:26
2,4-Dinitrotoluene	< 294	ug/Kg		8/6/2021 23:26
2,6-Dinitrotoluene	< 294	ug/Kg		8/6/2021 23:26
2-Chloronaphthalene	< 294	ug/Kg		8/6/2021 23:26
2-Chlorophenol	< 294	ug/Kg		8/6/2021 23:26
2-Methylnapthalene	< 294	ug/Kg		8/6/2021 23:26
2-Methylphenol	< 294	ug/Kg		8/6/2021 23:26
2-Nitroaniline	< 294	ug/Kg		8/6/2021 23:26
2-Nitrophenol	< 294	ug/Kg		8/6/2021 23:26
3&4-Methylphenol	< 294	ug/Kg		8/6/2021 23:26
3,3'-Dichlorobenzidine	< 294	ug/Kg		8/6/2021 23:26

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	TE-04-BLT-B		
Lab Sample ID:	213480-04	**Date Sampled:**	8/3/2021
Matrix:	Soil	**Date Received:**	8/3/2021

3-Nitroaniline	< 294	ug/Kg	8/6/2021 23:26
4,6-Dinitro-2-methylphenol	< 393	ug/Kg	8/6/2021 23:26
4-Bromophenyl phenyl ether	< 294	ug/Kg	8/6/2021 23:26
4-Chloro-3-methylphenol	< 294	ug/Kg	8/6/2021 23:26
4-Chloroaniline	< 294	ug/Kg	8/6/2021 23:26
4-Chlorophenyl phenyl ether	< 294	ug/Kg	8/6/2021 23:26
4-Nitroaniline	< 294	ug/Kg	8/6/2021 23:26
4-Nitrophenol	< 294	ug/Kg	8/6/2021 23:26
Acenaphthene	< 294	ug/Kg	8/6/2021 23:26
Acenaphthylene	< 294	ug/Kg	8/6/2021 23:26
Acetophenone	< 294	ug/Kg	8/6/2021 23:26
Anthracene	< 294	ug/Kg	8/6/2021 23:26
Atrazine	< 294	ug/Kg	8/6/2021 23:26
Benzaldehyde	< 294	ug/Kg	8/6/2021 23:26
Benzo (a) anthracene	< 294	ug/Kg	8/6/2021 23:26
Benzo (a) pyrene	< 294	ug/Kg	8/6/2021 23:26
Benzo (b) fluoranthene	< 294	ug/Kg	8/6/2021 23:26
Benzo (g,h,i) perylene	< 294	ug/Kg	8/6/2021 23:26
Benzo (k) fluoranthene	< 294	ug/Kg	8/6/2021 23:26
Bis (2-chloroethoxy) methane	< 294	ug/Kg	8/6/2021 23:26
Bis (2-chloroethyl) ether	< 294	ug/Kg	8/6/2021 23:26
Bis (2-ethylhexyl) phthalate	< 294	ug/Kg	8/6/2021 23:26
Butylbenzylphthalate	< 294	ug/Kg	8/6/2021 23:26
Caprolactam	< 294	ug/Kg	8/6/2021 23:26
Carbazole	< 294	ug/Kg	8/6/2021 23:26
Chrysene	< 294	ug/Kg	8/6/2021 23:26
Dibenz (a,h) anthracene	< 294	ug/Kg	8/6/2021 23:26
Dibenzofuran	< 294	ug/Kg	8/6/2021 23:26
Diethyl phthalate	< 294	ug/Kg	8/6/2021 23:26
Dimethyl phthalate	< 294	ug/Kg	8/6/2021 23:26

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: TE-04-BLT-B
Lab Sample ID: 213480-04 **Date Sampled:** 8/3/2021
Matrix: Soil **Date Received:** 8/3/2021

Di-n-butyl phthalate	< 294	ug/Kg	8/6/2021	23:26
Di-n-octylphthalate	< 294	ug/Kg	8/6/2021	23:26
Fluoranthene	< 294	ug/Kg	8/6/2021	23:26
Fluorene	< 294	ug/Kg	8/6/2021	23:26
Hexachlorobenzene	< 294	ug/Kg	8/6/2021	23:26
Hexachlorobutadiene	< 294	ug/Kg	8/6/2021	23:26
Hexachlorocyclopentadiene	< 1180	ug/Kg	8/6/2021	23:26
Hexachloroethane	< 294	ug/Kg	8/6/2021	23:26
Indeno (1,2,3-cd) pyrene	< 294	ug/Kg	8/6/2021	23:26
Isophorone	< 294	ug/Kg	8/6/2021	23:26
Naphthalene	< 294	ug/Kg	8/6/2021	23:26
Nitrobenzene	< 294	ug/Kg	8/6/2021	23:26
N-Nitroso-di-n-propylamine	< 294	ug/Kg	8/6/2021	23:26
N-Nitrosodiphenylamine	< 294	ug/Kg	8/6/2021	23:26
Pentachlorophenol	< 588	ug/Kg	8/6/2021	23:26
Phenanthrene	< 294	ug/Kg	8/6/2021	23:26
Phenol	< 294	ug/Kg	8/6/2021	23:26
Pyrene	< 294	ug/Kg	8/6/2021	23:26

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	**65.2**	36.4 - 87.2		8/6/2021	23:26
2-Fluorobiphenyl	**59.1**	44 - 84		8/6/2021	23:26
2-Fluorophenol	**54.2**	43.2 - 82.1		8/6/2021	23:26
Nitrobenzene-d5	**52.2**	36.4 - 82.2		8/6/2021	23:26
Phenol-d5	**54.2**	41.1 - 81.4		8/6/2021	23:26
Terphenyl-d14	**64.0**	43.8 - 103		8/6/2021	23:26

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 8/5/2021
Data File: B56011.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	TE-04-BLT-A		
Lab Sample ID:	213480-04A	**Date Sampled:**	8/3/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 8.50	ug/Kg		8/4/2021 15:16
1,1,2,2-Tetrachloroethane	< 8.50	ug/Kg		8/4/2021 15:16
1,1,2-Trichloroethane	< 8.50	ug/Kg		8/4/2021 15:16
1,1-Dichloroethane	< 8.50	ug/Kg		8/4/2021 15:16
1,1-Dichloroethene	< 8.50	ug/Kg		8/4/2021 15:16
1,2,3-Trichlorobenzene	< 21.3	ug/Kg		8/4/2021 15:16
1,2,4-Trichlorobenzene	< 21.3	ug/Kg		8/4/2021 15:16
1,2,4-Trimethylbenzene	< 8.50	ug/Kg		8/4/2021 15:16
1,2-Dibromo-3-Chloropropane	< 42.5	ug/Kg		8/4/2021 15:16
1,2-Dibromoethane	< 8.50	ug/Kg		8/4/2021 15:16
1,2-Dichlorobenzene	< 8.50	ug/Kg		8/4/2021 15:16
1,2-Dichloroethane	< 8.50	ug/Kg		8/4/2021 15:16
1,2-Dichloropropane	< 8.50	ug/Kg		8/4/2021 15:16
1,3,5-Trimethylbenzene	< 8.50	ug/Kg		8/4/2021 15:16
1,3-Dichlorobenzene	< 8.50	ug/Kg		8/4/2021 15:16
1,4-Dichlorobenzene	< 8.50	ug/Kg		8/4/2021 15:16
1,4-Dioxane	< 42.5	ug/Kg		8/4/2021 15:16
2-Butanone	< 42.5	ug/Kg		8/4/2021 15:16
2-Hexanone	< 21.3	ug/Kg		8/4/2021 15:16
4-Methyl-2-pentanone	< 21.3	ug/Kg		8/4/2021 15:16
Acetone	< 42.5	ug/Kg		8/4/2021 15:16
Benzene	< 8.50	ug/Kg		8/4/2021 15:16
Bromochloromethane	< 21.3	ug/Kg		8/4/2021 15:16
Bromodichloromethane	< 8.50	ug/Kg		8/4/2021 15:16
Bromoform	< 21.3	ug/Kg		8/4/2021 15:16
Bromomethane	< 8.50	ug/Kg		8/4/2021 15:16
Carbon disulfide	< 8.50	ug/Kg		8/4/2021 15:16
Carbon Tetrachloride	< 8.50	ug/Kg		8/4/2021 15:16

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: TE-04-BLT-A
Lab Sample ID: 213480-04A **Date Sampled:** 8/3/2021
Matrix: Soil **Date Received:** 8/3/2021

Chlorobenzene	< 8.50	ug/Kg	8/4/2021	15:16
Chloroethane	< 8.50	ug/Kg	8/4/2021	15:16
Chloroform	< 8.50	ug/Kg	8/4/2021	15:16
Chloromethane	< 8.50	ug/Kg	8/4/2021	15:16
cis-1,2-Dichloroethene	< 8.50	ug/Kg	8/4/2021	15:16
cis-1,3-Dichloropropene	< 8.50	ug/Kg	8/4/2021	15:16
Cyclohexane	< 42.5	ug/Kg	8/4/2021	15:16
Dibromochloromethane	< 8.50	ug/Kg	8/4/2021	15:16
Dichlorodifluoromethane	< 8.50	ug/Kg	8/4/2021	15:16
Ethylbenzene	< 8.50	ug/Kg	8/4/2021	15:16
Freon 113	< 8.50	ug/Kg	8/4/2021	15:16
Isopropylbenzene	< 8.50	ug/Kg	8/4/2021	15:16
m,p-Xylene	< 8.50	ug/Kg	8/4/2021	15:16
Methyl acetate	< 8.50	ug/Kg	8/4/2021	15:16
Methyl tert-butyl Ether	< 8.50	ug/Kg	8/4/2021	15:16
Methylcyclohexane	< 8.50	ug/Kg	8/4/2021	15:16
Methylene chloride	< 21.3	ug/Kg	8/4/2021	15:16
Naphthalene	< 21.3	ug/Kg	8/4/2021	15:16
n-Butylbenzene	< 8.50	ug/Kg	8/4/2021	15:16
n-Propylbenzene	< 8.50	ug/Kg	8/4/2021	15:16
o-Xylene	< 8.50	ug/Kg	8/4/2021	15:16
p-Isopropyltoluene	< 8.50	ug/Kg	8/4/2021	15:16
sec-Butylbenzene	< 8.50	ug/Kg	8/4/2021	15:16
Styrene	< 21.3	ug/Kg	8/4/2021	15:16
tert-Butylbenzene	< 8.50	ug/Kg	8/4/2021	15:16
Tetrachloroethene	< 8.50	ug/Kg	8/4/2021	15:16
Toluene	< 8.50	ug/Kg	8/4/2021	15:16
trans-1,2-Dichloroethene	< 8.50	ug/Kg	8/4/2021	15:16
trans-1,3-Dichloropropene	< 8.50	ug/Kg	8/4/2021	15:16
Trichloroethene	< 8.50	ug/Kg	8/4/2021	15:16

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	TE-04-BLT-A		
Lab Sample ID:	213480-04A	**Date Sampled:**	8/3/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Trichlorofluoromethane	< 8.50	ug/Kg			8/4/2021 15:16
Vinyl chloride	< 8.50	ug/Kg			8/4/2021 15:16

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**96.0**	88.8 - 123		8/4/2021 15:16
4-Bromofluorobenzene	**80.5**	68.7 - 115		8/4/2021 15:16
Pentafluorobenzene	**98.4**	80.2 - 112		8/4/2021 15:16
Toluene-D8	**95.8**	83.5 - 123		8/4/2021 15:16

Method Reference(s): EPA 8260C
EPA 5035A - L

Data File: z03386.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

PARADIGM ENVIRONMENTAL SERVICES, INC.

Method Blank Report

Client: **Stantec**

Project Reference: 213414039.400

Lab Project ID: 213480

Matrix: Soil

RCRA Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed	
Arsenic	<0.500	mg/Kg		8/4/2021	20:30
Barium	<5.00	mg/Kg		8/4/2021	20:30
Cadmium	<0.250	mg/Kg		8/4/2021	20:30
Chromium	<0.500	mg/Kg		8/4/2021	20:30
Lead	<0.500	mg/Kg		8/4/2021	20:30
Selenium	<1.00	mg/Kg		8/4/2021	20:30
Silver	<0.500	mg/Kg		8/4/2021	20:30

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 8/4/2021
Data File: 210804C
QC Batch ID: QC210804soil
QC Number: Blk 1

Report Prepared Tuesday, August 10, 2021

PARADIGM ENVIRONMENTAL SERVICES, INC.

QC Report for Laboratory Control Sample and Control Sample Duplicate

Client: **Stantec**

Project Reference: 213414039.400

Lab Project ID: 213480

Matrix: Soil

RCRA Metals (ICP)

Analyte	LCS Added	LCSD Added	Spike Units	LCS Result	LCSD Result	LCS % Recovery	LCSD % Recovery	% Rec Limits	LCS Outliers	LCSD Outliers	Relative % Difference	RPD Limit	RPD Outliers	Date Analyzed
Arsenic	118	124	mg/Kg	108	115	91.8	93.1	80 - 120			1.41	20		8/4/2021
Barium	118	124	mg/Kg	132	139	112	113	80 - 120			0.544	20		8/4/2021
Cadmium	47.2	49.5	mg/Kg	49.0	51.6	104	104	80 - 120			0.494	20		8/4/2021
Chromium	118	124	mg/Kg	122	129	103	104	80 - 120			0.687	20		8/4/2021
Lead	118	124	mg/Kg	124	131	105	106	80 - 120			0.571	20		8/4/2021
Selenium	118	124	mg/Kg	109	115	92.8	92.9	80 - 120			0.168	20		8/4/2021
Silver	11.8	12.4	mg/Kg	11.1	11.7	93.8	94.6	80 - 120			0.818	20		8/4/2021

Method Reference(s): EPA 6010C
EPA 3050B

Preparation Date: 8/4/2021

Data File: 210804C

QC Number: 1

QC Batch ID: QC210804soil

Report Prepared Tuesday, August 10, 2021

PARADIGM ENVIRONMENTAL SERVICES, INC.

QC Report for Sample Spike and Sample Duplicate

Client: **Stantec** **Lab Project ID:** 213480

Project Reference: 213414039.400

Lab Sample ID: 213480-04 **Date Sampled:** 8/3/2021

Sample Identifier: TE-04-BLT-B **Date Received:** 8/3/2021

Matrix: Soil

RCRA Metals (ICP)

Analyte	Sample Results	Result Units	Spike Added	Spike Result	Spike % Recovery	% Rec Limits	Spike Outliers	Duplicate Result	Relative % Difference	RPD Limit	RPD Outliers	Date Analyzed
Arsenic	**3.71**	mg/Kg	140	113	78.3	75 - 125		4.75	24.7	20	*	8/4/2021
Barium	**60.1**	mg/Kg	140	171	79.0	75 - 125		59.0	1.79	20		8/4/2021
Cadmium	**0.289**	mg/Kg	56.1	43.2	76.5	75 - 125		0.497	53.0	20	*	8/4/2021
Chromium	**9.69**	mg/Kg	140	120	78.5	75 - 125		11.2	14.6	20		8/4/2021
Lead	**62.7**	mg/Kg	140	187	88.8	75 - 125		64.5	2.78	20		8/4/2021
Selenium	< 1.10	mg/Kg	140	112	79.7	75 - 125		<1.12	NC	20		8/4/2021
Silver	< 0.550	mg/Kg	14.0	11.5	82.1	75 - 125		<0.561	NC	20		8/4/2021

Method Reference(s): EPA 6010C
EPA 3050B

Preparation Date: 8/4/2021
210804C

QC Batch ID: QC210804soil

NC = Not Calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added.

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PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: **Stantec**

Project Reference: 213414039.400

Lab Project ID: 213480

Matrix: Soil

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed	
1,1-Biphenyl	<262	ug/Kg		8/5/2021	13:49
1,2,4,5-Tetrachlorobenzene	<262	ug/Kg		8/5/2021	13:49
1,2,4-Trichlorobenzene	<262	ug/Kg		8/5/2021	13:49
1,2-Dichlorobenzene	<262	ug/Kg		8/5/2021	13:49
1,3-Dichlorobenzene	<262	ug/Kg		8/5/2021	13:49
1,4-Dichlorobenzene	<262	ug/Kg		8/5/2021	13:49
2,2-Oxybis (1-chloropropane)	<262	ug/Kg		8/5/2021	13:49
2,3,4,6-Tetrachlorophenol	<262	ug/Kg		8/5/2021	13:49
2,4,5-Trichlorophenol	<262	ug/Kg		8/5/2021	13:49
2,4,6-Trichlorophenol	<262	ug/Kg		8/5/2021	13:49
2,4-Dichlorophenol	<262	ug/Kg		8/5/2021	13:49
2,4-Dimethylphenol	<262	ug/Kg		8/5/2021	13:49
2,4-Dinitrophenol	<1050	ug/Kg		8/5/2021	13:49
2,4-Dinitrotoluene	<262	ug/Kg		8/5/2021	13:49
2,6-Dinitrotoluene	<262	ug/Kg		8/5/2021	13:49
2-Chloronaphthalene	<262	ug/Kg		8/5/2021	13:49
2-Chlorophenol	<262	ug/Kg		8/5/2021	13:49
2-Methylnapthalene	<262	ug/Kg		8/5/2021	13:49
2-Methylphenol	<262	ug/Kg		8/5/2021	13:49
2-Nitroaniline	<262	ug/Kg		8/5/2021	13:49
2-Nitrophenol	<262	ug/Kg		8/5/2021	13:49
3&4-Methylphenol	<262	ug/Kg		8/5/2021	13:49
3,3'-Dichlorobenzidine	<262	ug/Kg		8/5/2021	13:49
3-Nitroaniline	<262	ug/Kg		8/5/2021	13:49
4,6-Dinitro-2-methylphenol	<524	ug/Kg		8/5/2021	13:49
4-Bromophenyl phenyl ether	<262	ug/Kg		8/5/2021	13:49
4-Chloro-3-methylphenol	<262	ug/Kg		8/5/2021	13:49
4-Chloroaniline	<262	ug/Kg		8/5/2021	13:49

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PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: **Stantec**
Project Reference: 213414039.400
Lab Project ID: 213480
Matrix: Soil

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed	
4-Chlorophenyl phenyl ether	<262	ug/Kg		8/5/2021	13:49
4-Nitroaniline	<262	ug/Kg		8/5/2021	13:49
4-Nitrophenol	<262	ug/Kg		8/5/2021	13:49
Acenaphthene	<262	ug/Kg		8/5/2021	13:49
Acenaphthylene	<262	ug/Kg		8/5/2021	13:49
Acetophenone	<262	ug/Kg		8/5/2021	13:49
Anthracene	<262	ug/Kg		8/5/2021	13:49
Atrazine	<262	ug/Kg		8/5/2021	13:49
Benzaldehyde	<262	ug/Kg		8/5/2021	13:49
Benzo (a) anthracene	<262	ug/Kg		8/5/2021	13:49
Benzo (a) pyrene	<262	ug/Kg		8/5/2021	13:49
Benzo (b) fluoranthene	<262	ug/Kg		8/5/2021	13:49
Benzo (g,h,i) perylene	<262	ug/Kg		8/5/2021	13:49
Benzo (k) fluoranthene	<262	ug/Kg		8/5/2021	13:49
Bis (2-chloroethoxy) methane	<262	ug/Kg		8/5/2021	13:49
Bis (2-chloroethyl) ether	<262	ug/Kg		8/5/2021	13:49
Bis (2-ethylhexyl) phthalate	<262	ug/Kg		8/5/2021	13:49
Butylbenzylphthalate	<262	ug/Kg		8/5/2021	13:49
Caprolactam	<262	ug/Kg		8/5/2021	13:49
Carbazole	<262	ug/Kg		8/5/2021	13:49
Chrysene	<262	ug/Kg		8/5/2021	13:49
Dibenz (a,h) anthracene	<262	ug/Kg		8/5/2021	13:49
Dibenzofuran	<262	ug/Kg		8/5/2021	13:49
Diethyl phthalate	<262	ug/Kg		8/5/2021	13:49
Dimethyl phthalate	<262	ug/Kg		8/5/2021	13:49
Di-n-butyl phthalate	<262	ug/Kg		8/5/2021	13:49
Di-n-octylphthalate	<262	ug/Kg		8/5/2021	13:49
Fluoranthene	<262	ug/Kg		8/5/2021	13:49

PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: **Stantec**
Project Reference: 213414039.400
Lab Project ID: 213480
Matrix: Soil

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed	
Fluorene	<262	ug/Kg		8/5/2021	13:49
Hexachlorobenzene	<262	ug/Kg		8/5/2021	13:49
Hexachlorobutadiene	<262	ug/Kg		8/5/2021	13:49
Hexachlorocyclopentadiene	<1050	ug/Kg		8/5/2021	13:49
Hexachloroethane	<262	ug/Kg		8/5/2021	13:49
Indeno (1,2,3-cd) pyrene	<262	ug/Kg		8/5/2021	13:49
Isophorone	<262	ug/Kg		8/5/2021	13:49
Naphthalene	<262	ug/Kg		8/5/2021	13:49
Nitrobenzene	<262	ug/Kg		8/5/2021	13:49
N-Nitroso-di-n-propylamine	<262	ug/Kg		8/5/2021	13:49
N-Nitrosodiphenylamine	<262	ug/Kg		8/5/2021	13:49
Pentachlorophenol	<524	ug/Kg		8/5/2021	13:49
Phenanthrene	<262	ug/Kg		8/5/2021	13:49
Phenol	<262	ug/Kg		8/5/2021	13:49
Pyrene	<262	ug/Kg		8/5/2021	13:49

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	**61.8**	36.4 - 87.2		8/5/2021	13:49
2-Fluorobiphenyl	**58.5**	44 - 84		8/5/2021	13:49
2-Fluorophenol	**56.5**	43.2 - 82.1		8/5/2021	13:49
Nitrobenzene-d5	**54.1**	36.4 - 82.2		8/5/2021	13:49
Phenol-d5	**58.6**	41.1 - 81.4		8/5/2021	13:49
Terphenyl-d14	**69.3**	43.8 - 103		8/5/2021	13:49

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 8/5/2021
Data File: B55944.D
QC Batch ID: QC210805ABNS
QC Number: 1

PARADIGM
ENVIRONMENTAL SERVICES, INC

QC Report for Laboratory Control Sample

Client: Stantec
Project Reference: 213414039.400
Lab Project ID: 213480
Matrix: Soil

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Spike Added	Spike Units	LCS Result	LCS % Recovery	% Rec Limits	LCS Outliers	Date Analyzed
1,2,4-Trichlorobenzene	2840	ug/Kg			38.8 - 80.6		
1,4-Dichlorobenzene	2840	ug/Kg			38.6 - 76		
2,4-Dinitrotoluene	2840	ug/Kg			43.4 - 93.3		
2-Chlorophenol	4260	ug/Kg			51.8 - 82.6		
4-Chloro-3-methylphenol	4260	ug/Kg			48.4 - 90.3		
4-Nitrophenol	4260	ug/Kg			43.4 - 97		
Acenaphthene	2840	ug/Kg			43.6 - 84.4		
N-Nitroso-di-n-propylamine	2840	ug/Kg			36.1 - 88.4		
Pentachlorophenol	4260	ug/Kg			41.6 - 111		
Phenol	4260	ug/Kg			51.7 - 84.3		
Pyrene	2840	ug/Kg			48.4 - 104		

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 8/5/2021
QC Number: 1
QC Batch ID: QC210805ABNS

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Report Prepared Tuesday, August 10, 2021

PARADIGM ENVIRONMENTAL SERVICES, INC.

QC Report for Matrix Spike and Matrix Spike Duplicate

Client: Stantec

Lab Project ID: 213480

Project Reference: 213414039.400

Lab Sample ID: 213480-02
Sample Identifier: TE-02-BLT-B
Matrix: Soil

Date Sampled: 8/3/2021
Date Received: 8/3/2021
Date Analyzed: 8/6/2021

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Sample Result	Result Units	MS Added	MS Result	MS % Recovery	MSD Added	MSD Result	MSD % Recovery	% Rec. Limits	MS Outlier	MSD Outlier	Relative % Diff.	RPD Limit	RPD Outlier
1,2,4-Trichlorobenzene	< 321	ug/Kg	3260	1790	55.0	3350	1420	42.2	38.8 - 80.6			26.3	44.1	
1,4-Dichlorobenzene	< 321	ug/Kg	3260	1610	49.4	3350	1270	37.9	38.6 - 76		*	26.4	45.5	
2,4-Dinitrotoluene	< 321	ug/Kg	3260	1930	59.2	3350	1680	50.3	43.4 - 93.3			16.3	55.8	
2-Chlorophenol	< 321	ug/Kg	4890	2680	54.8	5030	2190	43.5	51.8 - 82.6		*	23.0	22.1	*
4-Chloro-3-methylphenol	< 321	ug/Kg	4890	2940	60.2	5030	2490	49.6	48.4 - 90.3			19.3	27.5	
4-Nitrophenol	< 321	ug/Kg	4890	1900	38.8	5030	1650	32.9	43.4 - 97	*	*	16.5	44	
Acenaphthene	< 321	ug/Kg	3260	1820	55.8	3350	1550	46.3	43.6 - 84.4			18.6	44.7	
N-Nitroso-di-n-propylamine	< 321	ug/Kg	3260	1550	47.4	3350	1270	37.8	36.1 - 88.4			22.5	48.6	
Pentachlorophenol	< 642	ug/Kg	4890	3650	74.5	5030	3180	63.3	41.6 - 111			16.3	39.4	
Phenol	< 321	ug/Kg	4890	2490	50.9	5030	2100	41.7	51.7 - 84.3	*	*	19.8	23.6	
Pyrene	< 321	ug/Kg	3260	2030	62.3	3350	1670	49.9	48.4 - 104			22.1	52.9	

Any estimated values are displayed, and derived values calculated, based on numeric result only. See primary analytical report for data flags.

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Report Prepared Tuesday, August 10, 2021

PARADIGM
ENVIRONMENTAL SERVICES, INC

QC Report for Matrix Spike and Matrix Spike Duplicate

Client: Stantec

Lab Project ID: 213480

Project Reference: 213414039.400

Lab Sample ID: 213480-02
Sample Identifier: TE-02-BLT-B
Matrix: Soil

Date Sampled: 8/3/2021
Date Received: 8/3/2021
Date Analyzed: 8/6/2021

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Sample Result	Result Units	MS Added	MS Result	MS % Recovery	MSD Added	MSD Result	MSD % Recovery	% Rec. Limits	MS Outlier	MSD Outlier	Relative % Diff.	RPD Limit	RPD Outlier

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 8/5/2021
Data File(s): B56008.D
B56009.D
B56007.D
1
QC Batch ID: QC210805ABNS

Any estimated values are displayed, and derived values calculated, based on numeric result only. See primary analytical report for data flags.

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Tuesday, August 10, 2021

Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

Each page of this document is part of a multipage report. This document may not be reproduced except in its entirety, without the prior consent of Paradigm Environmental Services, Inc.

All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.
"E" = Result has been estimated, calibration limit exceeded.
"Z" = See case narrative.
"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.
"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.
"B" = Method blank contained trace levels of analyte. Refer to included method blank report.
"J" = Result estimated between the quantitation limit and half the quantitation limit.
"L" = Laboratory Control Sample recovery outside accepted QC limits.
"P" = Concentration differs by more than 40% between the primary and secondary analytical columns.
"NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.
"" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted.*
"(1)" = Indicates data from primary column used for QC calculation.
"A" = denotes a parameter for which ELAP does not offer approval as part of their laboratory certification program.
"F" = denotes a parameter for which Paradigm does not carry certification, the results for which should therefore only be used where ELAP certification is not required, such as personal exposure assessment.

GENERAL TERMS AND CONDITIONS
LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, tern or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty. Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.

Scope and Compensation. LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB wi use LAB default method for all tests unless specified otherwise on the Work Order.

Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.

Prices. Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs may incur additional fees.

Limitations of Liability. In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re-perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services.

LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results.

All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB.

Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.

Hazard Disclosure. Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.

Sample Handling. Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises.

Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on th final report.

Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples.

LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.

Legal Responsibility. LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.

Assignment. LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.

Force Majeure. LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.

Law. This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

PARADIGM

CHAIN OF CUSTODY

REPORT TO:	INVOICE TO:	
CLIENT: Stantec	CLIENT:	LAB PROJECT ID: 213480
ADDRESS: 61 Commercial St. Suite 100	ADDRESS: SAME	Quotation #:
CITY: Rochester STATE: NY ZIP: 14614	CITY: STATE: ZIP:	Email:
PHONE: 585-775-3835	PHONE:	
ATTN: Steve Campbell	ATTN:	

PROJECT REFERENCE: 213414039.400

Matrix Codes:
AQ - Aqueous Liquid; NQ - Non-Aqueous Liquid; WA - Water; WG - Groundwater; DW - Drinking Water; WW - Wastewater; SO - Soil; SL - Sludge; SD - Solid; PT - Paint; WP - Wipe; CK - Caulk; OL - Oil; AR - Air

REQUESTED ANALYSIS

DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	8260B TCL	8260D TCL + TICs	8082A	6010D/7471B Metals						REMARKS	PARADIGM LAB SAMPLE NUMBER
8/3/21	0828		X	TE-01-BLT	So	2	X	X	X	X						Per email add (-A) to	01A
8/3/21	0900		X	TE-02-BLT	So	2	X	X	X	X						Sample IDs for VOA jars	02A
8/3/21	0935		X	TE-03-BLT	So	2	X	X	X	X						and (-B) to sample IDs	03A
8/3/21	1011		X	TE-04-BLT	So	2	X	X	X	X						for SVOA/PCB/metals jars.	04A
																A for VOA aliquots. GP 8/4/21	
																11°C iced started in field MM 8/3/21 1520	

Turnaround Time		Report Supplements			
Availability contingent upon lab approval; additional fees may apply.					
Standard 5 day	X	None Required	X	None Required	
10 day		Batch QC		Basic EDD	
Rush 3 day		Category A		NYSDEC EDD	
Rush 2 day		Category B			
Rush 1 day					
Date Needed _____ please indicate date needed: _____		Other please indicate package needed: _____		Other EDD please indicate EDD needed: Stantec EDD	X

Sampled By — Date/Time: 8/3/2021 1515

Relinquished By — Date/Time: 8/3/21 1515

Received By — Date/Time: 8/3/21 1521

Received @ Lab By — Date/Time

Total Cost:

P.I.F.

By signing this form, client agrees to Paradigm Terms and Conditions (reverse).

See additional page for sample conditions.

PARADIGM

Chain of Custody Supplement

Client: Stantec **Completed by:** Molly Kail

Lab Project ID: 213480 **Date:** 8/3/21

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

NELAC compliance with the sample condition requirements upon receipt

Condition	Yes	No	N/A
Container Type	✓	5035	
Comments			
Transferred to method-compliant container			✓
Headspace (<1 mL)			✓
Comments			
Preservation			✓
Comments			
Chlorine Absent (<0.10 ppm per test strip)			✓
Comments			
Holding Time	✓		
Comments			
Temperature	✓		met
Comments	11°C and started in field		
Compliant Sample Quantity/Type	✓		
Comments			

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

EMSL Analytical, Inc.

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Tel/Fax: (585) 957-9436 / (585) 957-9437
http://www.EMSL.com / rochesterlab@EMSL.com

EMSL Order: 532101324
Customer ID: SRNY42
Customer PO:
Project ID:

Attention: Amanda Matkosky
Stantec
61 Commercial Street
Suite 100
Rochester, NY 14614-1009
Project: 213414039, NY

Phone: (585) 413-5208
Fax: (585) 424-5951
Received Date: 08/03/2021 11:38 AM
Analysis Date: 08/12/2021
Collected Date: 07/30/2021

Test Report:Asbestos Analysis of Bulk Material

Test	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos
Sample ID SACM-1-1		**Description**	Northern Wall - Top JF		
532101324-0001		**Homogeneity**	Heterogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	08/12/2021	Various		100.00% Other	**Inconclusive: None Detected**
TEM NYS 198.4 NOB	08/12/2021	Various		100.00% Other	**None Detected**
Sample ID SACM-1-2		**Description**	Northern Wall - Bottom		
532101324-0002		**Homogeneity**	Heterogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	08/12/2021	Various		100.00% Other	**Inconclusive: None Detected**
TEM NYS 198.4 NOB	08/12/2021	Various		100.00% Other	**None Detected**
Sample ID SACM-2-1		**Description**	Middle Wall - Top JF		
532101324-0003		**Homogeneity**	Heterogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	08/12/2021	Various	<1.00% Glass	100.00% Other	**Inconclusive: None Detected**
TEM NYS 198.4 NOB	08/12/2021	Various		100.00% Other	**None Detected**
Sample ID SACM-2-2		**Description**	Middle Wall - Bottom		
532101324-0004		**Homogeneity**	Heterogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	08/12/2021	Various	<1.00% Glass	100.00% Other	**Inconclusive: None Detected**
TEM NYS 198.4 NOB	08/12/2021	Various		100.00% Other	**None Detected**
Sample ID SACM-3-1-Paint		**Description**	Wall by Gate - Light Tan Paint SC/P		
532101324-0005		**Homogeneity**	Homogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	08/12/2021	Tan		100.00% Other	**Inconclusive: None Detected**
TEM NYS 198.4 NOB	08/12/2021	Tan		100.00% Other	**None Detected**

Initial report from: 08/12/2021 13:27:26

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Tel/Fax: (585) 957-9436 / (585) 957-9437
http://www.EMSL.com / rochesterlab@EMSL.com

EMSL Order: 532101324
Customer ID: SRNY42
Customer PO:
Project ID:

Test Report:Asbestos Analysis of Bulk Material

Test	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos
Sample ID SACM-3-1-Plaster *532101324-0005A*		**Description** Wall by Gate - Light Tan Paint SC/P **Homogeneity** Homogeneous			
PLM NYS 198.1 Friable	08/12/2021	Gray		100.00% Non-fibrous (other)	**None Detected**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB					**Not Analyzed**
TEM NYS 198.4 NOB					**Not Analyzed**
Sample ID SACM-3-2-Paint *532101324-0006*		**Description** Wall by Gate - Light Tan Paint SC/P **Homogeneity** Heterogeneous			
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	08/12/2021	Gray/ Tan		100.00% Other	**Inconclusive: None Detected**
Result includes a small amount of inseparable attached material					
TEM NYS 198.4 NOB	08/12/2021	Gray/ Tan		100.00% Other	**None Detected**
Sample ID SACM-3-2-Plaster *532101324-0006A*		**Description** Wall by Gate - Light Tan Paint SC/P **Homogeneity** Homogeneous			
PLM NYS 198.1 Friable	08/12/2021	Gray		100.00% Non-fibrous (other)	**None Detected**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB					**Not Analyzed**
TEM NYS 198.4 NOB					**Not Analyzed**
Sample ID SACM-3-3-Paint *532101324-0007*		**Description** Wall by Gate - Light Tan Paint SC/P **Homogeneity** Heterogeneous			
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	08/12/2021	Various		100.00% Other	**Inconclusive: None Detected**
Result includes a small amount of inseparable attached material					
TEM NYS 198.4 NOB	08/12/2021	Various		100.00% Other	**None Detected**
Sample ID SACM-3-3-Plaster *532101324-0007A*		**Description** Wall by Gate - Light Tan Paint SC/P **Homogeneity** Homogeneous			
PLM NYS 198.1 Friable	08/12/2021	Gray		100.00% Non-fibrous (other)	**None Detected**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB					**Not Analyzed**
TEM NYS 198.4 NOB					**Not Analyzed**
Sample ID SACM-4-1-Paint *532101324-0008*		**Description** Wall by Gate - Dark Tan Paint SC/P **Homogeneity** Heterogeneous			
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	08/12/2021	Various		100.00% Other	**Inconclusive: None Detected**
Result includes a small amount of inseparable attached material					
TEM NYS 198.4 NOB	08/12/2021	Various		100.00% Other	**None Detected**

Initial report from: 08/12/2021 13:27:26

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http://www.EMSL.com / rochesterlab@EMSL.com

EMSL Order: 532101324
Customer ID: SRNY42
Customer PO:
Project ID:

Test Report:Asbestos Analysis of Bulk Material

Test	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos
Sample ID SACM-4-1-Plaster *532101324-0008A*		**Description** Wall by Gate - Dark Tan Paint SC/P **Homogeneity** Homogeneous			
PLM NYS 198.1 Friable	08/12/2021	Gray		100.00% Non-fibrous (other)	**None Detected**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB					**Not Analyzed**
TEM NYS 198.4 NOB					**Not Analyzed**
Sample ID SACM-4-2-Paint *532101324-0009*		**Description** Wall by Gate - Dark Tan Paint SC/P **Homogeneity** Heterogeneous			
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	08/12/2021	Various		100.00% Other	**Inconclusive: None Detected**
Result includes a small amount of inseparable attached material					
TEM NYS 198.4 NOB	08/12/2021	Various		100.00% Other	**None Detected**
Sample ID SACM-4-2-Plaster *532101324-0009A*		**Description** Wall by Gate - Dark Tan Paint SC/P **Homogeneity** Homogeneous			
PLM NYS 198.1 Friable	08/12/2021	Gray		100.00% Non-fibrous (other)	**None Detected**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB					**Not Analyzed**
TEM NYS 198.4 NOB					**Not Analyzed**
Sample ID SACM-4-3-Paint *532101324-0010*		**Description** Wall by Gate - Dark Tan Paint SC/P **Homogeneity** Heterogeneous			
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	08/12/2021	Various		100.00% Other	**Inconclusive: None Detected**
Result includes a small amount of inseparable attached material					
TEM NYS 198.4 NOB	08/12/2021	Various		100.00% Other	**None Detected**
Sample ID SACM-4-3-Plaster *532101324-0010A*		**Description** Wall by Gate - Dark Tan Paint SC/P **Homogeneity** Homogeneous			
PLM NYS 198.1 Friable	08/12/2021	Gray		100.00% Non-fibrous (other)	**None Detected**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB					**Not Analyzed**
TEM NYS 198.4 NOB					**Not Analyzed**
Sample ID SACM-5-1-Paint *532101324-0011*		**Description** Southern Wall - SC/P **Homogeneity** Heterogeneous			
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	08/12/2021	Gray		100.00% Other	**Inconclusive: None Detected**
Result includes a small amount of inseparable attached material					
TEM NYS 198.4 NOB	08/12/2021	Gray		100.00% Other	**None Detected**

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EMSL Order: 532101324
Customer ID: SRNY42
Customer PO:
Project ID:

Test Report:Asbestos Analysis of Bulk Material

Test	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos
Sample ID SACM-5-1-Plaster *532101324-0011A*		**Description** Southern Wall - SC/P **Homogeneity** Homogeneous			
PLM NYS 198.1 Friable	08/12/2021	Gray		100.00% Non-fibrous (other)	**None Detected**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB					**Not Analyzed**
TEM NYS 198.4 NOB					**Not Analyzed**
Sample ID SACM-5-2-Paint *532101324-0012*		**Description** Southern Wall - SC/P **Homogeneity** Heterogeneous			
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	08/12/2021	Various		100.00% Other	**Inconclusive: None Detected**
Result includes a small amount of inseparable attached material					
TEM NYS 198.4 NOB	08/12/2021	Various		100.00% Other	**None Detected**
Sample ID SACM-5-2-Plaster *532101324-0012A*		**Description** Southern Wall - SC/P **Homogeneity** Homogeneous			
PLM NYS 198.1 Friable	08/12/2021	Gray		100.00% Non-fibrous (other)	**None Detected**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB					**Not Analyzed**
TEM NYS 198.4 NOB					**Not Analyzed**
Sample ID SACM-5-3-Paint *532101324-0013*		**Description** Southern Wall - SC/P **Homogeneity** Heterogeneous			
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	08/12/2021	Various		100.00% Other	**Inconclusive: None Detected**
TEM NYS 198.4 NOB	08/12/2021	Various		100.00% Other	**None Detected**
Sample ID SACM-5-3-Plaster *532101324-0013A*		**Description** Southern Wall - SC/P **Homogeneity** Homogeneous			
PLM NYS 198.1 Friable	08/12/2021	Gray		100.00% Non-fibrous (other)	**None Detected**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB					**Not Analyzed**
TEM NYS 198.4 NOB					**Not Analyzed**
Sample ID SACM-6-1 *532101324-0014*		**Description** Southern Wall - JF **Homogeneity** Homogeneous			
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	08/12/2021	White		100.00% Other	**Inconclusive: None Detected**
TEM NYS 198.4 NOB	08/12/2021	White		100.00% Other	**None Detected**

Initial report from: 08/12/2021 13:27:26

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EMSL Order: 532101324
Customer ID: SRNY42
Customer PO:
Project ID:

Test Report:Asbestos Analysis of Bulk Material

Test	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos
Sample ID SACM-6-2 *532101324-0015*		**Description**	Southern Wall - JF		
		Homogeneity	Homogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	08/12/2021	White		100.00% Other	**Inconclusive: None Detected**
TEM NYS 198.4 NOB	08/12/2021	White		100.00% Other	**None Detected**

Initial report from: 08/12/2021 13:27:26

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EMSL Order: 532101324
Customer ID: SRNY42
Customer PO:
Project ID:

Test Report:Asbestos Analysis of Bulk Material

The samples in this report were submitted to EMSL for analysis by Asbestos Analysis of Bulk Materials via NYS ELAP Approved Methods. The reference number for these samples is the EMSL Order ID above. Please use this reference number when calling about these samples.

Report Comments:

Sample Receipt Date: 8/3/2021 Sample Receipt Time: 11:38 AM
Analysis Completed Date: 8/12/2021 Analysis Completed Time: 7:55 AM

Analyst(s):

Jessica Schwartz PLM NYS 198.1 Friable (9)

Jessica Schwartz PLM NYS 198.6 NOB (15)

Peter Donato TEM NYS 198.4 NOB (15)

Samples reviewed and approved by:

Peter Donato, Laboratory Manager
or Other Approved Signatory

Samples analyzed by EMSL Analytical, Inc. Rochester, NY NYS ELAP 12088, NVLAP Lab Code 600183-0

Initial report from: 08/12/2021 13:27:26

APPENDIX E: ENVIRONMENTAL MANAGEMENT PLAN

Environmental Management Plan
Brewery Line Trail Construction Project
Rochester, New York

September 16, 2021

Prepared for:

City of Rochester
Dept. of Environmental Services Development Division, Room 300B
City Hall, 30 Church Street Rochester, NY 14614-1279

Prepared by:

Stantec Consulting Services Inc.
61 Commercial Street, Suite 100
Rochester, New York 14614

Project No. 213414039

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Prepared by _____
(signature)

Steve Campbell
Environmental Scientist

Technical Review by _____
(signature)

Dwight Harrienger, PE
Sr. Environmental Project Manager

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Abbreviations

ACM	Asbestos Containing Material
CAMP	Community Air Monitoring Plan
DEQ	Division of Environmental Quality
DER-10	DER-10 Technical Guidance for Site Investigation and Remediation
EC	Engineering Control
ELAP	Environmental Laboratory Approval Program
EMP	Environmental Management Plan
ESA	Environmental Site Assessment
eV	Electron Volt
ft bgs	feet below ground surface
HASP	Health and Safety Plan
HUD	U.S. Department of Housing and Urban Development
IC	Institutional Control
IDW	Investigation-Derived Waste
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
OSHA	Occupational Health and Safety Administration
PAH	Poly-Nuclear Aromatic Hydrocarbon
PCBs	Polychlorinated Biphenyls
PID	Photoionization Detector
POGW	Protection of Groundwater
PPE	Personal Protective Equipment
ppm	parts per million
QEP	Qualified Environmental Professional
REC	Recognized Environmental Condition
RU	Residential Use
SCO	Soil Cleanup Objective
SVOC	Semi-Volatile Organic Compound
TAL	Target Analyte List
TCL	Target Compound List
TCLP	Toxicity Characteristic Leaching Procedure
TPH	Total Petroleum Hydrocarbons
VOC	Volatile Organic Compound

1.0 INTRODUCTION

This document presents the **Environmental Management Plan (EMP)** to be used during excavation and construction activities for the Brewery Line Trail Construction Project (BLTCP). This EMP presents background information on the historical uses of the Property and provides guidance on how to address known and potential impacts from environmental contamination that may be encountered during project construction activities. Environmental impacts were identified during a May 17, 2021, Phase I Environmental Site Assessment (ESA) and an August 16, 2021, Phase II ESA that were completed to assist with planning for the BLTCP.

2.0 BACKGROUND INFORMATION

2.1 PROJECT LOCATION

The project location is shown on **Figure 1** and includes the following parcels:

- Upper Falls Terrace Park ("the Park"), consists of 2.13 acres and is located at 305-365 Saint Paul Street (SBL# 106.70-1-27),
- 295 St. Paul Street (the Former Rail Parcel) consists of 0.87 acres of a former railroad line and currently consists of vacant land; (SBL# 106.70-28.001). This portion of the former rail line adjoins the western boundary of the park and extends north from the park beyond the Pont Du Rennes Bridge; and
- 369 St. Paul Street covering 1.31 acres which houses a City building and extends into the Genesee River Gorge down to the water line (SBL#106.70-1-29).

A review of proposed design drawings shows that City plans to renovate the park by removing outdated features such as sidewalks, light poles, a concrete tunnel and various landscaping. The Park will be improved with new bench seats, grills, and landscaping such as trees. A recreational trail will be constructed atop of the former rail line parcel and will receive improvements including resurfacing, landscaping, lighting upgrades and seating. The proposed design will require earth disturbance such as regrading and excavation cuts to incorporate utility upgrades, drainage, and other features. Removal of existing railroad ties and bedding to facilitate construction of the proposed trail will also be necessary.

2.2 PHASE I ENVIRONMENTAL SITE ASSESSMENT

A Phase I Environmental Site Assessment of the project properties was completed in May of 2021 to document available information on historical property use and recognized environmental conditions (RECs) at the Property. The Phase I ESA was conducted in conformance with the requirements of the American Society for Testing and Materials (ASTM) Designation E 1527-13 (Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process). The results of the

Phase I ESA, which were presented in a report titled "Phase I Environmental Site Assessment, Brewery Line Trail Project, Rochester, New York" (Stantec, May 17, 2021), are summarized below.

2.2.1 Recognized Environmental Conditions

The Phase I ESA revealed evidence of the following Project-specific RECs.

- REC #1: A railroad was located on the Property since at least the early 1890s ceasing operations between 1960 and 1980. The former New York Central Hudson River Railroad (NYCHRRR) traversed the length of the 295 St. Paul Street parcel, with two sidings extending east across the 305-365 St. Paul Street parcel. The rail lines and/or sidings have since been removed or partially covered in the development of the park on the Property. During our site visit, over 500 visible railroad ties were noted onsite. Historically, railroad properties have been found to be impacted by herbicides, metals, constituents of oil or fuel, PCBs, and wood preservatives such as creosote. The historical presence of railroad lines, as well as remaining railroad ties onsite, was identified as a REC for the Property.

- REC #2: Based on historical Sanborn and Plat Maps, there were former structures on the Property (Upper Falls Terrace Park) from at least 1892 through 1971 that have since been demolished. There is the potential for debris from demolition of the former structures to be buried onsite. These materials may contain regulated building materials (RBM) such as lead based paint (LBP), PCBs, underground storage tanks (USTs) and/or asbestos containing building materials (ACBMs). The past presence of buildings on the Property was identified as a REC for the Property.

- REC #3: According to historical records review, the Property has been utilized in a commercial and industrial capacity from at least 1892 through the 1970s, when the Property was converted into a city park. Operations onsite included The Rochester Casket Co. followed by the Rochester Burial Case Company Inc. which occupied a portion of the Property at 305 St. Paul Street from 1923 until at least 1950. A portion of the 305-365 St. Paul Street section of the Property housed the Rochester Iron & Metal Co. Inc. and operated in such capacity from at least 1923 until the 1970s. Several coal companies, Drake H F Coal Co., Langie L C Coal Co., and Beechwood Coal Co Inc. were located on the Property from 1923 through the early 1940s. From 1928 until at least 1938, a portion of the Property formerly designated as 307 and 309 St. Paul Street housed various automotive facilities, including: an auto supplies facility and a City bus garage. Fire Department records show a permit granted to Rochester Transit Corporation in February of 1941 for the in-place closure of a 2,000-gallon underground tank at 309 St. Paul Street. This address is shown as Co-Ordinated Bus Lines Inc Garage, Rochester Interurban Bus Co. on the 1935 Platt Map. The contents of the tank and its location are not specified. City Fire Department records also include a permit to store gasoline for a 400-gallon tank at 325 St. Paul Street (the former Rochester Iron and Metal Company). The permit does not specify whether the tank was above or below ground. There is no permit listed for the removal of this tank. Further, a fuel service station was listed at the address of 357 St. Paul Street in 1943. Other industrial and/or commercial

businesses located on the Property included machine shops and industrial metal companies. The historical industrial and commercial use of the Property was identified as a REC.

- REC #4: In previous Geotechnical Consultations conducted by Foundation Design, P.C., soils within the current High Falls Terrace Park were noted to consist of topsoil, fill material, and native soil. Fill material on the Property included some brick, building debris, and cinders. The presence of fill material onsite was identified as a REC for the Property.
- REC #5: During a limited Soil Characterization study prepared by Ravi Engineering and Land Surveying (RELS) for McCord Landscape Architecture, samples of onsite soils collected and analyzed were identified to be above New York State Department of Environmental Conservation (NYSDEC) Restricted Use-Restricted Residential (RR) soil cleanup objectives (SCOs) which are applicable to parkland. Analytical results showed concentrations of metals (arsenic, cadmium, lead, mercury, selenium, and silver) and/or SVOCs (Benzo (a) anthracene, Benzo (a) pyrene, Benzo (b) fluoranthene, Benzo(k)fluoranthene, Chrysene, Dibenz(a,h)anthracene, and Indeno (1,2,3-cd) pyrene) at levels above RR SCOs. The presence of chemical compounds in on-site soils at concentrations exceeding NYSDEC RR SCOs was identified as a REC.

Figures 2A and 2B provide an overlay of historic site features as they related to the proposed project design. Sampling locations from this Phase II Assessment and previous soils testing completed by RELS are also included.

2.3 PHASE II ENVIRONMENTAL SITE ASSESSMENT

Based on the identified RECs a Phase II ESA was recommended to further evaluate data gaps identified in Stantec's Environmental Gap Analysis Summary ("Gap Analysis") report dated July 23, 2021, and to provide the City of Rochester ("the City") with associated findings and an opinion of probable costs (OPC) to address potential environmental impacts during construction on the proposed BLTCP.

The Phase II ESA was performed in accordance with the "Environmental Gap Analysis Summary Report and Proposal for Supplemental Environmental Site Assessment, Brewery Line Trail Project, 305-365 Saint Paul Street, 295 St. Paul Street and 369 St. Paul Street, Rochester, New York, Stantec, July 23, 2021). The Scope of Work was reviewed and approved by the Division of Environmental Quality of the City of Rochester Department of Environmental Services prior to implementation of investigation activities.

The Phase II ESA consisted of the environmental work tasks noted below.

2.3.1 Sampling and Analysis of Railroad Ties and Surrounding Bedding

Stantec had discussions with the potential disposal destination (Waste Management) and the City of Rochester Department of Environmental Services (DES) regarding the required number of samples and laboratory analysis for disposal and associated costs for the railroad ties and surrounding bedding. The tasks identified below were completed to address suggested sampling and analytical testing.

1. Direct push borings were completed in two locations to depths of four feet below ground surface to assess railroad bedding and shallow subsurface soil conditions and to collect samples. Collected samples were sent to Paradigm Environmental Services, Inc. of Rochester ("Paradigm") an Environmental Laboratory Approval Program (ELAP) certified laboratory (ELAP #10958) and analyzed for semi-volatile organic compounds and total metals.
2. Soil samples were visually inspected, logged and described in terms of grain size distribution and potential fill materials, and inspected for indications of staining, sheen, etc.
3. The soil samples were screened with a photoionization detector (PID) for the potential presence of volatile organic compounds (VOCs). Soil descriptions, PID screening results and other observations were documented in boring logs included in **Attachment A**.
4. One representative sample of an existing railroad tie was collected using a wood coring tool attached to a powered hand drill. The collected sample was sent to Paradigm and analyzed for semi-volatile organic compounds – acid fraction and total metals.
5. Sample analytical results have been compared to existing applicable state and federal regulations to determine if the railroad ties and/or bedding are defined as hazardous waste(s).

Sample locations are depicted on Figure 3A and 3B and a discussion of Stantec's findings and conclusions is provided in Section 2.3.3 of this EMP.

2.3.2 Soil Borings and Test Pit Excavations Along Proposed Utility Upgrades

2.3.2.1 Soil Borings

Thirteen borings were advanced using a direct push drill rig. Selected locations were based on areas where subsurface soils will be disturbed during construction (utility upgrades for electricity and stormwater and cuts for regrading). Depths of the borings varied from four to twelve feet below ground surface (bgs) depending on locations and the projected depth of utility (electric and stormwater drainage) installations. Boring number SB01-BLT on the northern most portion of the proposed trail was advanced to the depth necessary to install utilities in that area (approximately four feet) with borings along the same utility corridor advancing to deeper depths (approximately twelve feet bgs) on the eastern portion of the project corridor.

Soil samples were obtained from the borings by inserting a clear acetate liner into a hollow, stainless-steel coring barrel and driving the coring barrel into the subsurface using a hydraulically driven hammer. Soil was continuously logged for lithologic characteristics. The lithologic soil classification, physical characteristics, odors, and other observed soil conditions were documented on individual test boring logs. The recovered soil was screened for visual/olfactory observations and for VOCs using a photoionization detector (PID) equipped with a 10.6 electron-volt lamp. PID readings were documented on field data sheets and boring logs.

During the project, eight soil samples from the borings were analyzed for the following parameters that are consistent with likely contaminants associated with historical land uses as identified by the Phase I ESA:

Soil samples collected from the borings were analyzed by Paradigm for the following laboratory analysis parameters:

- VOCs (NYSDEC Part 375/CP-51 lists) using USEPA Method8260C;
- SVOCs (NYSDEC Part 375/CP-51 lists) using EPA Method 8270D;
- RCRA metals using EPA Methods 6010D/7471B; and
- PCBs using EPA Method 8082A.

Boreholes were backfilled with their original drill cuttings and the ground surface restored to match preexisting conditions to the extent practical. Sample locations are depicted on Figure 3A and 3B and a discussion of Stantec's findings and conclusions is provided in Section 2.3.3 of this EMP.

2.3.2.2 Test Pit Excavations

Due to the potential presence of buried building materials, concrete slabs and railroad sidings, four test pits (TE-01-BLT through TE-04-BLT on **Figures 3A and 3B**) were completed to provide a broader view of the subsurface in the area where the new stormwater line is proposed. Test pits were advanced to native soil and/or excavation refusal, whichever occurred first. Excavated soils were monitored with a PID and evaluated for odors and staining as indicators of potential environmental impacts. Test pit dimensions, orientation, and a lithologic description were recorded, and photographs were taken at each location. Test Pit Logs are included in Attachment B.

Soil samples were collected from all four test excavations at depths determined by the Field Team Leader. Soil samples from the test pits were analyzed for the following parameters:

- VOCs (NYSDEC Part 375/CP-51 lists) using USEPA Method 8260C;
- SVOCs (NYSDEC Part 375/CP-51 lists) using EPA Method 8270D;
- RCRA metals using EPA Methods 6010D/7471B; and
- PCBs using EPA Method 8082A.

Analytical results were evaluated against NYCRR Part 375 for restricted residential (RR) and commercial (C) soil cleanup objectives to determine if materials excavated during construction may be reused in the original excavation, as fill on the same parcel or require off-site disposal.

The Phase II ESA drilling, test-pit-excavation and sampling activities did not generate soil or water that required management as investigation-derived waste. Excess spoils from each boring and test pit were returned to the boring or excavation, and backfilled test pits were compacted with the excavator bucket and regraded to approximate existing conditions.

Phase II ESA test pit soil and test boring soil samples collected for analysis of parameters other than asbestos were submitted to Paradigm Environmental Services, Inc. in Rochester, New York, which is a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) laboratory.

2.3.2.3 Sampling for Asbestos Containing Materials

Twenty samples of six homogeneous materials were collected by a NYS licensed asbestos surveyor to evaluate the potential for ACM in paint and joint compound on the retaining wall near the observation platform. This wall is proposed for demolition and removal as part of the project. Samples were collected and analyzed in accordance with NYS Code Rule 56 criteria (12 NYCRR Part 56).

Samples for asbestos were not collected from homogenous areas where the inspector determined that the material was a non-ACM (such as materials that were obviously metal or concrete). Samples of materials identified as suspect ACM by the survey inspectors were collected using guidelines outlined in NYS Industrial Code Rule 56.

Following collection, the suspect asbestos containing building material (SACBM) samples were submitted to an accredited New York State Department of Health (NYSDOH) ELAP laboratory (EMSL Analytical, Inc. Rochester, NY, ELAP #12088) for analysis of asbestos content by Polarized Light Microscopy (PLM), Gravimetric Matrix Reduction (GMR) and/or Transmission Electron Microscopy (TEM). The bulk sample asbestos analytical report is presented in **Attachment C**, along with the chain of custody report.

There was no visible evidence of SACBM (e.g., pieces of tile, insulation, roofing, etc.) observed in test borings or test excavations. As a result, no ACM sample analysis was required.

2.3.2.4 Comparison Criteria for Evaluation of Sample Analysis Results

Given the setting and proposed public use of the project corridor, Phase II ESA soil sample analysis results have been compared to NYSDEC's Part 375 Environmental Remediation Program Soil Cleanup Objectives (SCOs) for Protection of Public Health at RR Use sites (the Part 375 RR SCOs).

Soil sample analysis results were also evaluated by comparison to NYSDEC Part 375 SCOs for Protection of Groundwater (POGW SCOs). The Part 375 RR and POGW SCOs are the comparison criteria used to evaluate eligibility for beneficial use of excavated fill material under NYSDEC Part 360 Solid Waste regulations.

For purposes of confirming that fill material to be disposed of off-site will be eligible to be managed as non-hazardous solid waste, results of analyses of test pit samples were compared to state and federal characteristic hazardous waste thresholds for reactivity, ignitability, corrosivity and total metals. Follow-up analysis using the Toxicity Characteristic Leaching Procedure (TCLP) was performed on those test pit and/or soil boring samples in which lead was detected at a concentration above 100 milligrams per kilogram (mg/kg, equivalent to parts per million, ppm). The results of the TCLP analyses were compared to the state and federal toxicity characteristic hazardous waste threshold for lead of 5 milligrams per liter (mg/L, also equivalent to ppm). The Hazardous waste thresholds were exceeded in one sample (TE-01 BLT) in Area 2B as shown on drawing M-1 of the BLTCP design drawings. Other samples collected in the vicinity of TE-01 BLT did not exceed hazardous waste thresholds.

2.3.2.5 Laboratory Analysis Summary

The following table provides a summary of soil samples and ACM samples collected and submitted to Paradigm and EMSL for analysis of compounds of concern.

		Number of Samples				
Analysis Parameters	**USEPA Analytical Method**	**Shallow Soils**	**Railroad Ties**	**Soil Borings***	**Test Pits****	**Retaining Wall**
TCL and CP-51 List VOCs	8260	2		8	4	
TCL and CP-51 Semi-Volatile Base Neutrals (SVBNs)	8270	2	1	8	4	
Polychlorinated Biphenyls (PCBs)	8082	2		8	4	
8 RCRA Metals	6010 & 7471	2	1	8	4	
ACM				0	0	6

* One sample each from Borings SB-01, SB-02, SB-03, SB-04, SB-05, SB-08, SB-09, and SB-11.

** One sample each from each of four Test Pits.

2.3.3 Summary of Findings with Potential to Impact Project Construction

The following summary presents conclusions on the environmental management conditions that are likely to apply in each investigation area given the results of the sampling performed in that area.

Overall Site Conditions

The following conditions will apply generally to the entire project area.

- This Environmental Management Plan (EMP) includes the findings of Stantec's Phase I and II ESAs. The EMP will serve as a guide to be used should materials be encountered during construction that were not identified during previous environmental investigation.
- An environmental monitoring representative should be present during all excavation activities as a required element of the EMP to be used during construction for the project. If monitoring results indicate that excavated material contain more than a *de minimis* (minor) amount of non-soil components such as ash and cinders or other waste materials, or the monitoring indicates evidence of petroleum or other contamination, such material would not be eligible for beneficial use as General Fill on the project without further handling and testing. Such materials would need to be segregated from apparently uncontaminated material and either removed for off-site landfill disposal or managed on site in a manner that meets the requirements of the Part 360 regulations. Large pieces of excavated concrete or other encountered materials (i.e. mortar and brick) should not be considered for re-use in landscaping berms or reused as fill on the project.

- For all project excavation areas, approval by NYSDEC of a case-specific beneficial use determination (BUD) application may be needed to allow for re-use of fill material that doesn't meet General Fill criteria in landscaping berms or under pavements, even if the material meets the Part 360 physical criteria and maximum concentration levels for Restricted Use Fill or Limited Use Fill. No excavated material should be moved from one parcel to another as BUD requirements could be triggered. Boundaries for each of the three land parcels that make up the project corridor should be surveyed and marked by a licensed land surveyor prior to starting project construction.

- If monitoring results indicate the only evidence of impacts is the apparent presence of petroleum or other chemical contamination rather than visible physical evidence of waste components (the material has no more than a *de minimis* amount of ash and cinders, bricks and concrete, etc.), the material can be stockpiled and sampled for lab analysis to determine if chemical contamination exceeds Part 360 limits for General Fill. Material exhibiting petroleum or other chemical odors or staining or elevated PID readings should not be considered for re-use in landscaping berms.

2.3.3.1 Removal of Existing Railroad Ties and Bedding Materials (Excavation Area 1)

A railroad was located on the Property since at least the early 1890s ceasing operations between 1960 and 1980. The former New York Central Hudson River Railroad (NYCHRRR) traversed the length of the 295 St. Paul Street parcel, with two sidings extending east across the 305-365 St. Paul Street parcel. The rail lines and/or sidings have since been removed or fully or partially covered in the development of the park on the Property. Approximately 500 visible railroad ties were noted onsite of which approximately 400 are located within the proposed trail upgrades to the project corridor. To prevent settling of the newly constructed trail, the removal of railroad ties by is required prior to construction.

Laboratory analysis from a sample of a representative railroad tie and two samples of surrounding bedding material has shown that these materials can be transported to Waste Management's High Acres facility (or another applicably permitted facility) and disposed of in accordance with applicable solid waste management transport and disposal regulations. The area designated for removal is shown on Figure 4A as Excavation Area 1 and designated with its own line weight. Laboratory Summary Tables showing exceedances of RR SCOs are included in Attachment C and the complete laboratory analytical report for the project can be found in Attachment D.

Excavated railroad ties or preserved timbers should not be included in materials to be re-used in landscaping berms on the project and should be managed for off-site disposal in accordance with Part 360.

2.3.3.2 Installation of Proposed Stormwater Drainage Line (Excavation Area 2A)

Based on the historical Sanborn and Plat Maps, and environmental assessments completed to date, there were former structures on the Property from at least 1892 through 1971 that have since been demolished. Stantec completed a series of borings and test pits to evaluate the potential for environmental impacts and/or buried building materials, structures, and potentially buried rail lines along the proposed storm sewer excavation and in other areas where utility excavations are proposed along the proposed trail and in the existing park.

Test pits and borings completed in Excavation Area 2A did show buried cobbles, stone and footer materials (hard fill). These materials were noted at depths ranging from approximately one to four feet below ground surface. No rail lines, railroad ties or building materials with suspect asbestos containing materials were observed. If the storm sewer installation is implemented at the location and current depth proposed, the contractor will encounter the materials noted above. The hard fill materials will require off-site disposal in accordance with applicable NYSDEC Part 360 regulations.

Laboratory analysis from representative samples in Excavation Area 2 show soils in that area are acceptable for reuse in the original excavation (if acceptable to the site design engineer) or as fill material on the same parcel. Any soils that are reused on the same parcel must be buried beneath at least one foot of acceptable cover material. The area designated for removal is shown on Figure 4B as Excavation Area 2A and designated in green and shown with its own line weight (in case drawings are copied in black and white). Laboratory Summary Tables showing exceedances of restricted residential SCOs are included in Attachment D and the complete laboratory analytical report for the project can be found in Attachment E.

2.3.3.3 Installation of Proposed Stormwater Drainage Line (Excavation Area 2B)

According to historical records review, the Property where Excavation 2B is located has been utilized in a commercial and industrial capacity from at least 1892 through the 1970s, when the Property was converted into a city park. Operations onsite housed the Rochester Iron & Metal Co. Inc. and operated in such capacity from at least 1923 until the 1970s. Several coal companies, Drake H F Coal Co., Langie L C Coal Co., and Beechwood Coal Co Inc. were located on or near this area from 1923 through the early 1940s. From 1928 until at least 1938, a portion of the Property formerly designated as 307 and 309 St. Paul Street housed various automotive facilities, including: an auto supplies facility and to the south a Rochester City bus garage.

Analytical results from Stantec test excavation TE-01-BLT (TE-01) and soil boring SB-04-BLT (SB-04) 4 in this area showed total lead levels of 11,400 and 1,450 mg/kg respectively, TE-01 also showed several SVOC compounds above restricted residential SCOs. Both of these samples were collected from depths of one to two feet below ground surface. Upon receipt of laboratory results Stantec contacted Paradigm and requested additional analysis on samples TE-01 and SB-04 to determine if the material would be considered hazardous waste. Other samples collected from the remainder of the proposed storm sewer excavation area did not show elevated levels of metals or SVOCs.

Laboratory results from the TCLP analysis show that the sample from SB-04 does not meet the definition of a hazardous waste. The analysis from sample TE-01 did exceed the hazardous waste value for lead (5 mg/l) at a concentration of 68 mg/l. Based on the laboratory analysis results and field observations we have projected a volume of 85 tons of soil from Area 2B will be require removal from the site and disposal as hazardous waste at an approved facility. The area and volume for soils removal is shown on Figure 4B as Excavation Area 2B, and is shown with its own line weight. Laboratory Summary Tables are included in Attachment C and the complete laboratory analytical report for the project can be found in Attachment D.

2.3.3.4 Cut Area Near Viewing Platform for Regrading to Construct Trail Connection (Excavation Area 3)

During a limited soil characterizations study prepared by RELS for MLA (Brewery Line Trail Soil Characterization Report, July 2020), samples of onsite soils collected and analyzed at locations B-03S, B-05S, B-06S and B07S in this area identified SVOCs above New York State Department of Environmental Conservation (NYSDEC) Restricted Use-Restricted Residential (RR) soil cleanup objectives (SCOs) which are applicable to parkland. These materials were identified in samples collected from one to two feet below ground surface. Analytical results for additional samples collected from this area during Stantec's Phase II ESA did not show concentrations of metals and/or SVOCs at levels above RR SCOs.

Based on the finding of RELS's soil sampling and subsequent soil sampling completed by Stantec in this area it is our professional opinion that these materials are suitable for reuse as area (non-structural) fill during regrading as long as they remain within the same property boundary. Any soils that are reused on the same parcel must be buried beneath at least one foot of acceptable cover material. If the materials require removal and off-site disposal then applicable regulated waste handling, transport and disposal requirements will apply.

The soil area available for reuse is shown on Figure 4B. The area is shown as Excavation Area 3, designated with its own line weight.

2.3.3.5 Retaining Wall Demolition

The retaining wall along the southern end of the project corridor near the terrace is proposed to be removed. Samples collected and analyzed for potential for asbestos containing materials (ACM) did not show the presence of asbestos. Materials generated from the wall demolition cannot be used as onsite fill and will need to be transported to an approved facility for disposal.

2.3.3.6 Relocation of Metal Fence Railing

The existing metal railing that is to be sanded, repainted and in some cases relocated and reinstalled is assumed to have at least one layer of lead-based paint. It is recommended that Safe Work Practices for handling materials with lead-based paint be incorporated during this work.

3.0 ENVIRONMENTAL MANAGEMENT PLAN

3.1 OBJECTIVES

The EMP describes procedures and methods to be used to address known and potential impacts from environmental contamination that may be encountered during BLTCP construction activities. The EMP is intended to provide guidance for the identification, characterization, and management (on-site handling and ultimate on/or off-site disposition) of environmentally impacted soil and other subsurface materials that may be encountered during excavation or construction.

The EMP specifies screening procedures to be used during subsurface excavation or construction activities and health and safety and materials-handling and disposal procedures to be used during those activities to address known conditions and to address currently unknown conditions should contaminated soil or groundwater or other evidence of unanticipated potential contamination be encountered.

Proper management of impacted soil and, if encountered, groundwater requires that care be taken in identifying and characterizing the soil and groundwater encountered or disturbed during site development. Careful monitoring and characterization must allow for determination of the appropriate status of the materials (whether regulated or non-regulated) which will in turn allow for re-use of the soil on a project property as clean fill if appropriate, proper implementation of engineering and institutional controls if the soil is to remain on site, proper off-site beneficial use or controlled off-site disposal as waste.

3.2 NOTIFICATIONS, REVIEWS AND APPROVALS

The EMP is subject to review and approval by the City of Rochester before it can be implemented. Advance approval by the City is also required before modifications to the EMP can be implemented, and approval from the City must be received for all off-site soil re-use sites and off-site waste disposal sites before project materials can be transported to an off-site location. Finally, the City must be notified in advance of the start of site work activities, and City personnel or a third-party representative of the City must have free access to observe site work as necessary to monitor compliance with the EMP.

The two individuals to be contacted at the City for matters related to the EMP are as follows:

Jane M. H. Forbes
Sr. Environmental Specialist
Division of Environmental Quality
City Hall Room 300B
30 Church Street
Rochester, NY 14614
Email: jane.forbes@cityofrochester.gov
Phone: 585.428.7892 (office), 585.314.1719 (mobile)

Dennis Peck
Environmental Technician
City of Rochester, Division of Environmental Quality
City Hall Room 300B
30 Church Street
Rochester, NY 14614
Email: dennis.peck@cityofrochester.gov
Phone: 585.428.6884 (office) 585.469.6372 (mobile)

3.3 CONSTRUCTION PLANNING CONSIDERATIONS

During planning for the construction activities of the Project, the following elements will or may be affected by environmental management requirements:

- It is anticipated that contaminated fill material that is not eligible for beneficial use will be transported to a regulated landfill for disposal off-site in accordance with the subsequent provisions of this EMP and contract drawings and specifications. For the purposes of project planning, the contract drawings and specifications provide anticipated excavation and disposal volumes at each location likely to be managed for off-site disposal.

- Scheduling of construction must allow for management of unanticipated potentially contaminated material encountered during the course of construction. Should unanticipated materials or conditions be observed during excavation work, additional sampling may be required. Sampling will entail laboratory analysis, which typically takes at least a few days, and perhaps considerably longer, to be completed. Construction schedules and design plans must allow for adequate flexibility for sampling, segregation, and temporary stockpiling of unanticipated materials on site.

- Construction schedules must also provide both contingency time and measures to address variability in subsurface conditions and the presence of groundwater. For example, if hazardous conditions are encountered, additional site safety measures and use of personal protective equipment (PPE) by site workers may be required, as well as additional community air monitoring. Excavation dewatering and work stoppage could also affect construction schedules and costs.

- As with all underground excavation work, the parties performing invasive subsurface work are responsible for the safe performance of the work, the integrity and safety of excavations, and for protection of structures that may be affected by excavations (such as underground or aboveground utility lines, sidewalks or road surfaces and building foundations). Prior to commencement of any intrusive work, the presence of utilities and easements on the site must be ascertained via a Dig Safely NY stakeout, review of utility drawings, and interviews with

knowledgeable parties to determine if they are likely to be encountered so that appropriate plans can be developed.

3.4 IDENTIFICATION AND CHARACTERIZATION OF ENVIRONMENTAL IMPACTS

3.4.1 Monitoring During Excavation

Monitoring of materials encountered during construction is generally needed for three reasons:

- To protect the health and safety of project site workers during construction,
- To determine that soil/fill materials and groundwater conditions (if encountered) are consistent with the results of the previous characterization and sampling that has been performed, and
- To facilitate the proper and complete characterization of materials to be removed in accordance with disposal or re-use site requirements and applicable local, state and federal regulations.

3.4.1.1 Health and Safety Monitoring

Past investigations have shown that fill materials will be encountered during construction activities, and that impacted/contaminated soils are present in the areas specified on design drawing M-1. Based on the historical uses of the project area, other contaminated materials may be encountered. These include materials that could be present in site fill, contaminated soil in areas of historical fuel storage, railroad usage, and/or industrial/manufacturing. Although no groundwater was encountered during Phase II investigation activities it is also important to consider potential contaminants that may be present in groundwater, if encountered.

General groups of potentially hazardous materials subject to health and safety planning include:

- Semi-volatile organic compounds (SVOCs) – some are present in fuel-oil, also in motor oil or other lubricants or waste oil; PAHs commonly result from the incomplete combustion of organic matter including fossil fuels, such as coal or fuel oil, and are often found in ash, cinders and soot.
- Metals – present incidentally in ash and cinders or other fill materials.
- VOCs – can be related to former gasoline station operations or residential petroleum storage, also with paint or solvents.
- PCBs – can be associated with electrical equipment fluids or hydraulic oils.

Health and safety planning must also give consideration to other construction-related issues, such as use of heavy equipment, weather conditions, confined space entry, excavation safety and other construction-related Occupational Health and Safety Administration (OSHA) regulations.

Health and safety planning must be performed prior to construction activities. This should include the preparation of a written Health and Safety Plan (HASP) for construction activities. The HASP would be based on the results of the previous chemical analyses, information specific to the proposed development, specific construction tasks to be completed and the potential for exposure of Site workers to the Site contaminants.

Previous investigations show that while overall the potential for worker exposure exists, it is relatively low. However, all contractors and developers involved in earth moving and excavation activities must consider the need for health and safety planning relative to their specific tasks and planned activities. Furthermore, if hazardous waste or potentially hazardous conditions are encountered during project excavation activities, further work at the site is to be stopped until qualified contractor personnel with current OSHA HAZWOPER Health & Safety training (and equipped with appropriate personal protective and monitoring equipment) can be mobilized to continue the work until potentially hazardous conditions have been addressed or eliminated.

Presently available information indicates that site conditions do not warrant preparation and implementation of a Community Air Monitoring Plan (CAMP). However, should contamination be encountered that could present a risk of exposure to neighboring residents or others in the community from airborne vapors or particulates (dust) that may be generated during excavation or site grading activities, it may be necessary to implement a CAMP in the future. If a CAMP is needed, it should reflect the approach outlined in the NYSDOH Generic CAMP as described in Appendix 1A of the NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation (DER-10). To guard against potential exposures of site workers and neighborhood residents to ACM, implementation of a CAMP is required during excavation of every occurrence of a significant concentration of ACM demolition debris that may be encountered during project development activities.

3.4.1.2 Soil/Fill/Groundwater Monitoring

Field monitoring of soil and fill materials that are excavated and groundwater that is pumped during construction must be performed during all excavation and invasive work performed during development, such as excavations for foundations and utility work. Visual, olfactory and instrument-based (e.g. photoionization detector) soil screening must be performed by a trained environmental engineer, scientist, or geologist working under the direction of a qualified environmental professional (QEP) during all excavations into known or potentially contaminated material. Monitoring must generally consist of documentation of visible characteristics of the soil, fill and groundwater encountered, including obvious staining, sheens, odors, or other indicators of contamination such as oils, tars or containers. Monitoring must be performed during all earth moving, excavation and groundwater work.

Portable monitoring instruments are available to assist in field monitoring of materials. Such instruments are primarily used for detection of VOCs or dust and particulates. Types of instruments available for this purpose include:

- PIDs such as a MiniRae 3000 or equivalent – These instruments operate by pumping a sample of ambient air into a chamber where the air is ionized using a light source of specific energy (10.2, 10.6, or 11.7 eV).
- Combustible gas meters/gas monitors – These instruments are capable of measuring combustible gases such as petroleum vapors, methane or hydrogen sulfide and would be used during construction activities if orphan petroleum storage tanks or large amounts of wood debris such as railroad timbers are encountered.
- Dust/Particulate Meters (aerosol monitors such as a TSI DustTrak II or equivalent) – These instruments are capable of measuring dust and particulates in ambient air.

These instruments must be operated by individuals trained and experienced in their use, limitations and capability for data generation. Readings generated from monitoring instruments must be recorded in the field along with visual observations.

As long as excavation monitoring at a project property shows soil, fill, and groundwater material to be either uncontaminated or consistent with the findings for that property that were documented by the results of the Phase II ESA, then the material will be manageable as determined prior to construction. If conditions are different from those anticipated, then sampling and additional characterization may be necessary.

3.4.2 Additional Soil Fill Characterization

Supplemental sampling of excavated soil or subsurface materials or groundwater removed during subsurface work must be conducted if conditions encountered during construction are significantly different than those observed during pre-construction investigations. Examples include unusual odors or visual observations such as, stained soils, petroleum sheens or free-product, concentrations of demolition or debris or waste material, buried tanks, vaults, drums, containers, or unknown piping, etc.

In these situations, sampling frequency and analyses will depend on the types, conditions and quantities of material encountered and the anticipated re-use, re-cycling or disposal of the removed materials. The associated chemical analysis of samples obtained must adequately characterize materials in light of current NYSDEC 6 NYCRR Part 375 or Commissioner's Policy CP-51 Recommended SCOs, and/or permitted disposal or wastewater treatment facility requirements, depending on the intended destination of waste materials.

Potentially impacted soil and soil with known or apparent impacts considered for re-use on the project properties must have been tested in accordance with the procedures and sampling frequency specified in 6NYCRR 360.13.

Characterization of soil for the purposes of obtaining approval for disposal at a permitted solid waste landfill typically include some or all of the following analyses:

- Total VOCs and PAHs;
- TCLP VOCs;
- total Metals;
- pH, Ignitability, and Reactivity.

Depending on the nature of potential contaminants encountered and/or the intended disposal facility, the following additional waste disposal analyses may also be required:

- TCLP Metals;
- TCLP SVOCs;
- Total or TCLP Pesticides and Herbicides;
- PCBs.

Generally speaking, groundwater was not encountered during the Phase II ESA investigation activities at depths above the maximum excavation depth in the proposed storm sewer trench (10 feet below current grade) anticipated for the BLTCP. However, if groundwater is encountered during construction under conditions where pumping of groundwater from excavations becomes necessary, sampling of groundwater must be considered. In order to obtain approval to discharge potentially impacted groundwater to the Monroe County sewer system, the typical wastewater analyses that may be required include:

- Total VOCs, SVOCs (Acids and Base Neutrals), PCBs and chlorinated Pesticides;
- Total Petroleum Hydrocarbons (TPH); and
- arsenic, cadmium, chromium, copper, lead, nickel, silver and zinc.

A copy of a Monroe County Department of Environmental Services Specialty Short Term Discharge Permit application is presented in Attachment F.

Analysis of samples collected for characterization of excavated materials, groundwater or other liquids generated by construction activities must be analyzed by an environmental testing laboratory accredited to perform the required analyses under the NYSDOH ELAP.

3.5 MANAGEMENT OF EXCAVATED MATERIAL

Management of soil/fill excavated during construction activities must be performed in accordance with local, state and federal regulations. Methods to be used will depend on the nature and levels of contaminants present in the material and on the options for re-use or off-site disposal that are available at the time the work is performed.

3.5.1 Re-Use of Excavated Materials

3.5.1.1 Soil Material Without Known Impacts

1. Previously Undisturbed Native Overburden

For the purposes of this EMP, it is presumed that throughout the project area, undisturbed native overburden present beneath fill material, or beneath well-established topsoil layers at locations where fill deposits may be absent, can be managed for re-use as clean soil on site without testing. This presumption only applies if the native overburden:

- exhibits physical characteristics which identify it as undisturbed natural soil (characteristics such as sedimentary bedding or recognizable glacial till fabric);
- exhibits no apparent staining, no petroleum, solvent or chemical odors, no VOC impacts based on field monitoring results, and no other visible evidence of potential contamination; and
- is unsaturated (occurs above the water table), or if below the water table has been field-screened and exhibits no evidence of VOC or other contamination.

This presumption is based on the results of the soil sampling and analysis performed during the Phase II ESA, which indicated that the contamination present on project properties is essentially limited to metals and PAHs, contaminant classes with low mobility in soil. This presumption would not apply if unanticipated petroleum contamination or industrial waste material were to be encountered in overlying fill deposits during construction.

2. Soil Without SCO Exceedances

Excavated soil without exceedances of RR SCOs can be managed for re-use on the property as clean soil without further testing subject to the following requirements:

- The soil fill material must contain no more than a de minimis component of ash, cinders, brick fragments, concrete pieces, wood, asphalt, and/or glass. Soil containing layers or pockets of ash and cinders material or urban fill that are more than a few inches thick and are laterally extensive must be segregated from other material slated for re-use and managed as specified in this plan

for appropriate off-site disposal as regulated solid waste. Pockets or large items of debris such as bricks, wood, foundation stone, or pipes must similarly be segregated and managed for appropriate off-site recycling or disposal.

- The soil must not exhibit evidence of staining, petroleum, solvent or chemical odors, VOC impacts (based on field monitoring results), or other evidence of potential contamination.
- Fill soil which meets the two criteria listed above must if re-used on within the same parcel and be covered with 12 inches of soil or clean fill that contains only silt, sand, gravel and/or rock (contains no non-soil constituents such as brick pieces).

3.5.1.2 Environmentally Impacted Soil

1. General Provisions

Impacted (contaminated) soil that will be re-used on a project property must be segregated from unacceptable material on the basis of field screening, previous investigation findings, and/or additional pre-construction and/or construction sampling and analyses. The material being considered for re-use must have been tested to confirm that it meets the conditions of NYSDEC Part 360.13. The analysis results must be compared to applicable guidelines, and if concentrations are confirmed to be below NYSDEC's RR SCOs, the soil can be re-used on the property from which it was derived, but must be covered with at least 12 inches of clean soil or clean fill (or a permanent pavement). If the concentrations are above RR SCOs, the material must be transported off-Site for re-use or disposal as specified in Section 3.5.2 below.

A QEP must oversee the proper management of the excavated soils for re-use and ensure that procedures defined for materials re-use in this EMP are followed.

Excavated materials with high PID readings or with signs of staining or petroleum product or nuisance odor must not be considered appropriate for re-use and must be managed for proper off-site disposal. Demolition debris and organic matter debris (wood, roots, stumps, etc.) encountered during construction excavations and other solid waste derived from clearing and grubbing of the site must not be re-used on a project property.

2. Excavation Area 1

Laboratory analysis from a sample of a representative railroad tie and two samples of surrounding bedding material has shown that these materials can be transported to Waste Management's High Acres facility (or another applicably permitted facility) and disposed of in accordance with applicable solid waste management transport and disposal regulations. The area designated for removal is shown on Figure 4A as Excavation Area 1 and designated with its own line weight. Laboratory Summary Tables showing exceedances of RR SCOs are included in Attachment C and the complete laboratory analytical report for the project can be found in Attachment D.

Excavated railroad ties or preserved timbers should not be included in materials to be re-used in landscaping berms on the project and should be managed for off-site disposal in accordance with Part 360.

3. Excavation Area 2A

Laboratory analysis from representative samples in Excavation Area 2A show soils in that area are acceptable for reuse in the original excavation (if acceptable to the site design engineer) or as fill material on the same parcel. Any soils that are reused on the same parcel must be buried beneath at least one foot of acceptable cover material. The area designated for removal is shown on Figure 4B as Excavation Area 2A and designated in green and shown with its own line weight (in case drawings are copied in black and white). Laboratory Summary Tables showing exceedances of restricted residential SCOs are included in Attachment D and the complete laboratory analytical report for the project can be found in Attachment E.

4. Lead in Soil at Location TE-01 BLT (Area 2B)

Soil exceeding TCLP hazardous waste limit for lead has been identified as being present at location 2B on project. The impacted surface soil in the affected area must either be removed for off-site disposal in accordance with the remaining sections of this EMP and as identified on drawing M-1 and project specifications. After soils excavation and removal this area must be covered with at least 12 inches of clean soil or clean fill (or a permanent pavement).

5. Excavation Area 3

Based on the finding of RELS's soil sampling and subsequent soil sampling completed by Stantec in this area it is our professional opinion that these materials are suitable for reuse as area (non-structural) fill during regrading as long as they remain within the same property boundary. Any soils that are reused on the same parcel must be buried beneath at least one foot of acceptable cover material. If the materials require removal and off-site disposal then applicable regulated waste handling, transport and disposal requirements will apply.

3.5.2 Off-Site Disposal of Soil, Debris and Solid Materials

Impacted soil and waste material excavated for project construction (fill material that does not meet the 6 NYCRR 360.13 special requirements for pre-determined parcel specific beneficial use) that is not hazardous waste and will be exported off-site must be disposed of as non-hazardous regulated solid waste at a NYSDEC-permitted landfill which has pre-approved the material for acceptance in accordance with its permit.

If hazardous wastes in addition to Area 2b are encountered, they must be disposed properly off-site at an approved hazardous-waste disposal facility.

Non-impacted soil or uncontaminated bedrock from construction excavations on this project that is proposed for unregulated off-site beneficial use must have advance approval of the receiving site by the City. Uncontaminated soil or bedrock that is proposed for transport off-site for recycling must be transported to a C&D processing facility that is registered or permitted by New York State, and the proposed recycling site must have advance approval by the City.

Additional details concerning methods and requirements are described below.

3.5.2.1 Petitioning for Beneficial Use Determinations

For impacted soils which are to be exported for beneficial re-use offsite, a petition for a beneficial use determination (BUD) must be submitted to the NYSDEC Division of Materials Management for approval prior to export. A copy of a BUD petition form to be used for application for off-site re-use of material as structural or grade-adjustment fill or as ground surface cover material is presented in Appendix G.

Soil for which BUD approval will be sought must be tested in accordance with 6 NYCRR Part 360.13(e). A sampling plan describing the sampling approach, locations, frequency and methods and analysis parameters must be submitted to both the City and the NYSDEC Region 8 BUD coordinator for approval prior to sampling.

3.5.2.2 Soil Staging Methods

If contaminated soils, fill or hazardous materials (e.g. drums, containers, odiferous fill) are identified outside of the areas identified on drawing M-1 those materials must be placed on and covered plastic sheeting composed of polyethylene (poly) plastic with a minimum thickness of 6-mil, and both the liner and the cover must overlap perimeter berms. Soil stockpiles must be continuously encircled with a berm and/or silt fence. Hay bales must be used as needed near catch basins, surface waters and other discharge points.

Stockpiles must be kept covered at all times with appropriately anchored tarps. Stockpiles must be routinely inspected, and damaged tarp covers must be promptly replaced.

Stockpiles must be inspected at a minimum of once each week and after every storm event.

3.5.2.3 Materials Excavation and Load-Out

A qualified environmental professional or person under their supervision must oversee all invasive work and the excavation and load-out of all excavated material.

The City and its contractors are responsible for safe execution of all invasive and other work performed under this Plan.

Loaded vehicles leaving the site must be appropriately lined, tarped, securely covered, manifested, and placarded in accordance with appropriate Federal, State, local, and NYSDOT requirements (and all other applicable transportation requirements).

Locations where vehicles enter or exit the site must be inspected daily for evidence of off-site soil tracking. The qualified environmental professional will be responsible for ensuring that all egress points for truck and equipment transport from the site are clean of dirt and other materials derived from the site during intrusive excavation activities. Cleaning of the adjacent streets must be performed as needed to maintain a clean condition with respect to site-derived materials.

3.5.2.4 Materials Transport Off-Site

All transport of impacted, regulated materials must be performed by licensed haulers in accordance with appropriate local, State, and Federal regulations, including 6 NYCRR Part 364.

Haulers must be appropriately licensed and trucks properly placarded. If loads contain wet material capable of producing free liquid, truck liners must be used. Truck transport routes must be the most appropriate routes and take into account: (a) use of city mapped truck routes; (b) prohibiting off-site queuing of trucks entering the facility; (c) promoting safety in access to highways; and (d) overall safety in transport. Stopping and idling or trucks in the neighborhood of the project site must be minimized to the extent possible. Egress points for truck and equipment transport from the site must be kept clean of dirt and other materials during site development. Queuing must be performed in a manner that minimizes off-site disturbance.

3.5.3 Backfill from Off-Site Sources

All materials proposed for import onto the site must be approved by the qualified environmental professional and must be in compliance with provisions in this EMP prior to receipt at the site.

Material from industrial sites, spill sites, or other environmental remediation sites or potentially contaminated sites must not be imported to the site.

All imported soils must meet the General Fill requirements established in 6 NYCRR 360.13. Soils that meet ‘exempt’ fill requirements under 6 NYCRR Part 360 but do not meet Part 375 RR SCOs must not be imported onto the site without prior approval by the City of Rochester DEQ. Solid waste must not be imported onto the site.

3.5.4 Fluids Management and Off-Site Disposal of Impacted Water

During construction, all surface water runoff and construction dewatering shall be managed in accordance with the approved site plans. Use of sediment barriers and other best management practices for stormwater must be implemented to limit the downstream discharge of sediment-laden water to the combined sewer.

All liquids to be removed from the site must be handled, discharged or transported (as needed) and treated/disposed in accordance with applicable local, State, and Federal regulations.

Should influx of groundwater (as opposed to accumulation of stormwater) into an excavation occur under conditions which would necessitate excavation dewatering to complete the excavation and construction activities, the management of the excavation water must be conducted under the supervision of a QEP. Similarly, should accumulated stormwater or groundwater be found to exhibit petroleum sheen or odors, solvent or chemical odors, or other indications of the potential presence of petroleum or chemical contamination, removal and management of this water must be conducted under the supervision of a QEP. In these cases, excavation dewatering fluids must not be recharged back to the land surface or subsurface of the site or discharged to the sewer unless prior approval is obtained from a QEP.

Management of impacted water generated during project development activities must include characterization (sampling and laboratory analysis) as required to obtain approval from the municipal sewer authority for sewer discharge or approval from an off-site disposal facility. A temporary sewer use permit must be obtained from the Monroe County Department of Environmental Services (MCDES) – Division of Pure Waters (DPW) in advance of discharge of impacted water to the sewer system. Information on an MCDES-DPW application to obtain a temporary permit is included in Appendix F. If disposal to the MCDES sewer system is not approved, transport to and disposal at a permitted disposal facility will be required.

Appropriate measures for management of impacted water must include temporary containerization and measures to prevent water from contaminating other materials or migrating off-site. Measures that must be incorporated into such plans include:

- Containerize water prior to pumping or transport off-site.
- Stage containers away from drainage sources.
- Pump water directly into containers.
- Perform necessary sampling prior to disposal.
- Coordinate with the MCDES or alternate facility to receive permission for disposal.

3.6 DOCUMENTATION AND REPORTING

Records must be developed and maintained throughout the development activity period documenting waste characterization and post-excavation confirmatory sample locations if applicable and sample analytical data, mapping indicating impacted-material removal locations and quantities and any remaining exceedances of RR SCOs, and off-site re-use and disposal of materials exported from the project properties.

During those weeks during which site development activities involving environmental management are being conducted (for example, weeks during which excavation or soil transport activities are being performed), brief weekly email summaries will be submitted to the City DEQ summarizing the remedial activities initiated or completed during the reporting period and noting and explaining any deviations from the EMP. Monthly progress reports must be submitted to the City in letter format consolidating the

information provided in the weekly emails and providing supporting data such as sample location maps, laboratory analysis reports, and summaries of exported soil locations, quantities and destinations.

Upon project completion, a report must be developed to document activities throughout the duration of the project along with associated analytical results, appropriate disposal information and documentation, applicable photographic documentation, field logs and notes, and finalized mapping.

3.7 ENGINEERING CONTROLS

At the present time there are no engineering controls anticipated for the Property or the BLTCP.

3.8 CONTACT INFORMATION

The following is a list of entities who can be contacted regarding environmentally-related issues at the Site:

- **City of Rochester**

  Division of Environmental Quality
  City Hall Room 300B
  30 Church Street
  Rochester, NY 14614
  Jane M. H. Forbes, Sr. Environmental Specialist
  Email: jane.forbes@cityofrochester.gov
  Phone: 585.428.7892 (office), 585.314.1719 (mobile)

  Neighborhood and Business Development
  City Hall Room 005A
  30 Church Street
  Rochester, NY 14614
  Lia Anselm, Sr. Community Housing Planner
  Email: lia.anselm@cityofrochester.gov
  Phone: 585.428.9368 Fax: 585.428.6229

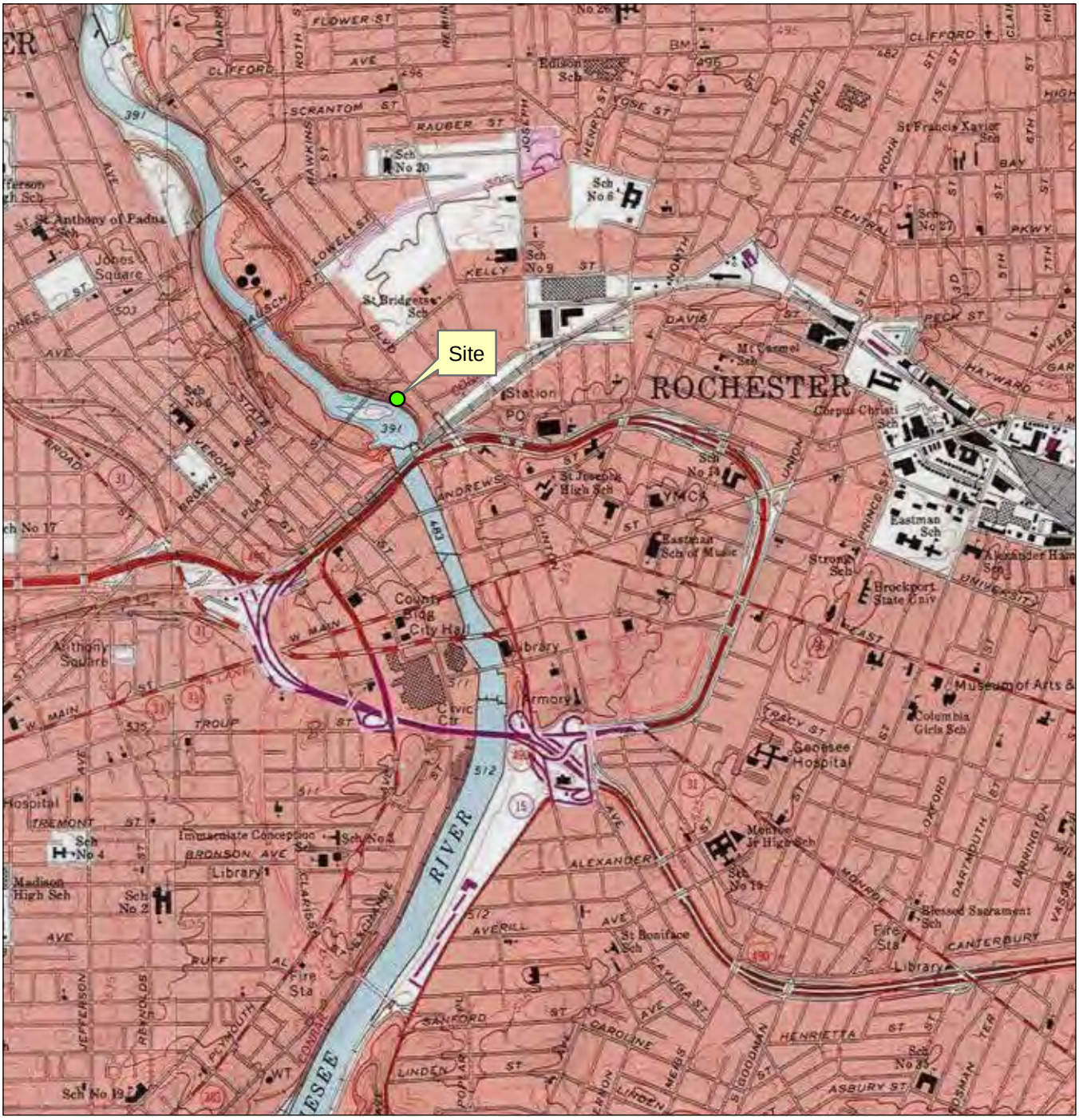
- **NYSDEC Spills Hotline**
  800.457.7362

- **Stantec Consulting Services Inc.**
  61 Commercial Street, Suite 100
  Rochester, NY 14614
  Steve Campbell: 585.785.3835 (mobile) or Dwight Harrienger: 585.413.8740 (mobile)

4.0 REFERENCES

1. Phase 1 Environmental Site Assessment 305-365 St. Paul Street, 295 St. Paul Street and 369 St. Paul Street (May 20,2021)
2. Environmental Gap Analysis Summary Report, Brewery Line Trail Project (May 17,2021)
3. Phase II Environmental Assessment Report (August 18, 2021)
4. Updated Soil Characterization Report (Ravi Engineers and Land Surveying. P.C., September 4, 2020)
5. Environmental Management Plan (Ravi Engineers and Land Surveying. P.C., November, 2019)
6. NYS DOT Standard Specification Section 205 – Contaminated Soil Contract Drawing No. 943 / M-1 and related notes.
7. Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing, U.S. Department of Housing and Urban Development (HUD), July 2012.
8. DER-10 Technical Guidance for Site Investigation and Remediation, NYSDEC Div. of Environmental Remediation, May 2010.
9. CP-51 / Soil Clean-up Guidance, NYSDEC Div. of Environmental Remediation, October 2010.
10. Technical and Operational Guidance Series (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, NYSDEC Division of Water, June 1998.
11. New York Codes, Rules and Regulations 6 NYCRR Parts 360, 370 and 375.

FIGURES



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USA Topo Maps

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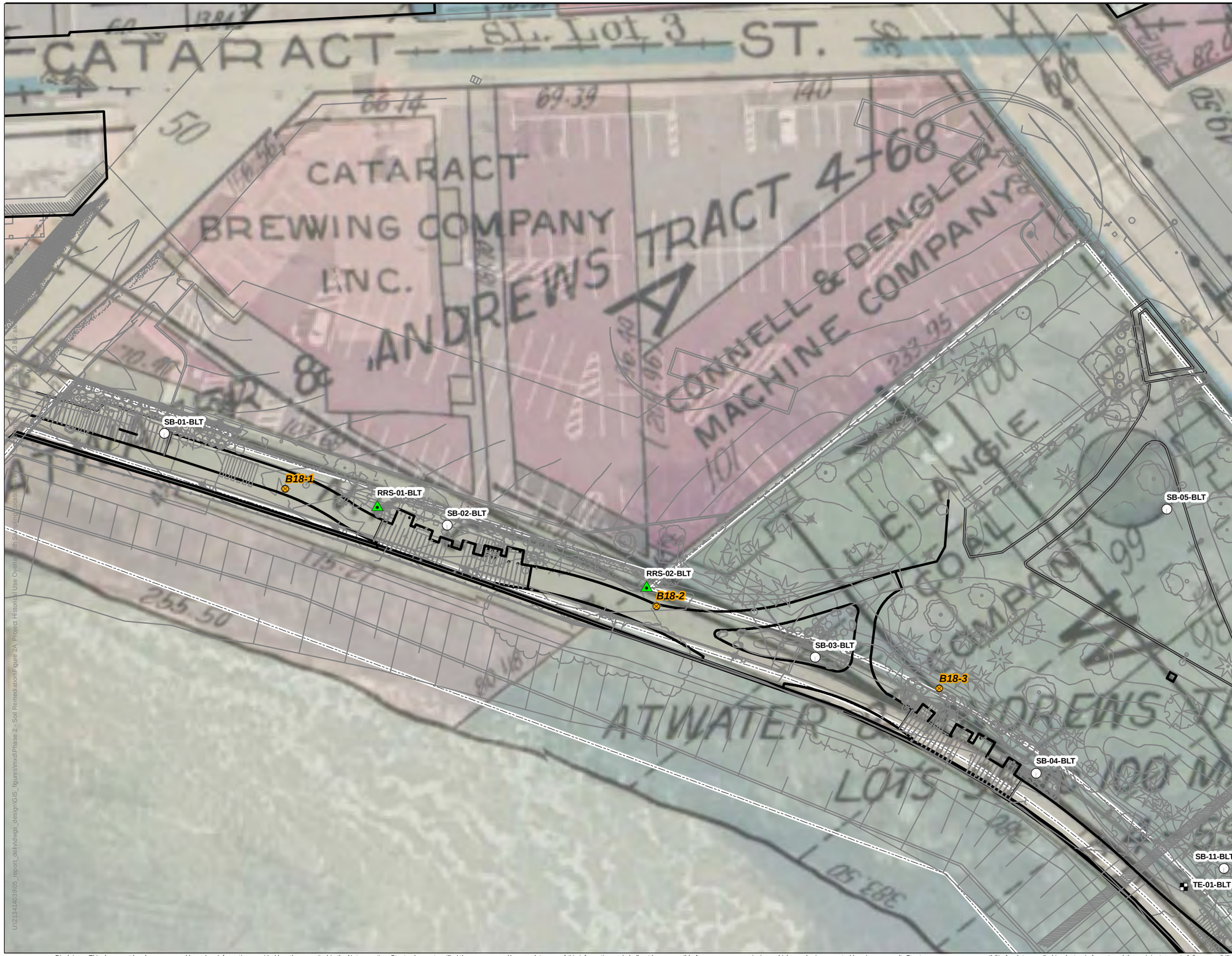
Project Location City of Rochester Monroe County NY	Prepared byAPL on 2021-08-13 TR by DH on 2021-08-13 IR Review by SC on2021-08-13
Client/Project City of Rochester Brewery Line Trail Report	213414039
Figure No. 1	
Title	

Site Location Map

Notes

1. Coordinate System: NAD 1983 StatePlane New York West FIPS 3103 Feet
2. Data Sources:
3. Background: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Stantec

Legend

- Existing Geotechnical Borings
- Existing Environmental Boreholes
- Shallow Surface Soil Location
- Soil Boing
- Test Excavation

N

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(At original document size of 11x17)
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Notes

1. Coordinate System: NAD 1983 StatePlane New York West FIPS 3103 Feet
2. Data Sources:
3. Background: GM Hopkins, 1935, City of Rochester, NY, 2014

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

Project Location
305-365 St. Paul Street, 295 St. Paul Street and 369 St. Paul Street, Rochester, NY

Prepared by APL on 2021-08-13
TR by SC/DH on 2021-08-13
IR Review by MS on 2021-08-13

Client/Project 213414039
City of Rochester
Environmental Assessment
Brewery Line Trail Project

Figure No.
2A

Title
Project Historical Use Overlay with Sampling Locations - Western Section

Stantec

Legend

- Existing Geotechnical Borings
- Existing Environmental Boreholes
- Shallow Surface Soil Location
- Soil Boing
- Test Excavation

N

0 20 40 Feet

(At original document size of 11x17)
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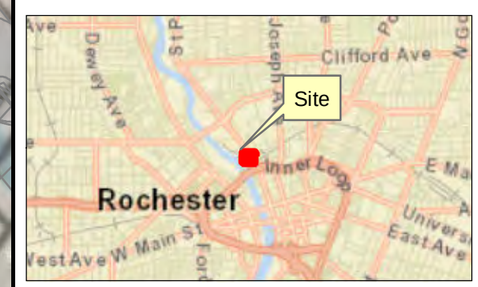
Notes

1. Coordinate System: NAD 1983 StatePlane New York West FIPS 3103 Feet
2. Data Sources:
3. Background: GM Hopkins, 1935, City of Rochester, NY, 2014
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Project Location
305-365 St. Paul Street, 295 St. Paul Street and 369 St. Paul Street, Rochester, NY

Prepared by APL on 2021-07-01
TR by SC/DH on 2021-07-01
IR Review by MS on 2021-07-01

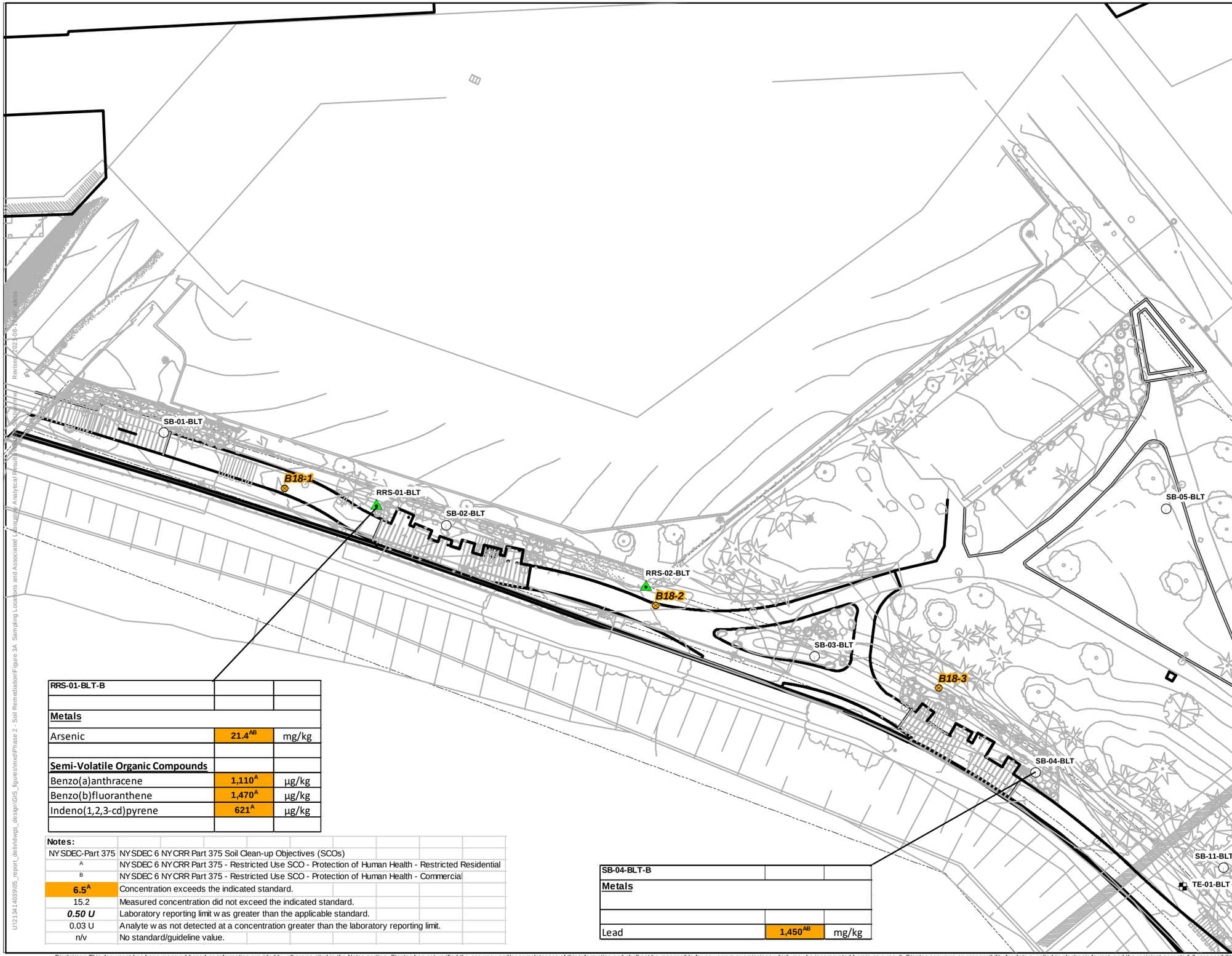
Client/Project 213414039
City of Rochester
Environmental Assessment
Brewery Line Trail Project

Figure No.
2B

Title

Project Historical Use Overlay with Sampling Locations - Southeastern Section

U:\213414039\05_report_deliv\dwgs_design\GIS_figures\mxd\Phase2 - Soil Remediation\Figure 2B Project Historical Use Overlay with Sampling Locations - Southeastern Section.mxd Revised: 2021-08-13 By: aless



RRS-01-BLT-B		
Metals		
Arsenic	21.4[AB]	mg/kg
Semi-Volatile Organic Compounds		
Benzo(a)anthracene	1,110[A]	µg/kg
Benzo(b)fluoranthene	1,470[A]	µg/kg
Indeno(1,2,3-cd)pyrene	621[A]	µg/kg

SB-04-BLT-B		
Metals		
Lead	1,450[AB]	mg/kg

Notes:	
NYSDEC-Part 375	NYSDEC 6 NYCRR Part 375 Soil Clean-up Objectives (SCOs)
A	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Restricted Residential
B	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Commercial
6.5[A]	Concentration exceeds the indicated standard.
15.2	Measured concentration did not exceed the indicated standard.
0.50 U	Laboratory reporting limit was greater than the applicable standard.
0.03 U	Analyte was not detected at a concentration greater than the laboratory reporting limit.
n/v	No standard/guideline value.

Stantec

Legend

- Existing Geotechnical Borings
- Existing Environmental Boreholes
- Shallow Surface Soil Location
- Soil Boing
- Test Excavation

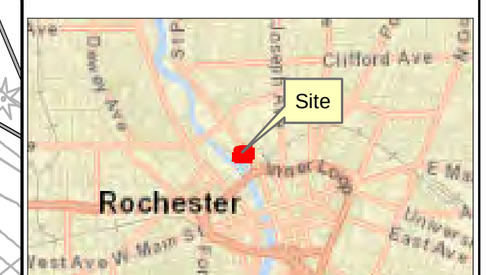
N

0 20 40 Feet

(At original document size of 11x17)
1:480

Notes

1. Coordinate System: NAD 1983 StatePlane New York West FIPS 3103 Feet
2. Data Sources:
3. Background: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Project Location

305-365 St. Paul Street, 295 St. Paul Street and 369 St. Paul Street, Rochester, NY

Prepared by APL on 2021-08-13
TR by SC/DH on 2021-08-13
IR Review by MS on 2021-08-13

Client/Project 213414039

City of Rochester
Environmental Assessment
Brewery Line Trail Project

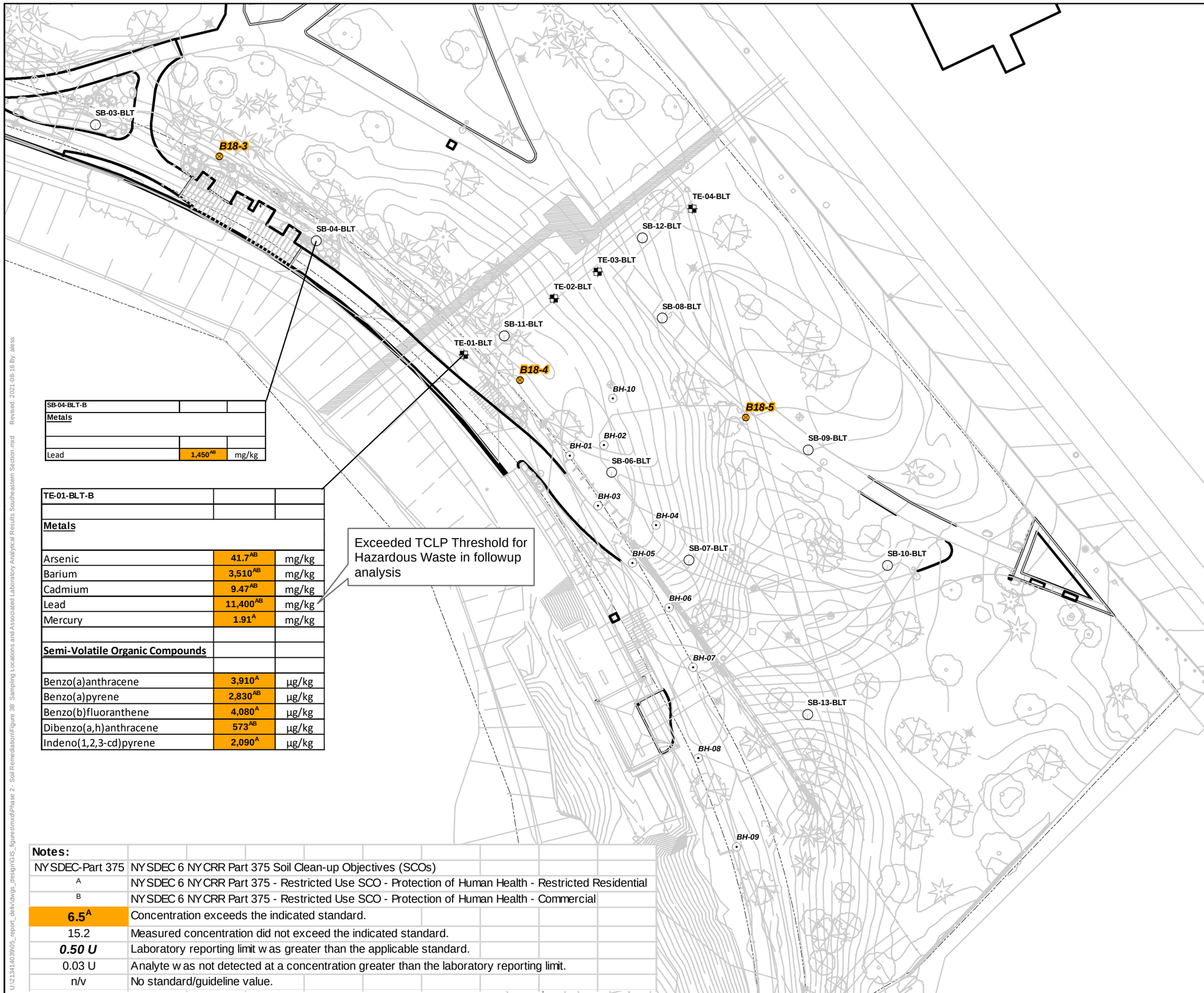
Figure No.

3A

Title

Sampling Locations and Associated Laboratory Analytical Results Western Section

U:\213414039\05_report_deliv\dwgs_design\GIS_figures\mxd\Phase 2 - Soil Remediation\Figure 3A Sampling Locations and Associated Laboratory Analytical Results Western Section - Revised 2021-08-13 - Progress



SB-04-BLT-B		
Metals		
Lead	1,450[AB]	mg/kg

TE-01-BLT-B		
Metals		
Arsenic	41.7[AB]	mg/kg
Barium	3,510[AB]	mg/kg
Cadmium	9.47[AB]	mg/kg
Lead	11,400[AB]	mg/kg
Mercury	1.91[A]	mg/kg
Semi-Volatile Organic Compounds		
Benzo(a)anthracene	3,910[A]	µg/kg
Benzo(a)pyrene	2,830[AB]	µg/kg
Benzo(b)fluoranthene	4,080[A]	µg/kg
Dibenzo(a,h)anthracene	573[AB]	µg/kg
Indeno(1,2,3-cd)pyrene	2,090[A]	µg/kg

Exceeded TCLP Threshold for Hazardous Waste in followup analysis

Notes:	
NYSDEC-Part 375	NYSDEC 6 NYCRR Part 375 Soil Clean-up Objectives (SCOs)
A	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Restricted Residential
B	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Commercial
6.5[A]	Concentration exceeds the indicated standard.
15.2	Measured concentration did not exceed the indicated standard.
0.50 U	Laboratory reporting limit was greater than the applicable standard.
0.03 U	Analyte was not detected at a concentration greater than the laboratory reporting limit.
n/v	No standard/guideline value.

Stantec

Legend

- Existing Geotechnical Borings
- Existing Environmental Boreholes
- Shallow Surface Soil Location
- Soil Boing
- Test Excavation

N

0 20 40 Feet

(At original document size of 11x17)
1:480

Notes
1. Coordinate System: NAD 1983 StatePlane New York West FIPS 3103 Feet
2. Data Sources:
3. Background: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

Project Location
305-365 St. Paul Street, 295 St. Paul Street and 369 St. Paul Street, Rochester, NY

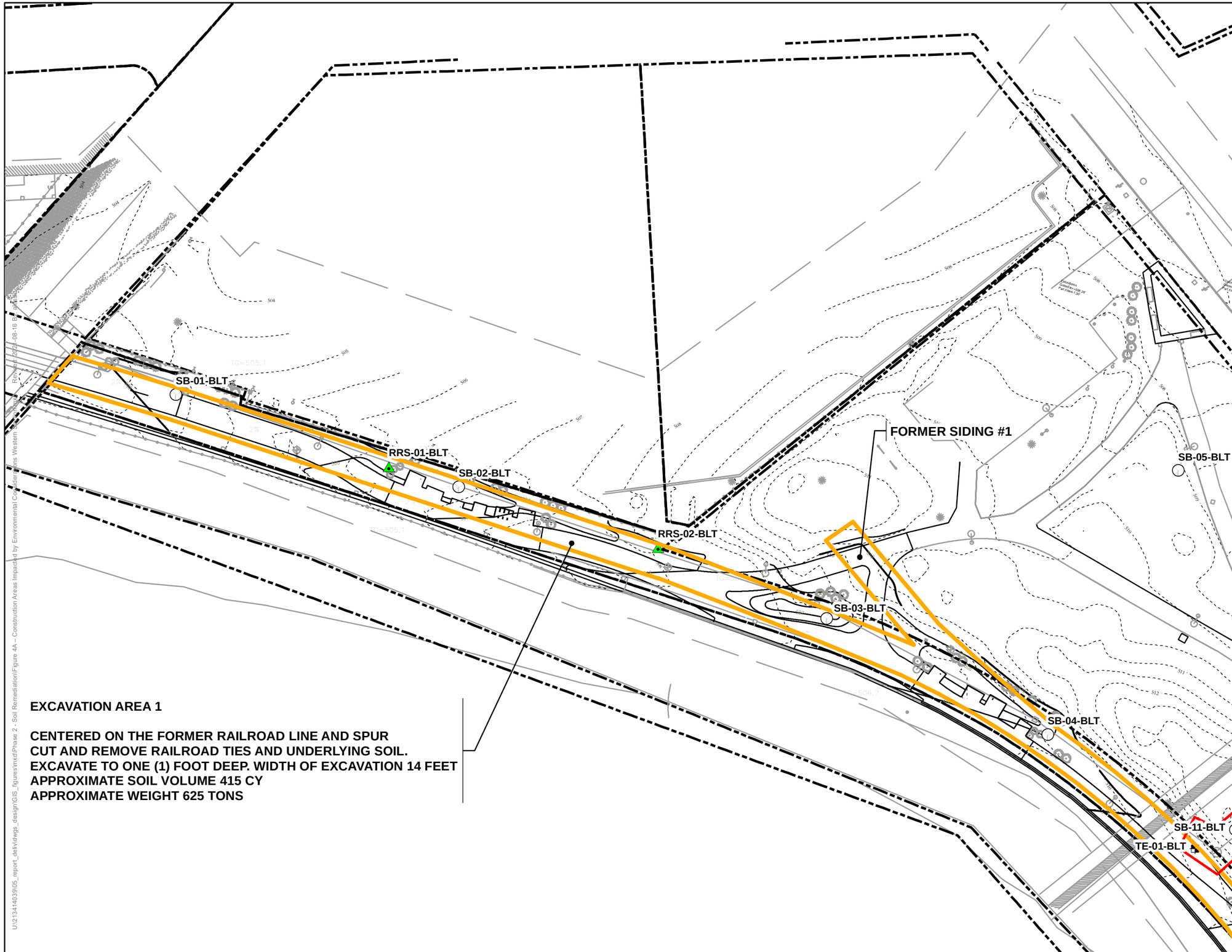
Prepared by APL on 2021-07-01
TR by SC/DH on 2021-07-01
IR Review by MS on 2021-07-01

Client/Project 213414039
City of Rochester
Environmental Assessment
Brewery Line Trail Project

Figure No.
3B

Title
Sampling Locations and Associated Laboratory Analytical Results Southeastern Section

U:\213414039\05_report_deliv\dwgs_design\GIS_figures\mxd\Phase 2 - Soil Remediation\Figure 3B Sampling Locations and Associated Laboratory Analytical Results Southeastern Section.mxd Revised: 2021-08-16 By: aless



Stantec

Legend

- Existing Geotechnical Borings
- Existing Environmental Boreholes
- Shallow Surface Soil Location
- Soil Boing
- Test Excavation

1 Excavate and Remove Railroad Ties and Underlying Soil to One Foot

N

0 20 40 Feet

(At original document size of 11x17)
1:480

Notes

1. Coordinate System: NAD 1983 StatePlane New York West FIPS 3103 Feet
2. Data Sources:
3. Background: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

Project Location
305-365 St. Paul Street, 295 St. Paul Street and 369 St. Paul Street, Rochester, NY

Prepared by APL on 2021-08-13
TR by SC/DH on 2021-08-13
IR Review by MS on 2021-08-13

Client/Project
City of Rochester
Environmental Assessment
Brewery Line Trail Project

213414039

Figure No.
4A

Title
Construction Areas Impacted by Environmental Considerations Western Section

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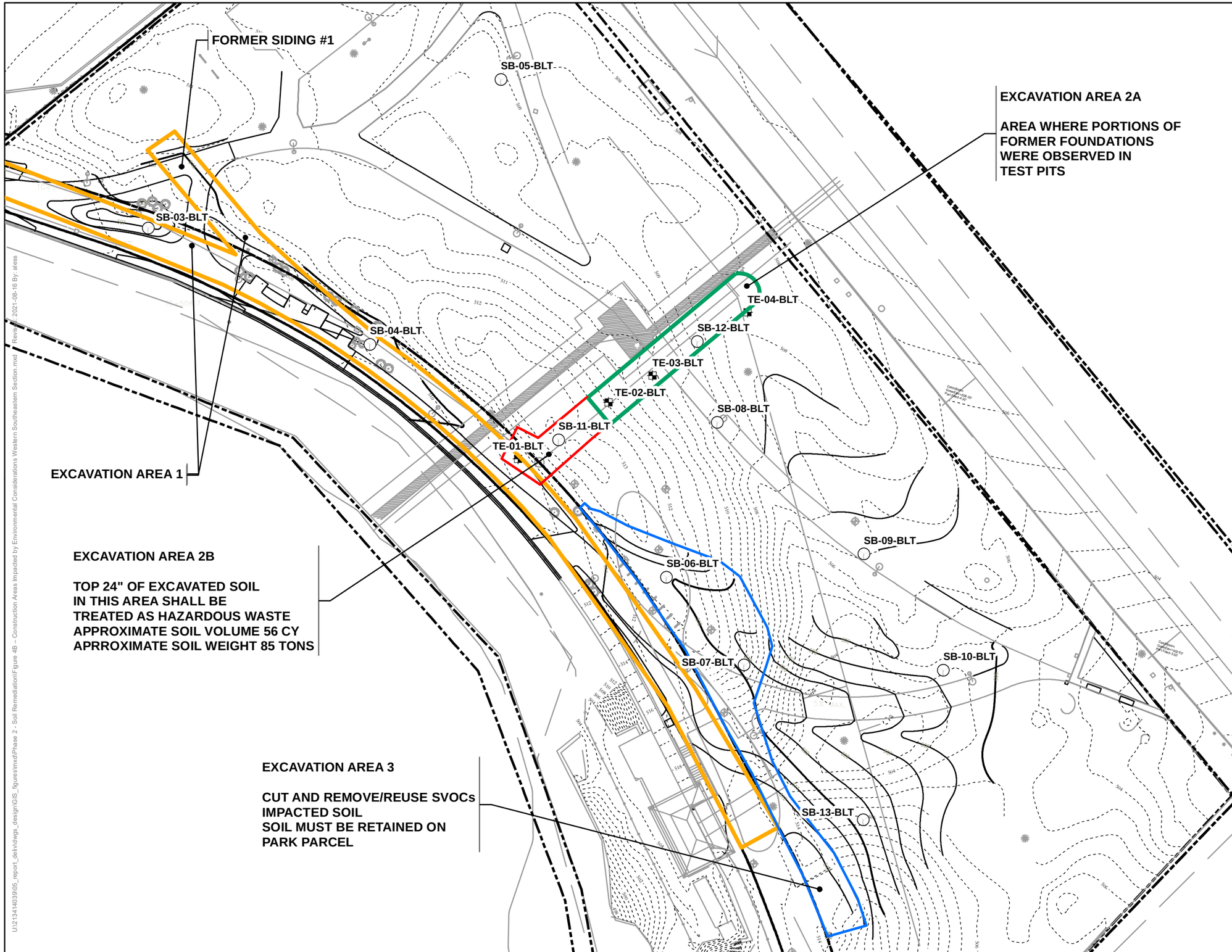

Stantec

Legend

- Existing Geotechnical Borings
- Existing Environmental Boreholes
- Shallow Surface Soil Location
- Soil Boing
- Test Excavation

1 Excavate and Remove Railroad Ties and Underlying Soil to One Foot

2A Area where Portions of Former Foundations Walls were Observed in Test Pits

2B Excavated Soil in this Area shall be Treated as Hazardous Waste

3 Cut and Remove / Reuse SVOCs Impacted Soil

N

0 20 40 Feet
(At original document size of 11x17)
1:480

Notes
1. Coordinate System: NAD 1983 StatePlane New York West FIPS 3103 Feet
2. Data Sources:
3. Background: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

Project Location
305-365 St. Paul Street, 295 St. Paul Street and 369 St. Paul Street, Rochester, NY

Prepared by APL on 2021-08-13
TR by SC/DH on 2021-08-13
IR Review by MS on 2021-08-13

Client/Project 213414039
City of Rochester
Environmental Assessment
Brewery Line Trail Project

Figure No.
4B

Title
Construction Areas Impacted by Environmental Considerations Western Southeastern Section

U:\213414039\05_report_deliv\dwgs_design\GIS_figures\mxd\Phase 2 - Soil Remediation\Figure 4B – Construction Areas Impacted by Environmental Considerations Western Southeastern Section.mxd | Revised: 2021-08-16 By: aless

ATTACHMENTS

Attachment A Boring Logs

Stantec

61 Commercial St., Suite 100
Rochester, NY 14614
(585) 475-1440

Test Boring No.: 1
Page: 1 of 13

Project:	Brewery Line Trail Phase II	Drill Contractor:	TREC	Start Date:	8/2/2021
Project #:	213414039	Driller:	Chad Britton	Completion Date:	8/2/2021
Client:	City of Rochester	Elevation:	NM	Drilling Method:	Direct Push-Geoprobe
Location:	305-365, 295, 369 St Paul St. Rochester, NY	Weather:	70s, sunny	Supervisor:	A. Matkosky

0	SAMPLE PID (ppm)	No.	Rec. (ft)	Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	2.5	0.0-4.0	0.0-0.5	
0.7	0.5				0.5-1.0	Black-dark brown SILT and very fine SAND, trace clay, grass and roots, moist, no odor -TOPSOIL-
1.3	0.1				1.0-2.5	Dark brown-black SILT, some very fine sand, medium-coarse grey gravel, some pieces of brick,
2.0	0.1					moist, no odor -FILL-
						Black fine-coarse SAND, medium-coarse grey GRAVEL, black cinders, trace ash and brick pieces and coal, moist, no odor -FILL-
						Bottom of Exploration at 2.5 ft
5						
10						
15						
20						

Notes:
1. PID Model MiniRAE 3000 with 10.6eV lamp.

Stantec

61 Commercial St., Suite 100
Rochester, NY 14614
(585) 475-1440

Test Boring No.: 2
Page: 2 of 13

Project:	Brewery Line Trail Phase II	Drill Contractor:	TREC	Start Date:	8/2/2021
Project #:	213414039	Driller:	Chad Britton	Completion Date:	8/2/2021
Client:	City of Rochester	Elevation:	NM	Drilling Method:	Direct Push-Geoprobe
Location:	305-365, 295, 369 St Paul St. Rochester, NY	Weather:	70s, sunny	Supervisor:	A. Matkosky

	SAMPLE				Depth of Strata Change (ft)	Material Description and Remarks
0	PID (ppm)	No.	Rec. (ft)	Depth (ft)		
		1	3.0	0.0-4.0	0.0-0.5	Black-dark brown SILT and very fine SAND, grass and roots, moist, no odor -TOPSOIL-
0.6	0.1				0.5-0.7	Dark brown-black SILT and very fine-fine SAND, some very fine gravel, trace roots, moist, no odor -FILL-
1.5	0.1				0.7-1.7	
					1.7-3.0	Black medium-coarse SAND, fine-medium grey-dark grey GRAVEL, coal and cinders, trace ash, brick pieces, moist-dry, no odor -FILL-
2.6	0.1					Medium brown SILT and very fine SAND, moist, no odor -NATIVE-
		2	3.6	4.0-8.0	4.0-7.6	4-5 feet: Same as above with fill fall-in from above 5-7.6 feet: Medium brown SILT and very fine SAND, moist, no odor -NATIVE-
5						
6	0.0					
						Bottom of Exploration at 7.6 ft
10						
15						
20						

Notes:
1. PID Model MiniRAE 3000 with 10.6eV lamp.

Stantec
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Project:	Brewery Line Trail Phase II	Drill Contractor:	TREC	Start Date:	8/2/2021
Project #:	213414039	Driller:	Chad Britton	Completion Date:	8/2/2021
Client:	City of Rochester	Elevation:	NM	Drilling Method:	Direct Push-Geoprobe
Location:	305-365, 295, 369 St Paul St. Rochester, NY	Weather:	70s, sunny	Supervisor:	A. Matkosky

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	3.5	0.0-4.0	0.0-0.2	Black-dark brown SILT and very fine-fine SAND, grass and roots, moist, no odor -TOPSOIL-
0.8	0.4				0.2-0.6	Dark brown SILT and very fine-fine SAND, trace very fine gravel, wood pieces, moist, no odor -FILL-
1.5	0.2				0.6-1.2	Dark brown-black medium-coarse SAND, trace silt, cinders and little coal, trace ash, brick pieces, and fine-medium grey-dark grey gravel, moderate tar like odor, moist-dry, -FILL-
					1.2-1.7	
					1.7-3.5	Same as above, slight-moderate tar like odor -FILL-
3.5	0.2					Medium brown SILT and very fine-fine SAND, moist, no odor, -NATIVE-
		2	4.0	4.0-8.0	4.0-5.0	Medium brown SILT and very fine-fine SAND with fall-in from above, no odor -NATIVE-
5					5.0-8.0	Medium brown SILT and very fine-fine SAND with little gravel -NATIVE-
6	0.2					
		3	4.0	8.0-12.0	8.0-8.3	Medium brown SILT and very fine-fine SAND with little gravel with fall-in from above -NATIVE-
					8.3-12.0	Medium brown SILT and very fine-fine SAND with little gravel with fall-in from above -NATIVE-
10	0.1					
						Bottom of Exploration at 12 ft
15						
20						

Notes:
1. PID Model MiniRAE 3000 with 10.6eV lamp.

Stantec

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Test Boring No.: 4
Page: 4 of 13

Project:	Brewery Line Trail Phase II	Drill Contractor:	TREC	Start Date:	8/2/2021
Project #:	213414039	Driller:	Chad Britton	Completion Date:	8/2/2021
Client:	City of Rochester	Elevation:	NM	Drilling Method:	Direct Push-Geoprobe
Location:	305-365, 295, 369 St Paul St. Rochester, NY	Weather:	70s, sunny	Supervisor:	A. Matkosky

0	SAMPLE PID (ppm)	No.	Rec. (ft)	Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
0.3	0.1	1	3.7	0.0-4.0	0.0-0.4	Black-dark brown SILT and very fine-fine SAND, grass and roots, moist, no odor -TOPSOIL-
0.9	0.1				0.4-0.8	Dark brown-black SILT, fine-medium SAND, little very fine-medium grey gravel, trace roots from above, moist, no odor -FILL-
1.4	0.1				0.8-1.8	
2					1.8-3.7	Dark brown-black SILT, fine-coarse SAND, some fine-medium grey gravel, coal and cinders, trace ash increasing ash towards bottom, moist-dry, no odor -FILL-
						Medium brown SILT and very fine-fine SAND, moist, no odor -NATIVE-
3.7	0.1	2	3.8	4.0-8.0	4.0-7.8	Medium brown SILT and very fine-fine SAND, little clay, wet, no odor around 6.0 ft -NATIVE-
5						
6.0	0.1					
		3	4	8.0-12.0	8.0-12.0	Medium brown SILT and very fine-fine sand, little very fine-fine grey gravel, wet, no odor -NATIVE-
10	0.1					
						Bottom of Exploration at 12 ft
15						
20						

Notes:
1. PID Model MiniRAE 3000 with 10.6eV lamp.

Stantec

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(585) 475-1440

Test Boring No.: 5
Page: 5 of 13

Project:	Brewery Line Trail Phase II	Drill Contractor:	TREC	Start Date:	8/2/2021
Project #:	213414039	Driller:	Chad Britton	Completion Date:	8/2/2021
Client:	City of Rochester	Elevation:	NM	Drilling Method:	Direct Push-Geoprobe
Location:	305-365, 295, 369 St Paul St. Rochester, NY	Weather:	70s, sunny	Supervisor:	A. Matkosky

	SAMPLE				Depth of Strata Change (ft)	Material Description and Remarks
0	PID (ppm)	No.	Rec. (ft)	Depth (ft)		
0.5	0.0	1	3.5	0.0-4.0	0.0-0.4	Black-dark brown SILT and very fine-fine SAND, grass and roots, moist, no odor -TOPSOIL-
0.9	0.0				0.4-0.5	Dark brown-black SILT and fine-medium SAND, trace roots, moist, no odor -FILL-
1.5	0.0				0.5-1.6	Dark brown-black SILT and fine-coarse SAND, some fine-medium grey gravel, coal and cinders, trace ash, moist-dry, no odor -FILL-
					1.6-3.5	Medium brown SILT and very fine-fine SAND, moist, no odor -NATIVE-
3.5	0.0					
		2	3.4	4.0-8.0	4.0-7.4	Medium brown SILT and very fine-fine SAND, little clay, gravel to 5 ft, wet at 6.1 ft, no odor -NATIVE-
5						
6	0.0					
		3	4	8.0-12.0	8.0-12.0	Medium brown SILT and very fine-fine SAND, increasing sand content with depth, little very fine gravel moist, no odor -NATIVE-
10	0.0					
						Bottom of Exploration at 12 ft
15						
16						
20						

Notes:
1. PID Model MiniRAE 3000 with 10.6eV lamp.

Stantec

61 Commercial St., Suite 100
Rochester, NY 14614
(585) 475-1440

Test Boring No.: 6
Page: 6 of 13

Project:	Brewery Line Trail Phase II	Drill Contractor:	TREC	Start Date:	8/2/2021
Project #:	213414039	Driller:	Chad Britton	Completion Date:	8/2/2021
Client:	City of Rochester	Elevation:	NM	Drilling Method:	Direct Push-Geoprobe
Location:	305-365, 295, 369 St Paul St. Rochester, NY	Weather:	70s, sunny	Supervisor:	A. Matkosky

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	3.0	0.0-4.0	0.0-0.6	Dark brown SILT and very fine-fine SAND, grass and roots, moist, no odor -TOPSOIL-
1.4	0.1				0.6-3.0	Medium brown SILT and fine SAND, little grey and red gravel, moist, no odor -NATIVE-
1.5	0.0					
		2	2.9	4.0-8.0	4.0-6.9	Medium brown SILT and fine SAND, little grey and red gravel, moist, wet from 5.3-6.9 ft, no odor -NATIVE-
4.6	0.0					
5						
6.7	0.0					
		3	4	8.0-12.0	8.0-12.0	Medium brown SILT and fine SAND, little grey and red gravel, wet, no odor -NATIVE-
10	0.0					
						Bottom of Exploration at 12 ft
15						
20						

Notes:
1. PID Model MiniRAE 3000 with 10.6eV lamp.

Stantec
61 Commercial St., Suite 100
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(585) 475-1440

Project:	Brewery Line Trail Phase II	Drill Contractor:	TREC	Start Date:	8/2/2021
Project #:	213414039	Driller:	Chad Britton	Completion Date:	8/2/2021
Client:	City of Rochester	Elevation:	NM	Drilling Method:	Direct Push-Geoprobe
Location:	305-365, 295, 369 St Paul St. Rochester, NY	Weather:	70s, sunny	Supervisor:	A. Matkosky

	SAMPLE				Depth of Strata Change (ft)	Material Description and Remarks
0	PID (ppm)	No.	Rec. (ft)	Depth (ft)		
0.5	0.0	1	2.4	0.0-4.0	0.0-0.4	Black-dark brown SILT and very fine-fine SAND, grass and roots, moist, no odor -TOPSOIL-
					0.4-1.2	Dark brown-black SILT and fine SAND, some fine-medium angular gravel, grass, little coal,
1.2	0.0				1.2-1.7	moist, no odor -FILL-
					1.7-1.11	Fine-coarse grey ROCK and GRAVEL pieces -FILL-
2.4	0.0				1.11-2.2	Red BRICK -FILL-
					2.2-2.4	Fine-coarse grey ROCK and GRAVEL pieces -FILL-
						Medium brown SILT, fine-medium SAND, and grey angular GRAVEL, little brick and coal, dry, no odor -FILL-
4.3	0.0	2	2.6	4.0-8.0	4-4.3	Medium brown SILT, fine-medium SAND, and grey angular GRAVEL, little brick and coal, dry,
5					4.3-4.9	no odor -FILL-
					4.9-6.6	Fine-coarse grey ROCK and GRAVEL pieces -FILL-
						Medium brown SILT and very fine-fine SAND, little grey gravel, moist, no odor -NATIVE-
		3	3.5	8.0-12.0	8.0-9.0	Brick and grey rock fall-in from above
					9.0-12.0	Medium brown SILT and very fine-fine SAND, little grey gravel, moist, no odor -NATIVE-
10						
11.4	0.0					
						Bottom of Exploration at 12 ft
15						
20						

Notes:
1. PID Model MiniRAE 3000 with 10.6eV lamp.

Stantec
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Project:	Brewery Line Trail Phase II	Drill Contractor:	TREC	Start Date:	8/2/2021
Project #:	213414039	Driller:	Chad Britton	Completion Date:	8/2/2021
Client:	City of Rochester	Elevation:	NM	Drilling Method:	Direct Push-Geoprobe
Location:	305-365, 295, 369 St Paul St. Rochester, NY	Weather:	70s, sunny	Supervisor:	A. Matkosky

	SAMPLE				Depth of Strata Change (ft)	Material Description and Remarks
0	PID (ppm)	No.	Rec. (ft)	Depth (ft)		
0.5	0.1	1	3.3	0.0-4.0	0.0-0.4	Black-dark brown SILT and very fine-fine SAND, grass and roots, moist, no odor -TOPSOIL-
					0.4-0.7	Dark brown-black SILT and fine-coarse SAND, some fine-medium gravel and coal, moist-dry, no odor -FILL-
1.4	0.0				0.7-3.3	Medium brown SILT and very fine SAND, fine-medium gravel, moist, no odor. Wet at 2.5-2.8 ft: fine-coarse sand, silt and clay, some fine-coarse gravel, moist, no odor -FILL-
2.5	0.0					
3.3	0.0					
		2	3.5	4.0-8.0	4.0-7.5	Medium brown SILT and very fine SAND, fine-medium grey and red sandstone gravel, moist to wet, no odor -NATIVE-
5						
5.4	0.0					
7.4	0.0					
		3	4	8.0-12.0	8.0-9.6	Medium brown SILT and very fine SAND, fine-medium grey and red sandstone gravel, moist to wet, no odor -NATIVE-
10					9.6-10.4	Transitioning to below layer
					10.4-12.0	Grey-light brown SILT and very fine SAND, some clay and fine-medium grey-red gravel,dry, well compacted, no odor -NATIVE-
11.3	0.0					
						Bottom of Exploration at 12 ft
15						
20						

Notes:
1. PID Model MiniRAE 3000 with 10.6eV lamp.

Stantec
61 Commercial St., Suite 100
Rochester, NY 14614
(585) 475-1440

Test Boring No.: 9

Project:	Brewery Line Trail Phase II	Drill Contractor:	TREC	Start Date:	8/2/2021
Project #:	213414039	Driller:	Chad Britton	Completion Date:	8/2/2021
Client:	City of Rochester	Elevation:	NM	Drilling Method:	Direct Push-Geoprobe
Location:	305-365, 295, 369 St Paul St. Rochester, NY	Weather:	70s, sunny	Supervisor:	A. Matkosky

	SAMPLE				Depth of Strata Change (ft)	Material Description and Remarks
0	PID (ppm)	No.	Rec. (ft)	Depth (ft)		
		1	3.7	0.0-4.0	0.0-0.8	Dark brown SILT and very fine-fine SAND, grass and roots, moist, no odor -TOPSOIL-
0.6	0.1				0.8-1.0	Dark brown SILT and very fine-fine SAND, moist, no odor -TOPSOIL-
					1.0-3.7	Light brown SILT, and very fine-fine SAND, very fine-medium grey and red gravel, little brick and coal, dry, no odor -FILL-
2						
2.2	0.0					
		2	4.0	4.0-8.0	4.0-5.0	Light brown SILT, very fine-fine SAND, very fine-medium grey and red gravel, little brick and coal, dry, no odor -FILL-
5					5.0-8.0	Medium brown SILT and very fine SAND, fine-medium grey and red gravel, moist, no odor -NATIVE-
5.2	0.0					
7.1	0.0					
		3	2.9	8.0-12.0	8.0-10.9	Medium brown SILT and very fine SAND, fine-medium grey and red gravel, moist, no odor -NATIVE-
10	0.0					
						Bottom of Exploration at 12.0 ft
15						
20						

Notes:
1. PID Model MiniRAE 3000 with 10.6eV lamp.

Stantec
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Rochester, NY 14614
(585) 475-1440

Project:	Brewery Line Trail Phase II	Drill Contractor:	TREC	Start Date:	8/2/2021
Project #:	213414039	Driller:	Chad Britton	Completion Date:	8/2/2021
Client:	City of Rochester	Elevation:	NM	Drilling Method:	Direct Push-Geoprobe
Location:	305-365, 295, 369 St Paul St. Rochester, NY	Weather:	70s, sunny	Supervisor:	A. Matkosky

	SAMPLE				Depth of Strata Change (ft)	Material Description and Remarks
0	PID (ppm)	No.	Rec. (ft)	Depth (ft)		
		1	4.0	0.0-4.0	0.0-0.5	Dark brown SILT and very fine-fine SAND, grass and tree roots, moist, no odor -TOPSOIL-
0.6	0.0				0.5-4.0	Medium brown SILT and very fine-fine SAND, some fine-medium gravel/rock pieces, trace clay, no odor -NATIVE-
2						
2.4	0.0					
		2	4.0	4.0-8.0	4.0-5.0	Medium brown SILT and very fine-fine SAND, some fine-medium gravel/rock pieces, trace clay, no odor -NATIVE-
4.6	0.0					
5					5.0-6.5	Transitioning to below layer
					6.5-8.0	Medium brown SILT and very fine-fine SAND, some fine-coarse gravel, trace red gravel, densely compacted, no odor -NATIVE-
7.3	0.0					
		3	2	8.0-10.0	8.0-10.0	Medium brown SILT and very fine-fine SAND, some fine-coarse gravel, trace red gravel, densely compacted, no odor -NATIVE-
10						
						Bottom of Exploration at 10 ft -REFUSAL-
15						
20						

Notes:
1. PID Model MiniRAE 3000 with 10.6eV lamp.

Stantec

61 Commercial St., Suite 100
Rochester, NY 14614
(585) 475-1440

Test Boring No.: 11
Page: 11 of 13

Project:	Brewery Line Trail Phase II	Drill Contractor:	TREC	Start Date:	8/2/2021
Project #:	213414039	Driller:	Chad Britton	Completion Date:	8/2/2021
Client:	City of Rochester	Elevation:	NM	Drilling Method:	Direct Push-Geoprobe
Location:	305-365, 295, 369 St Paul St. Rochester, NY	Weather:	70s, sunny	Supervisor:	A. Matkosky

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
		1	3.0	0.0-4.0	0.0-0.6	Black-dark brown SILT and very fine SAND, grass and roots, moist, no odor -TOPSOIL-
0.6	0.5				0.6-2.5	Light brown, appears native, little angular medium-coarse gravel, trace coal, moist-dry, no odor -FILL-
1.9	0.0					
2						
					2.5-3.0	Medium brown SILT and very fine-fine SAND, trace gravel, moist, no odor -NATIVE-
3	0.1					
		2	2.0	4.0-8.0	4.0-5.3	Medium brown SILT and very fine-fine SAND, trace gravel, moist, no odor -NATIVE-
5						
5.8	0.0				5.3-6.0	Medium brown SILT and very fine-fine SAND, trace gravel, broken up pieces of rock, moist, no odor -NATIVE-
6	0.1					
		3	3.6	8.0-12.0	8.0-11.6	Medium brown SILT and very fine-fine SAND, trace gravel, broken up pieces of rock, wet, no odor -NATIVE-
9	0.0					
10						
						Bottom of Exploration at 12.0 ft
15						
20						

Notes:
1. PID Model MiniRAE 3000 with 10.6eV lamp.

Stantec

61 Commercial St., Suite 100
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(585) 475-1440

Test Boring No.: 12
Page: 12 of 13

Project:	Brewery Line Trail Phase II	Drill Contractor:	TREC	Start Date:	8/2/2021
Project #:	213414039	Driller:	Chad Britton	Completion Date:	8/2/2021
Client:	City of Rochester	Elevation:	NM	Drilling Method:	Direct Push-Geoprobe
Location:	305-365, 295, 369 St Paul St. Rochester, NY	Weather:	70s, sunny	Supervisor:	A. Matkosky

0	SAMPLE PID (ppm)	SAMPLE No.	SAMPLE Rec. (ft)	SAMPLE Depth (ft)	Depth of Strata Change (ft)	Material Description and Remarks
0.4	0.0	1	1.9	0.0-4.0	0.0-0.5	Dark brown SILT and very fine-fine SAND, grass and roots, moist, no odor -TOPSOIL-
1.1	0.1				0.5-1.9	Dark brown-black SILT and fine-coarse SAND, some fine-medium grey gravel and red sandstone pieces, moist-dry, no odor -FILL-
1.9	0.0					
2						
		2	2.8	4.0-8.0	4.0-5.4	Medium brown SILT and very fine-fine SAND, little grey gravel and red sandstone pieces, dark grey clay at 5 ft, moist, no odor -FILL-
5	0.0					
					5.4-6.8	Medium brown SILT and very fine SAND, moist- wet, no odor -NATIVE-
7.2	0.0					
		3	4	8.0-12.0	8.0-12.0	Medium brown SILT and very fine SAND, increasing grey clay and fine gravel content with depth moist- wet, no odor -NATIVE-
9	0.0					
10						
						Bottom of Exploration at 12 ft
15						
20						

Notes:
1. PID Model MiniRAE 3000 with 10.6eV lamp.

Stantec

61 Commercial St., Suite 100
Rochester, NY 14614
(585) 475-1440

Test Boring No.: 13
Page: 13 of 13

Project:	Brewery Line Trail Phase II	Drill Contractor:	TREC	Start Date:	8/2/2021
Project #:	213414039	Driller:	Chad Britton	Completion Date:	8/2/2021
Client:	City of Rochester	Elevation:	NM	Drilling Method:	Direct Push-Geoprobe
Location:	305-365, 295, 369 St Paul St. Rochester, NY	Weather:	70s, sunny	Supervisor:	A. Matkosky

	SAMPLE				Depth of Strata Change (ft)	Material Description and Remarks
0	PID (ppm)	No.	Rec. (ft)	Depth (ft)		
0.5	0.0	1	2.9	0.0-4.0	0.0-0.6	Dark brown SILT and very fine-fine SAND, grass and roots, moist, no odor -TOPSOIL-
					0.6-2.9	Medium brown SILT and fine-coarse SAND, some fine-medium grey gravel, little coal and brick, moist-dry, no odor -FILL-
1.2	0.0					
2						
2.9	0.0					
		2	4.0	4.0-8.0	4.0-8.0	Medium brown SILT and very fine-fine SAND, some fine-coarse grey gravel, moist-dry, no odor -NATIVE-
5						
6	0.0					
8	0.0	3	3.2	8.0-12.0	8.0-9.0	Medium brown SILT and very fine-fine SAND, some fine-coarse grey gravel, moist-dry, no odor -NATIVE-
8.5	0.0					
						Bottom of Exploration at 9 ft -REFUSAL-
10						
15						
20						

Notes:
1. PID Model MiniRAE 3000 with 10.6eV lamp.

ATTACHMENT B TEST PIT LOGS

Stantec
61 Commercial Street
Rochester, NY 14614
(585) 475-1440

Test Pit ID: TE-1

Project:	Brewery Line Trail Phase II	**Contractor:**	TREC	**Date:**	8/3/2021
Project #:	213414039.000	**Operator:**	Chad Britton	**Start Time:**	0815
Client:	City of Rochester	**Equip Used:**	Kx 121-3	**Completed Time:**	0820
Location:	305-306, 295, 369 St Paul St.	**Weather:**	60's sunny	**Stantec Rep:**	A. Matkosky
	Rochester, NY				

Depth (ft)	PID (ppm)	Sample Info ID	Sample Info Depth	Strata Change (ft)	Soil & Stratigraphy Descriptions	Remarks
0.7	0.6			0.0-1.5	Black-dark brown SILT and fine-coarse SAND, coal pieces and cinders, some fine-medium gravel, little ash and brick pieces, moist, no odor -FILL-	Railroad tie held together during removal
1.0	7.1			1.5-2.0		
1.5	4.5				Medium brown SILT and very fine-fine SAND, little gravel, moist, no odor -NATIVE-	
2						
3					Bottom of Explorationat 2 ft in NATIVE	
4						
5						
6						
7						
8						
9						

Notes:
1. PID Model Mini-Rae 3000 with 10.6 eV lamp.

TP Length & Width: 2 x 10

Stantec
61 Commercial Street
Rochester, NY 14614
(585) 475-1440

Test Pit ID: TE-2

Project:	Brewery Line Trail Phase II	**Contractor:**	TREC	**Date:**	8/3/2021
Project #:	213414039.000	**Operator:**	Chad Britton	**Start Time:**	0838
Client:	City of Rochester	**Equip Used:**	Kx 121-3	**Completed Time:**	0856
Location:	305-306, 295, 369 St Paul St.	**Weather:**	60's sunny	**Stantec Rep:**	A. Matkosky
	Rochester, NY				

Depth (ft)	PID (ppm)	Sample Info ID	Sample Info Depth	Strata Change (ft)	Soil & Stratigraphy Descriptions	Remarks
0.7	1.6			0.0-0.8	Medium-dark brown SILT and very fine-medium SAND, little very fine-fine gravel, roots, moist, no odor -TOPSOIL-	Rock foundation pieces
1						
1.5	1.4			0.8-4.0	Medium brown SILT and fine-medium SAND, little fine-medium gravel, some rock pieces, trace brick, moist, no odor -FILL- Building foundation footer at ~2.9 ftbgs and slab at ~4 ftbgs	Stone foundations - could not break through with excavator
2						
3	0.5					
4						
					Refusal at 4 ft	
5						
6						
7						
8						
9						

Notes:
1. PID Model Mini-Rae 3000 with 10.6 eV lamp.

TP Length & Width: 11.5 x 2

Stantec
61 Commercial Street
Rochester, NY 14614
(585) 475-1440

Test Pit ID: TE-3

Project:	Brewery Line Trail Phase II	**Contractor:**	TREC	**Date:**	8/3/2021
Project #:	213414039.000	**Operator:**	Chad Britton	**Start Time:**	0905
Client:	City of Rochester	**Equip Used:**	Kx 121-3	**Completed Time:**	0920
Location:	305-306, 295, 369 St Paul St.	**Weather:**	60's sunny	**Stantec Rep:**	A. Matkosky
	Rochester, NY				

Depth (ft)	PID (ppm)	Sample Info ID	Sample Info Depth	Strata Change (ft)	Soil & Stratigraphy Descriptions	Remarks
0.5	0.0			0.0-0.7	Medium-dark brown SILT and very fine-medium SAND, fine-coarse gravel, roots, moist, no odor -TOPSOIL-	
1	0.0			0.7-1.1		
1.5	0.0				Medium-brown SILT and fine-medium SAND, fine-very coarse gravel, rock pieces, little brick, moist, no odor -FILL-	'Rock foundation pieces and minor seepage of water on west wall at ~3 ftbgs
2				1.1-3.1		
					Medium-brown-grey silt and fine-medium SAND, medium-coarse gravel, rock pieces and brick, moist-dry, no odor -FILL-	
3						
				3.1-4.5	Medium-brown SILT and fine sand, little fine-medium gravel, moist, no odor -NATIVE-	
4	0.0					
5					Bottom of Exploration at 4.5 ft	
6						
7						
8						
9						

Notes:
1. PID Model Mini-Rae 3000 with 10.6 eV lamp.

TP Length & Width: 10 x 2

Stantec
61 Commercial Street
Rochester, NY 14614
(585) 475-1440

Test Pit ID: TE-4

Project:	Brewery Line Trail Phase II	**Contractor:**	TREC	**Date:**	8/3/2021
Project #:	213414039.000	**Operator:**	Chad Britton	**Start Time:**	0935
Client:	City of Rochester	**Equip Used:**	Kx 121-3	**Completed Time:**	1011
Location:	305-306, 295, 369 St Paul St.	**Weather:**	60's sunny	**Stantec Rep:**	A. Matkosky
	Rochester, NY				

Depth (ft)	PID (ppm)	Sample Info ID	Sample Info Depth	Strata Change (ft)	Soil & Stratigraphy Descriptions	Remarks
0.5	0.0			0.0-0.9	Medium-dark brown SILT and very fine-medium SAND, fine gravel, roots, moist, no odor -TOPSOIL-	
1	0.0					
				0.9-7.5	Medium brown SILT and very fine-fine SAND, fine-very coarse gravel, large rock pieces, little asphalt, trace brick, moist-dry, no odor -FILL-	Rock foundation pieces
2						
2.5	0.0				Rock pieces from suspected old foundation at ~5.5 ft	
3						
4						
5	0.0					
6						
7						
8					Refusal at 7.5 ft	
9						

Notes:
1. PID Model Mini-Rae 3000 with 10.6 eV lamp.

TP Length & Width: 9 x 2

Test Pit 1, TE-01-BLT

Test Pit 2, TE-02-BLT

Test Pit 3, TE-03-BLT

Test Pit 4, TE-04-BLT

ATTACHMENT **C** LABORATORY SUMMARY TABLES

Table
Summary of Soil Analytical Results
Brewery Line Trail Environmental
City of Rochester

Sample Location			RRS-01		RRS-02		SB-01		SB-02		SB-03		SB-04		SB-05		SB-08		SB-09	
Sample Date			2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21
Sample ID			RRS-01-BLT-A	RRS-01-BLT-B	RRS-02-BLT-A	RRS-02-BLT-B	SB-01-BLT	SB-01-BLT	SB-02-BLT	SB-02-BLT	SB-03-BLT	SB-03-BLT	SB-04-BLT-A	SB-04-BLT-B	SB-05-BLT-A	SB-05-BLT-B	SB-08-BLT-A	SB-08-BLT-B	SB-09-BLT-A	SB-09-BLT-B
			0 - 2 ft	0 - 2 ft	0 - 2 ft	0 - 2 ft	0.7 ft (VOC)	2.0 ft (SVOC)	0.8 ft (VOC)	1.4 ft (SVOC)	0.8 ft (VOC)	1.5 ft (SVOC)	0.8 ft	1.5 ft	0.9 ft	1.5 ft	0.5 ft	2.5 ft	0.6 ft	2.3 ft
Sampling Company			STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory			PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH
Laboratory Work Order			213459	213459	213459	213459	213459	213459	213459	213459	213459	213459	213459	213459	213459	213459	213459	213459	213459	213459
Laboratory Sample ID			213459-09A	213459-09	213459-10A	213459-10	213459-01A	213459-01	213459-02A	213459-02	213459-03A	213459-03	213459-04A	213459-04	213459-05A	213459-05	213459-06A	213459-06	213459-07A	213459-07
Sample Type	Units	NYSDEC-Part 375																		
Metals																				
Arsenic	mg/kg	16_g^{AB}	-	**21.4^{AB}**	-	8.63	-	4.80	-	10.0	-	3.63	-	10.1	-	6.73	-	5.16	-	2.05 D
Barium	mg/kg	400^{AB}	-	82.5	-	68.5	-	53.5	-	77.7	-	49.2	-	58.2	-	121	-	58.8	-	36.2 D
Cadmium	mg/kg	4.3^{A} 9.3^{B}	-	0.315	-	0.289 U	-	0.425	-	0.276 U	-	0.274 U	-	0.433	-	0.278 U	-	0.291 U	-	0.275 U
Chromium	mg/kg	180^{A} $1{,}500^{B}$	-	10.1	-	10.8	-	6.24	-	11.6	-	7.00	-	8.90	-	6.52	-	14.2	-	7.05 D
Lead	mg/kg	400^{A} $1{,}000^{B}$	-	88.7	-	87.2	-	9.16	-	62.9	-	40.4	-	**1,450^{AB}**	-	69.3	-	9.08	-	4.76 D
Mercury	mg/kg	0.81_4^{A} 2.8_k^{B}	-	0.409	-	0.306	-	0.0270	-	0.316	-	0.0867	-	0.249	-	0.0913	-	0.0198	-	0.00840 U
Selenium	mg/kg	180^{A} $1{,}500^{B}$	-	1.20	-	1.15 U	-	1.54	-	1.10 U	-	1.10 U	-	1.15 U	-	1.11 U	-	1.17 U	-	1.10 U
Silver	mg/kg	180^{A} $1{,}500^{B}$	-	0.564 U	-	0.577 U	-	0.621 U	-	0.552 U	-	0.549 U	-	0.577 U	-	0.557 U	-	0.583 U	-	0.549 U
Polychlorinated Biphenyls																				
Aroclor 1016	mg/kg	$_o^{AB}$	-	0.184 U	-	0.179 U	-	0.156 U	-	0.153 U	-	0.141 U	-	0.161 U	-	0.175 U	-	0.164 U	-	0.149 U
Aroclor 1221	mg/kg	$_o^{AB}$	-	0.184 U	-	0.179 U	-	0.156 U	-	0.153 U	-	0.141 U	-	0.161 U	-	0.175 U	-	0.164 U	-	0.149 U
Aroclor 1232	mg/kg	$_o^{AB}$	-	0.184 U	-	0.179 U	-	0.156 U	-	0.153 U	-	0.141 U	-	0.161 U	-	0.175 U	-	0.164 U	-	0.149 U
Aroclor 1242	mg/kg	$_o^{AB}$	-	0.184 U	-	0.179 U	-	0.156 U	-	0.153 U	-	0.141 U	-	0.161 U	-	0.175 U	-	0.164 U	-	0.149 U
Aroclor 1248	mg/kg	$_o^{AB}$	-	0.184 U	-	0.179 U	-	0.156 U	-	0.153 U	-	0.141 U	-	0.161 U	-	0.175 U	-	0.164 U	-	0.149 U
Aroclor 1254	mg/kg	$_o^{AB}$	-	0.184 U	-	0.179 U	-	0.156 U	-	0.153 U	-	0.141 U	-	0.161 U	-	0.175 U	-	0.164 U	-	0.149 U
Aroclor 1260	mg/kg	$_o^{AB}$	-	0.184 U	-	0.179 U	-	0.156 U	-	0.153 U	-	0.141 U	-	0.161 U	-	0.175 U	-	0.164 U	-	0.149 U
Aroclor 1262	mg/kg	$_o^{AB}$	-	0.184 U	-	0.179 U	-	0.156 U	-	0.153 U	-	0.141 U	-	0.161 U	-	0.175 U	-	0.164 U	-	0.149 U
Aroclor 1268	mg/kg	$_o^{AB}$	-	0.184 U	-	0.179 U	-	0.156 U	-	0.153 U	-	0.141 U	-	0.161 U	-	0.175 U	-	0.164 U	-	0.149 U
Polychlorinated Biphenyls (PCBs)	mg/kg	1^{AB}	-	ND	-	ND	-	ND	-	ND	-	ND	-	ND	-	ND	-	ND	-	ND
Volatile Organic Compounds																				
Acetone	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	47.0 U	-	37.1 U	-	54.0 U	-	49.2 U	-	40.9 U	-	48.4 U	-	44.3 U	-	36.0 U	-	37.9 U	-
Benzene	µg/kg	$4{,}800^{A}$ $44{,}000^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Bromodichloromethane	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Bromoform (Tribromomethane)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	23.5 U	-	18.5 U	-	27.0 U	-	24.6 U	-	20.4 U	-	24.2 U	-	22.1 U	-	18.0 U	-	18.9 U	-
Bromomethane (Methyl bromide)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Butylbenzene, n-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Butylbenzene, sec- (2-Phenylbutane)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Butylbenzene, tert-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Carbon Disulfide	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Carbon Tetrachloride (Tetrachloromethane)	µg/kg	$2{,}400^{A}$ $22{,}000^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Chlorobenzene (Monochlorobenzene)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Chlorobromomethane	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	23.5 U	-	18.5 U	-	27.0 U	-	24.6 U	-	20.4 U	-	24.2 U	-	22.1 U	-	18.0 U	-	18.9 U	-
Chloroethane (Ethyl Chloride)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Chloroform (Trichloromethane)	µg/kg	$49{,}000^{A}$ $350{,}000^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Chloromethane	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Cyclohexane	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	47.0 U	-	37.1 U	-	54.0 U	-	49.2 U	-	40.9 U	-	48.4 U	-	44.3 U	-	36.0 U	-	37.9 U	-
Dibromo-3-Chloropropane, 1,2- (DBCP)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	47.0 U	-	37.1 U	-	54.0 U	-	49.2 U	-	40.9 U	-	48.4 U	-	44.3 U	-	36.0 U	-	37.9 U	-
Dibromochloromethane	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Dichlorobenzene, 1,2-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Dichlorobenzene, 1,3-	µg/kg	$49{,}000^{A}$ $280{,}000^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Dichlorobenzene, 1,4-	µg/kg	$13{,}000^{A}$ $130{,}000^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Dichlorodifluoromethane (Freon 12)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Dichloroethane, 1,1-	µg/kg	$26{,}000^{A}$ $240{,}000^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Dichloroethane, 1,2-	µg/kg	$3{,}100^{A}$ $30{,}000^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Dichloroethene, 1,1-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Dichloroethene, cis-1,2-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Dichloroethene, trans-1,2-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Dichloropropane, 1,2-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Dichloropropene, cis-1,3-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Dichloropropene, trans-1,3-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Dioxane, 1,4-	µg/kg	$13{,}000^{A}$ $130{,}000^{B}$	47.0 U	-	37.1 U	-	54.0 U	-	49.2 U	-	40.9 U	-	48.4 U	-	44.3 U	-	36.0 U	-	37.9 U	-
Ethylbenzene	µg/kg	$41{,}000^{A}$ $390{,}000^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Hexanone, 2- (Methyl Butyl Ketone)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	23.5 U	-	18.5 U	-	27.0 U	-	24.6 U	-	20.4 U	-	24.2 U	-	22.1 U	-	18.0 U	-	18.9 U	-
Isopropylbenzene	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Isopropyltoluene, p- (Cymene)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Methyl Acetate	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Methyl Ethyl Ketone (MEK) (2-Butanone)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	47.0 U	-	37.1 U	-	54.0 U	-	49.2 U	-	40.9 U	-	48.4 U	-	44.3 U	-	36.0 U	-	37.9 U	-
Methyl Isobutyl Ketone (MIBK)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	23.5 U	-	18.5 U	-	27.0 U	-	24.6 U	-	20.4 U	-	24.2 U	-	22.1 U	-	18.0 U	-	18.9 U	-
Methyl tert-butyl ether (MTBE)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Methylcyclohexane	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Methylene Chloride (Dichloromethane)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	23.5 U	-	18.5 U	-	27.0 U	-	24.6 U	-	20.4 U	-	24.2 U	-	22.1 U	-	18.0 U	-	18.9 U	-
Naphthalene	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	23.5 U	-	18.5 U	-	27.0 U	-	24.6 U	-	20.4 U	-	24.2 U	-	22.1 U	-	18.0 U	-	18.9 U	-
Propylbenzene, n-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Styrene	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	23.5 U	-	18.5 U	-	27.0 U	-	24.6 U	-	20.4 U	-	24.2 U	-	22.1 U	-	18.0 U	-	18.9 U	-
Tetrachloroethane, 1,1,2,2-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Tetrachloroethene (PCE)	µg/kg	$19{,}000^{A}$ $150{,}000^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Toluene	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Trichlorobenzene, 1,2,3-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	23.5 U	-	18.5 U	-	27.0 U	-	24.6 U	-	20.4 U	-	24.2 U	-	22.1 U	-	18.0 U	-	18.9 U	-
Trichlorobenzene, 1,2,4-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	23.5 U	-	18.5 U	-	27.0 U	-	24.6 U	-	20.4 U	-	24.2 U	-	22.1 U	-	18.0 U	-	18.9 U	-
Trichloroethane, 1,1,1-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Trichloroethane, 1,1,2-	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Trichloroethene (TCE)	µg/kg	$21{,}000^{A}$ $200{,}000^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Trichlorofluoromethane (Freon 11)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Trichlorotrifluoroethane (Freon 113)	µg/kg	$100{,}000_b^{A}$ $500{,}000_c^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Trimethylbenzene, 1,2,4-	µg/kg	$52{,}000^{A}$ $190{,}000^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Trimethylbenzene, 1,3,5-	µg/kg	$52{,}000^{A}$ $190{,}000^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Vinyl Chloride	µg/kg	900^{A} $13{,}000^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Xylene, m & p-	µg/kg	$100{,}000_{b,o}^{A}$ $500{,}000_{c,p}^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-
Xylene, o-	µg/kg	$100{,}000_{b,o}^{A}$ $500{,}000_{c,p}^{B}$	9.39 U	-	7.41 U	-	10.8 U	-	9.84 U	-	8.17 U	-	9.69 U	-	8.86 U	-	7.19 U	-	7.58 U	-

See notes on last page.

Table
Summary of Soil Analytical Results
Brewery Line Trail Environmental
City of Rochester

Sample Location			RRS-01		RRS-02		SB-01		SB-02		SB-03		SB-04		SB-05		SB-08		SB-09	
Sample Date			2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21	2-Aug-21
Sample ID			RRS-01-BLT-A	RRS-01-BLT-B	RRS-02-BLT-A	RRS-02-BLT-B	SB-01-BLT	SB-01-BLT	SB-02-BLT	SB-02-BLT	SB-03-BLT	SB-03-BLT	SB-04-BLT-A	SB-04-BLT-B	SB-05-BLT-A	SB-05-BLT-B	SB-08-BLT-A	SB-08-BLT-B	SB-09-BLT-A	SB-09-BLT-B
			0 - 2 ft	0 - 2 ft	0 - 2 ft	0 - 2 ft	0.7 ft (VOC)	2.0 ft (SVOC)	0.8 ft (VOC)	1.4 ft (SVOC)	0.8 ft (VOC)	1.5 ft (SVOC)	0.8 ft	1.5 ft	0.9 ft	1.5 ft	0.5 ft	2.5 ft	0.6 ft	2.3 ft
Sampling Company			STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory			PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH
Laboratory Work Order			213459	213459	213459	213459	213459	213459	213459	213459	213459	213459	213459	213459	213459	213459	213459	213459	213459	213459
Laboratory Sample ID			213459-09A	213459-09	213459-10A	213459-10	213459-01A	213459-01	213459-02A	213459-02	213459-03A	213459-03	213459-04A	213459-04	213459-05A	213459-05	213459-06A	213459-06	213459-07A	213459-07
Sample Type	Units	NYSDEC-Part 375																		
Semi-Volatile Organic Compounds																				
Acenaphthene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Acenaphthylene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	445	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Acetophenone	µg/kg	$100{,}000_b^A$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Anthracene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	436	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Atrazine	µg/kg	$100{,}000_b^A$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Benzaldehyde	µg/kg	$100{,}000_b^A$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Benzo(a)anthracene	µg/kg	$1{,}000_g^A$ $5{,}600^B$	-	**1,110^A**	-	316 U	-	336 U	-	312 U	-	276 U	-	449	-	321 U	-	305 U	-	294 U
Benzo(a)pyrene	µg/kg	$1{,}000_g^{AB}$	-	805	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Benzo(b)fluoranthene	µg/kg	$1{,}000_g^A$ $5{,}600^B$	-	**1,470^A**	-	316 U	-	336 U	-	312 U	-	276 U	-	456	-	432	-	305 U	-	294 U
Benzo(g,h,i)perylene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	499	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Benzo(k)fluoranthene	µg/kg	$3{,}900^A$ $56{,}000^B$	-	781	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Biphenyl	µg/kg	$100{,}000_b^A$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Bis(2-Chloroethoxy)methane	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Bis(2-Chloroethyl)ether	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Bis(2-Chloroisopropyl)ether (2,2-oxybis(1-Chloropropane))	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Bis(2-Ethylhexyl)phthalate (DEHP)	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Bromophenyl Phenyl Ether, 4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Butyl Benzyl Phthalate	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Caprolactam	µg/kg	$100{,}000_b^A$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Carbazole	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Chloro-3-methyl phenol, 4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Chloroaniline, 4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Chloronaphthalene, 2-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Chlorophenol, 2- (ortho-Chlorophenol)	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Chlorophenyl Phenyl Ether, 4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Chrysene	µg/kg	$3{,}900^A$ $56{,}000^B$	-	1,330	-	316 U	-	336 U	-	312 U	-	276 U	-	506	-	390	-	305 U	-	294 U
Cresol, m & p- (Methylphenol, 3&4-)	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Cresol, o- (Methylphenol, 2-)	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Dibenzo(a,h)anthracene	µg/kg	330^A 560^B	-	327 U	-	316 U	-	***336 U***	-	312 U	-	276 U	-	***333 U***	-	321 U	-	305 U	-	294 U
Dibenzofuran	µg/kg	$59{,}000^A$ $350{,}000^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Dibutyl Phthalate (DBP)	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Dichlorobenzene, 1,2-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Dichlorobenzene, 1,3-	µg/kg	$49{,}000^A$ $280{,}000^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Dichlorobenzene, 1,4-	µg/kg	$13{,}000^A$ $130{,}000^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Dichlorobenzidine, 3,3'-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Dichlorophenol, 2,4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Diethyl Phthalate	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Dimethyl Phthalate	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Dimethylphenol, 2,4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Dinitro-o-cresol, 4,6-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	654 U	-	632 U	-	671 U	-	625 U	-	552 U	-	665 U	-	643 U	-	610 U	-	587 U
Dinitrophenol, 2,4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	1,310 U	-	1,260 U	-	1,340 U	-	1,250 U	-	1,100 U	-	1,330 U	-	1,290 U	-	1,220 U	-	1,170 U
Dinitrotoluene, 2,4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Dinitrotoluene, 2,6-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Di-n-Octyl phthalate	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Fluoranthene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	2,130	-	316 U	-	336 U	-	312 U	-	276 U	-	1,230	-	602	-	305 U	-	294 U
Fluorene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Hexachlorobenzene	µg/kg	$1{,}200^A$ $6{,}000^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Hexachlorocyclopentadiene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	1,310 U	-	1,260 U	-	1,340 U	-	1,250 U	-	1,100 U	-	1,330 U	-	1,290 U	-	1,220 U	-	1,170 U
Hexachloroethane	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Indeno(1,2,3-cd)pyrene	µg/kg	500_g^A $5{,}600^B$	-	**621^A**	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Isophorone	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Methylnaphthalene, 2-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	497	-	305 U	-	294 U
Naphthalene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	331	-	305 U	-	294 U
Nitroaniline, 2-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Nitroaniline, 3-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Nitroaniline, 4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Nitrobenzene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Nitrophenol, 2-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Nitrophenol, 4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
N-Nitrosodi-n-Propylamine	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
n-Nitrosodiphenylamine	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Pentachlorophenol	µg/kg	$6{,}700^{AB}$	-	654 U	-	632 U	-	671 U	-	625 U	-	552 U	-	665 U	-	643 U	-	610 U	-	587 U
Phenanthrene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	912	-	316 U	-	336 U	-	312 U	-	276 U	-	1,510	-	745	-	305 U	-	294 U
Phenol	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Pyrene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	1,770	-	316 U	-	336 U	-	312 U	-	276 U	-	963	-	353	-	305 U	-	294 U
Tetrachlorobenzene, 1,2,4,5-	µg/kg	$100{,}000_b^A$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Tetrachlorophenol, 2,3,4,6-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Trichlorobenzene, 1,2,4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Trichlorophenol, 2,4,5-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U
Trichlorophenol, 2,4,6-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	327 U	-	316 U	-	336 U	-	312 U	-	276 U	-	333 U	-	321 U	-	305 U	-	294 U

See notes on last page.

Table
Summary of Soil Analytical Results
Brewery Line Trail Environmental
City of Rochester

Sample Location			SB-11		TE-01		TE-02		TE-03		TE-04	
Sample Date			2-Aug-21	2-Aug-21	3-Aug-21	3-Aug-21	3-Aug-21	3-Aug-21	3-Aug-21	3-Aug-21	3-Aug-21	3-Aug-21
Sample ID			SB-11-BLT-A 1.1 ft	SB-11-BLT-B 1.9 ft	TE-01-BLT-A 1.0 ft	TE-01-BLT-B 1.0 ft	TE-02-BLT-A 1.6 ft	TE-02-BLT-B 1.6 ft	TE-03-BLT-A 1.5 ft	TE-03-BLT-B 1.5 ft	TE-04-BLT-A 2.5 ft	TE-04-BLT-B 2.5 ft
Sampling Company			STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory			PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH
Laboratory Work Order			213459	213459	213480	213480	213480	213480	213480	213480	213480	213480
Laboratory Sample ID			213459-08A	213459-08	213480-01A	213480-01	213480-02A	213480-02	213480-03A	213480-03	213480-04A	213480-04
Sample Type	Units	NYSDEC-Part 375										
Metals												
Arsenic	mg/kg	16_{g}^{AB}	-	2.96	-	**41.7^{AB}**	-	2.77	-	5.76	-	3.71 D
Barium	mg/kg	400^{AB}	-	39.5	-	**$3{,}510^{AB}$**	-	69.6	-	53.5	-	60.1
Cadmium	mg/kg	4.3^{A} 9.3^{B}	-	0.490	-	**9.47^{AB}**	-	0.271 U	-	0.289	-	0.289 D
Chromium	mg/kg	180^{A} $1{,}500^{B}$	-	10.8	-	126	-	10.7	-	10.1	-	9.69
Lead	mg/kg	400^{A} $1{,}000^{B}$	-	44.7	-	**$11{,}400^{AB}$**	-	22.7	-	59.5	-	62.7
Mercury	mg/kg	0.81_{k}^{A} 2.8_{k}^{B}	-	0.117	-	**1.91^{A}**	-	0.0773	-	0.175	-	0.285
Selenium	mg/kg	180^{A} $1{,}500^{B}$	-	1.08 U	-	2.62	-	1.08 U	-	1.11 U	-	1.10 U
Silver	mg/kg	180^{A} $1{,}500^{B}$	-	0.541 U	-	0.598 U	-	0.542 U	-	0.553 U	-	0.550 U
Polychlorinated Biphenyls												
Aroclor 1016	mg/kg	$_{o}^{AB}$	-	0.134 U	-	0.180 U	-	0.181 U	-	0.143 U	-	0.175 U
Aroclor 1221	mg/kg	$_{o}^{AB}$	-	0.134 U	-	0.180 U	-	0.181 U	-	0.143 U	-	0.175 U
Aroclor 1232	mg/kg	$_{o}^{AB}$	-	0.134 U	-	0.180 U	-	0.181 U	-	0.143 U	-	0.175 U
Aroclor 1242	mg/kg	$_{o}^{AB}$	-	0.134 U	-	0.180 U	-	0.181 U	-	0.143 U	-	0.175 U
Aroclor 1248	mg/kg	$_{o}^{AB}$	-	0.134 U	-	0.180 U	-	0.181 U	-	0.143 U	-	0.175 U
Aroclor 1254	mg/kg	$_{o}^{AB}$	-	0.134 U	-	0.180 U	-	0.181 U	-	0.143 U	-	0.175 U
Aroclor 1260	mg/kg	$_{o}^{AB}$	-	0.134 U	-	0.180 U	-	0.181 U	-	0.143 U	-	0.175 U
Aroclor 1262	mg/kg	$_{o}^{AB}$	-	0.134 U	-	0.180 U	-	0.181 U	-	0.143 U	-	0.175 U
Aroclor 1268	mg/kg	$_{o}^{AB}$	-	0.134 U	-	0.180 U	-	0.181 U	-	0.143 U	-	0.175 U
Polychlorinated Biphenyls (PCBs)	mg/kg	1^{AB}	-	ND	-	ND	-	ND	-	ND	-	ND
Volatile Organic Compounds												
Acetone	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	40.7 U	-	55.4 U	-	49.3 U	-	35.2 U	-	42.5 U	-
Benzene	µg/kg	$4{,}800^{A}$ $44{,}000^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Bromodichloromethane	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Bromoform (Tribromomethane)	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	20.3 U	-	27.7 U	-	24.7 U	-	17.6 U	-	21.3 U	-
Bromomethane (Methyl bromide)	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Butylbenzene, n-	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Butylbenzene, sec- (2-Phenylbutane)	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Butylbenzene, tert-	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Carbon Disulfide	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Carbon Tetrachloride (Tetrachloromethane)	µg/kg	$2{,}400^{A}$ $22{,}000^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Chlorobenzene (Monochlorobenzene)	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Chlorobromomethane	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	20.3 U	-	27.7 U	-	24.7 U	-	17.6 U	-	21.3 U	-
Chloroethane (Ethyl Chloride)	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Chloroform (Trichloromethane)	µg/kg	$49{,}000^{A}$ $350{,}000^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Chloromethane	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Cyclohexane	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	40.7 U	-	55.4 U	-	49.3 U	-	35.2 U	-	42.5 U	-
Dibromo-3-Chloropropane, 1,2- (DBCP)	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	40.7 U	-	55.4 U	-	49.3 U	-	35.2 U	-	42.5 U	-
Dibromochloromethane	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Dichlorobenzene, 1,2-	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Dichlorobenzene, 1,3-	µg/kg	$49{,}000^{A}$ $280{,}000^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Dichlorobenzene, 1,4-	µg/kg	$13{,}000^{A}$ $130{,}000^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Dichlorodifluoromethane (Freon 12)	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Dichloroethane, 1,1-	µg/kg	$26{,}000^{A}$ $240{,}000^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Dichloroethane, 1,2-	µg/kg	$3{,}100^{A}$ $30{,}000^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Dichloroethene, 1,1-	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Dichloroethene, cis-1,2-	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Dichloroethene, trans-1,2-	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Dichloropropane, 1,2-	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Dichloropropene, cis-1,3-	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Dichloropropene, trans-1,3-	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Dioxane, 1,4-	µg/kg	$13{,}000^{A}$ $130{,}000^{B}$	40.7 U	-	55.4 U	-	49.3 U	-	35.2 U	-	42.5 U	-
Ethylbenzene	µg/kg	$41{,}000^{A}$ $390{,}000^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Hexanone, 2- (Methyl Butyl Ketone)	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	20.3 U	-	27.7 U	-	24.7 U	-	17.6 U	-	21.3 U	-
Isopropylbenzene	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Isopropyltoluene, p- (Cymene)	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	8.14 U	-	11.5	-	9.86 U	-	7.04 U	-	8.50 U	-
Methyl Acetate	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Methyl Ethyl Ketone (MEK) (2-Butanone)	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	40.7 U	-	55.4 U	-	49.3 U	-	35.2 U	-	42.5 U	-
Methyl Isobutyl Ketone (MIBK)	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	20.3 U	-	27.7 U	-	24.7 U	-	17.6 U	-	21.3 U	-
Methyl tert-butyl ether (MTBE)	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Methylcyclohexane	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Methylene Chloride (Dichloromethane)	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	20.3 U	-	27.7 U	-	24.7 U	-	17.6 U	-	21.3 U	-
Naphthalene	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	20.3 U	-	27.7 U	-	24.7 U	-	17.6 U	-	21.3 U	-
Propylbenzene, n-	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Styrene	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	20.3 U	-	27.7 U	-	24.7 U	-	17.6 U	-	21.3 U	-
Tetrachloroethane, 1,1,2,2-	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Tetrachloroethene (PCE)	µg/kg	$19{,}000^{A}$ $150{,}000^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Toluene	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Trichlorobenzene, 1,2,3-	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	20.3 U	-	27.7 U	-	24.7 U	-	17.6 U	-	21.3 U	-
Trichlorobenzene, 1,2,4-	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	20.3 U	-	27.7 U	-	24.7 U	-	17.6 U	-	21.3 U	-
Trichloroethane, 1,1,1-	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Trichloroethane, 1,1,2-	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Trichloroethene (TCE)	µg/kg	$21{,}000^{A}$ $200{,}000^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Trichlorofluoromethane (Freon 11)	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Trichlorotrifluoroethane (Freon 113)	µg/kg	$100{,}000_{b}^{A}$ $500{,}000_{c}^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Trimethylbenzene, 1,2,4-	µg/kg	$52{,}000^{A}$ $190{,}000^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Trimethylbenzene, 1,3,5-	µg/kg	$52{,}000^{A}$ $190{,}000^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Vinyl Chloride	µg/kg	900^{A} $13{,}000^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Xylene, m & p-	µg/kg	$100{,}000_{b,o}^{A}$ $500{,}000_{c,p}^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-
Xylene, o-	µg/kg	$100{,}000_{b,o}^{A}$ $500{,}000_{c,p}^{B}$	8.14 U	-	11.1 U	-	9.86 U	-	7.04 U	-	8.50 U	-

See notes on last page.

Table
Summary of Soil Analytical Results
Brewery Line Trail Environmental
City of Rochester

Sample Location			SB-11		TE-01		TE-02		TE-03		TE-04	
Sample Date			2-Aug-21	2-Aug-21	3-Aug-21	3-Aug-21	3-Aug-21	3-Aug-21	3-Aug-21	3-Aug-21	3-Aug-21	3-Aug-21
Sample ID			SB-11-BLT-A	SB-11-BLT-B	TE-01-BLT-A	TE-01-BLT-B	TE-02-BLT-A	TE-02-BLT-B	TE-03-BLT-A	TE-03-BLT-B	TE-04-BLT-A	TE-04-BLT-B
			1.1 ft	1.9 ft	1.0 ft	1.0 ft	1.6 ft	1.6 ft	1.5 ft	1.5 ft	2.5 ft	2.5 ft
Sampling Company			STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory			PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH	PARAROCH
Laboratory Work Order			213459	213459	213480	213480	213480	213480	213480	213480	213480	213480
Laboratory Sample ID			213459-08A	213459-08	213480-01A	213480-01	213480-02A	213480-02	213480-03A	213480-03	213480-04A	213480-04
Sample Type	Units	NYSDEC-Part 375										
Semi-Volatile Organic Compounds												
Acenaphthene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Acenaphthylene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	940	-	321 U	-	296 U	-	294 U
Acetophenone	µg/kg	$100{,}000_b^A$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Anthracene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	1,130	-	321 U	-	296 U	-	294 U
Atrazine	µg/kg	$100{,}000_b^A$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Benzaldehyde	µg/kg	$100{,}000_b^A$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Benzo(a)anthracene	µg/kg	$1{,}000_g^A$ $5{,}600^B$	-	284 U	-	**3,910^A**	-	321 U	-	296 U	-	294 U
Benzo(a)pyrene	µg/kg	$1{,}000_g^{AB}$	-	284 U	-	**2,830^{AB}**	-	321 U	-	296 U	-	294 U
Benzo(b)fluoranthene	µg/kg	$1{,}000_g^A$ $5{,}600^B$	-	284 U	-	**4,080^A**	-	321 U	-	296 U	-	294 U
Benzo(g,h,i)perylene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	1,950	-	321 U	-	296 U	-	294 U
Benzo(k)fluoranthene	µg/kg	$3{,}900^A$ $56{,}000^B$	-	284 U	-	2,000	-	321 U	-	296 U	-	294 U
Biphenyl	µg/kg	$100{,}000_b^A$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Bis(2-Chloroethoxy)methane	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Bis(2-Chloroethyl)ether	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Bis(2-Chloroisopropyl)ether (2,2-oxybis(1-Chloropropane))	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Bis(2-Ethylhexyl)phthalate (DEHP)	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Bromophenyl Phenyl Ether, 4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Butyl Benzyl Phthalate	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Caprolactam	µg/kg	$100{,}000_b^A$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Carbazole	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	501	-	321 U	-	296 U	-	294 U
Chloro-3-methyl phenol, 4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Chloroaniline, 4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Chloronaphthalene, 2-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Chlorophenol, 2- (ortho-Chlorophenol)	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Chlorophenyl Phenyl Ether, 4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Chrysene	µg/kg	$3{,}900^A$ $56{,}000^B$	-	284 U	-	3,690	-	321 U	-	296 U	-	294 U
Cresol, m & p- (Methylphenol, 3&4-)	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Cresol, o- (Methylphenol, 2-)	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Dibenzo(a,h)anthracene	µg/kg	330^A 560^B	-	284 U	-	**573^{AB}**	-	321 U	-	296 U	-	294 U
Dibenzofuran	µg/kg	$59{,}000^A$ $350{,}000^B$	-	284 U	-	336	-	321 U	-	296 U	-	294 U
Dibutyl Phthalate (DBP)	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Dichlorobenzene, 1,2-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Dichlorobenzene, 1,3-	µg/kg	$49{,}000^A$ $280{,}000^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Dichlorobenzene, 1,4-	µg/kg	$13{,}000^A$ $130{,}000^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Dichlorobenzidine, 3,3'-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Dichlorophenol, 2,4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Diethyl Phthalate	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Dimethyl Phthalate	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Dimethylphenol, 2,4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Dinitro-o-cresol, 4,6-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	569 U	-	623 U	-	642 U	-	593 U	-	588 U
Dinitrophenol, 2,4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	1,140 U	-	1,250 U	-	1,280 U	-	1,190 U	-	1,180 U
Dinitrotoluene, 2,4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Dinitrotoluene, 2,6-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Di-n-Octyl phthalate	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Fluoranthene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	359	-	6,190	-	321 U	-	296 U	-	294 U
Fluorene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Hexachlorobenzene	µg/kg	$1{,}200^A$ $6{,}000^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Hexachlorocyclopentadiene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	1,140 U	-	1,250 U	-	1,280 U	-	1,190 U	-	1,180 U
Hexachloroethane	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Indeno(1,2,3-cd)pyrene	µg/kg	500_g^A $5{,}600^B$	-	284 U	-	**2,090^A**	-	321 U	-	296 U	-	294 U
Isophorone	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Methylnaphthalene, 2-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	505	-	321 U	-	296 U	-	294 U
Naphthalene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	686	-	321 U	-	296 U	-	294 U
Nitroaniline, 2-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Nitroaniline, 3-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Nitroaniline, 4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Nitrobenzene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Nitrophenol, 2-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Nitrophenol, 4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
N-Nitrosodi-n-Propylamine	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
n-Nitrosodiphenylamine	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Pentachlorophenol	µg/kg	$6{,}700^{AB}$	-	569 U	-	623 U	-	642 U	-	593 U	-	588 U
Phenanthrene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	2,310	-	321 U	-	296 U	-	294 U
Phenol	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Pyrene	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	307	-	4,620	-	321 U	-	296 U	-	294 U
Tetrachlorobenzene, 1,2,4,5-	µg/kg	$100{,}000_b^A$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Tetrachlorophenol, 2,3,4,6-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Trichlorobenzene, 1,2,4-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Trichlorophenol, 2,4,5-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U
Trichlorophenol, 2,4,6-	µg/kg	$100{,}000_b^A$ $500{,}000_c^B$	-	284 U	-	311 U	-	321 U	-	296 U	-	294 U

See notes on last page.

Table
Summary of Soil Analytical Results
Brewery Line Trail Environmental
City of Rochester

Notes:

NYSDEC-Part 375	NYSDEC 6 NYCRR Part 375 Soil Clean-up Objectives (SCOs)
A	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Restricted Residential
B	NYSDEC 6 NYCRR Part 375 - Restricted Use SCO - Protection of Human Health - Commercial
6.5[A]	Concentration exceeds the indicated standard.
15.2	Measured concentration did not exceed the indicated standard.
0.50 U	Laboratory reporting limit was greater than the applicable standard.
0.03 U	Analyte was not detected at a concentration greater than the laboratory reporting limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
b	The SCOs for residential, restricted-residential and ecological resources use were capped at a maximum value of 100 mg/kg. See 6 NYCRR Part 375 TSD Section 9.3.
b,p	The SCOs for residential, restricted-residential and ecological resources use were capped at a maximum value of 100 mg/kg. See 6 NYCRR Part 375 TSD Section 9.3. The criterion is applicable to total xylenes, and the individual isomers should be added for comparison.
c	The SCOs for commercial use were capped at a maximum value of 500 mg/kg. See TSD Section 9.3.
c,p	The SCOs for commercial use were capped at a maximum value of 500 mg/kg. See TSD Section 9.3. The criterion is applicable to total xylenes, and the individual isomers should be added for comparison.
f	For constituents where the calculated SCO was lower than the CRQL, the CRQL is used as the SCO value.
g	For constituents where the calculated SCO was lower than the rural soil background concentration as determined by the DEC/DOH rural soil survey, the rural soil background concentration is used as the Track 2 SCO value for this use of the site.
i	The SCO for this specific compound (or family of compounds) is considered to be met if the analysis for the total species of this contaminant is below the specific SCO.
k	This SCO is the lower of the values for mercury (elemental) or mercury (inorganic salts). See 6 NYCRR Part 375 TSD Table 5.6-1.
o	Standard is applicable to total PCBs, and the individual Aroclors should be added for comparison.
D	Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.
ND	Not detected.

ATTACHMENT **D** LABORATORY ANALYTICAL REPORTS

Analytical Report For

Stantec

For Lab Project ID

213459

Referencing

213414039.400

Prepared

Tuesday, August 10, 2021

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-01-BLT		
Lab Sample ID:	213459-01	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.0270**	mg/Kg		8/6/2021 10:32

Method Reference(s): EPA 7471B
Preparation Date: 8/5/2021
Data File: Hg210806A

RCRA Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**4.80**	mg/Kg		8/5/2021 20:19
Barium	**53.5**	mg/Kg		8/5/2021 20:19
Cadmium	**0.425**	mg/Kg		8/5/2021 20:19
Chromium	**6.24**	mg/Kg		8/5/2021 20:19
Lead	**9.16**	mg/Kg		8/5/2021 20:19
Selenium	**1.54**	mg/Kg		8/5/2021 20:19
Silver	< 0.621	mg/Kg		8/5/2021 20:19

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 8/5/2021
Data File: 210805D

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.156	mg/Kg		8/4/2021 18:54
PCB-1221	< 0.156	mg/Kg		8/4/2021 18:54
PCB-1232	< 0.156	mg/Kg		8/4/2021 18:54
PCB-1242	< 0.156	mg/Kg		8/4/2021 18:54
PCB-1248	< 0.156	mg/Kg		8/4/2021 18:54
PCB-1254	< 0.156	mg/Kg		8/4/2021 18:54
PCB-1260	< 0.156	mg/Kg		8/4/2021 18:54
PCB-1262	< 0.156	mg/Kg		8/4/2021 18:54
PCB-1268	< 0.156	mg/Kg		8/4/2021 18:54

Report Prepared Tuesday, August 10, 2021

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-01-BLT		
Lab Sample ID:	213459-01	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	**59.1**	18.5 - 93.4		8/4/2021 18:54

Method Reference(s): EPA 8082A
EPA 3546
Preparation Date: 8/4/2021

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 336	ug/Kg		8/6/2021 15:01
1,2,4,5-Tetrachlorobenzene	< 336	ug/Kg		8/6/2021 15:01
1,2,4-Trichlorobenzene	< 336	ug/Kg		8/6/2021 15:01
1,2-Dichlorobenzene	< 336	ug/Kg		8/6/2021 15:01
1,3-Dichlorobenzene	< 336	ug/Kg		8/6/2021 15:01
1,4-Dichlorobenzene	< 336	ug/Kg		8/6/2021 15:01
2,2-Oxybis (1-chloropropane)	< 336	ug/Kg		8/6/2021 15:01
2,3,4,6-Tetrachlorophenol	< 336	ug/Kg		8/6/2021 15:01
2,4,5-Trichlorophenol	< 336	ug/Kg		8/6/2021 15:01
2,4,6-Trichlorophenol	< 336	ug/Kg		8/6/2021 15:01
2,4-Dichlorophenol	< 336	ug/Kg		8/6/2021 15:01
2,4-Dimethylphenol	< 336	ug/Kg		8/6/2021 15:01
2,4-Dinitrophenol	< 1340	ug/Kg		8/6/2021 15:01
2,4-Dinitrotoluene	< 336	ug/Kg		8/6/2021 15:01
2,6-Dinitrotoluene	< 336	ug/Kg		8/6/2021 15:01
2-Chloronaphthalene	< 336	ug/Kg		8/6/2021 15:01
2-Chlorophenol	< 336	ug/Kg		8/6/2021 15:01
2-Methylnapthalene	< 336	ug/Kg		8/6/2021 15:01
2-Methylphenol	< 336	ug/Kg		8/6/2021 15:01
2-Nitroaniline	< 336	ug/Kg		8/6/2021 15:01
2-Nitrophenol	< 336	ug/Kg		8/6/2021 15:01
3&4-Methylphenol	< 336	ug/Kg		8/6/2021 15:01
3,3'-Dichlorobenzidine	< 336	ug/Kg		8/6/2021 15:01

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-01-BLT
Lab Sample ID: 213459-01 **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

3-Nitroaniline	< 336	ug/Kg	8/6/2021	15:01
4,6-Dinitro-2-methylphenol	< 449	ug/Kg	8/6/2021	15:01
4-Bromophenyl phenyl ether	< 336	ug/Kg	8/6/2021	15:01
4-Chloro-3-methylphenol	< 336	ug/Kg	8/6/2021	15:01
4-Chloroaniline	< 336	ug/Kg	8/6/2021	15:01
4-Chlorophenyl phenyl ether	< 336	ug/Kg	8/6/2021	15:01
4-Nitroaniline	< 336	ug/Kg	8/6/2021	15:01
4-Nitrophenol	< 336	ug/Kg	8/6/2021	15:01
Acenaphthene	< 336	ug/Kg	8/6/2021	15:01
Acenaphthylene	< 336	ug/Kg	8/6/2021	15:01
Acetophenone	< 336	ug/Kg	8/6/2021	15:01
Anthracene	< 336	ug/Kg	8/6/2021	15:01
Atrazine	< 336	ug/Kg	8/6/2021	15:01
Benzaldehyde	< 336	ug/Kg	8/6/2021	15:01
Benzo (a) anthracene	< 336	ug/Kg	8/6/2021	15:01
Benzo (a) pyrene	< 336	ug/Kg	8/6/2021	15:01
Benzo (b) fluoranthene	< 336	ug/Kg	8/6/2021	15:01
Benzo (g,h,i) perylene	< 336	ug/Kg	8/6/2021	15:01
Benzo (k) fluoranthene	< 336	ug/Kg	8/6/2021	15:01
Bis (2-chloroethoxy) methane	< 336	ug/Kg	8/6/2021	15:01
Bis (2-chloroethyl) ether	< 336	ug/Kg	8/6/2021	15:01
Bis (2-ethylhexyl) phthalate	< 336	ug/Kg	8/6/2021	15:01
Butylbenzylphthalate	< 336	ug/Kg	8/6/2021	15:01
Caprolactam	< 336	ug/Kg	8/6/2021	15:01
Carbazole	< 336	ug/Kg	8/6/2021	15:01
Chrysene	< 336	ug/Kg	8/6/2021	15:01
Dibenz (a,h) anthracene	< 336	ug/Kg	8/6/2021	15:01
Dibenzofuran	< 336	ug/Kg	8/6/2021	15:01
Diethyl phthalate	< 336	ug/Kg	8/6/2021	15:01
Dimethyl phthalate	< 336	ug/Kg	8/6/2021	15:01

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-01-BLT
Lab Sample ID: 213459-01 **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Di-n-butyl phthalate	< 336	ug/Kg	8/6/2021	15:01
Di-n-octylphthalate	< 336	ug/Kg	8/6/2021	15:01
Fluoranthene	< 336	ug/Kg	8/6/2021	15:01
Fluorene	< 336	ug/Kg	8/6/2021	15:01
Hexachlorobenzene	< 336	ug/Kg	8/6/2021	15:01
Hexachlorobutadiene	< 336	ug/Kg	8/6/2021	15:01
Hexachlorocyclopentadiene	< 1340	ug/Kg	8/6/2021	15:01
Hexachloroethane	< 336	ug/Kg	8/6/2021	15:01
Indeno (1,2,3-cd) pyrene	< 336	ug/Kg	8/6/2021	15:01
Isophorone	< 336	ug/Kg	8/6/2021	15:01
Naphthalene	< 336	ug/Kg	8/6/2021	15:01
Nitrobenzene	< 336	ug/Kg	8/6/2021	15:01
N-Nitroso-di-n-propylamine	< 336	ug/Kg	8/6/2021	15:01
N-Nitrosodiphenylamine	< 336	ug/Kg	8/6/2021	15:01
Pentachlorophenol	< 671	ug/Kg	8/6/2021	15:01
Phenanthrene	< 336	ug/Kg	8/6/2021	15:01
Phenol	< 336	ug/Kg	8/6/2021	15:01
Pyrene	< 336	ug/Kg	8/6/2021	15:01

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	**56.7**	36.4 - 87.2		8/6/2021	15:01
2-Fluorobiphenyl	**54.9**	44 - 84		8/6/2021	15:01
2-Fluorophenol	**45.6**	43.2 - 82.1		8/6/2021	15:01
Nitrobenzene-d5	**46.2**	36.4 - 82.2		8/6/2021	15:01
Phenol-d5	**49.6**	41.1 - 81.4		8/6/2021	15:01
Terphenyl-d14	**64.6**	43.8 - 103		8/6/2021	15:01

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 8/5/2021
Data File: B55994.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-01-BLT		
Lab Sample ID:	213459-01A	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 10.8	ug/Kg		8/4/2021 15:36
1,1,2,2-Tetrachloroethane	< 10.8	ug/Kg		8/4/2021 15:36
1,1,2-Trichloroethane	< 10.8	ug/Kg		8/4/2021 15:36
1,1-Dichloroethane	< 10.8	ug/Kg		8/4/2021 15:36
1,1-Dichloroethene	< 10.8	ug/Kg		8/4/2021 15:36
1,2,3-Trichlorobenzene	< 27.0	ug/Kg		8/4/2021 15:36
1,2,4-Trichlorobenzene	< 27.0	ug/Kg		8/4/2021 15:36
1,2,4-Trimethylbenzene	< 10.8	ug/Kg		8/4/2021 15:36
1,2-Dibromo-3-Chloropropane	< 54.0	ug/Kg		8/4/2021 15:36
1,2-Dibromoethane	< 10.8	ug/Kg		8/4/2021 15:36
1,2-Dichlorobenzene	< 10.8	ug/Kg		8/4/2021 15:36
1,2-Dichloroethane	< 10.8	ug/Kg		8/4/2021 15:36
1,2-Dichloropropane	< 10.8	ug/Kg		8/4/2021 15:36
1,3,5-Trimethylbenzene	< 10.8	ug/Kg		8/4/2021 15:36
1,3-Dichlorobenzene	< 10.8	ug/Kg		8/4/2021 15:36
1,4-Dichlorobenzene	< 10.8	ug/Kg		8/4/2021 15:36
1,4-Dioxane	< 54.0	ug/Kg		8/4/2021 15:36
2-Butanone	< 54.0	ug/Kg		8/4/2021 15:36
2-Hexanone	< 27.0	ug/Kg		8/4/2021 15:36
4-Methyl-2-pentanone	< 27.0	ug/Kg		8/4/2021 15:36
Acetone	< 54.0	ug/Kg		8/4/2021 15:36
Benzene	< 10.8	ug/Kg		8/4/2021 15:36
Bromochloromethane	< 27.0	ug/Kg		8/4/2021 15:36
Bromodichloromethane	< 10.8	ug/Kg		8/4/2021 15:36
Bromoform	< 27.0	ug/Kg		8/4/2021 15:36
Bromomethane	< 10.8	ug/Kg		8/4/2021 15:36
Carbon disulfide	< 10.8	ug/Kg		8/4/2021 15:36
Carbon Tetrachloride	< 10.8	ug/Kg		8/4/2021 15:36

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-01-BLT
Lab Sample ID: 213459-01A **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Chlorobenzene	< 10.8	ug/Kg	8/4/2021	15:36
Chloroethane	< 10.8	ug/Kg	8/4/2021	15:36
Chloroform	< 10.8	ug/Kg	8/4/2021	15:36
Chloromethane	< 10.8	ug/Kg	8/4/2021	15:36
cis-1,2-Dichloroethene	< 10.8	ug/Kg	8/4/2021	15:36
cis-1,3-Dichloropropene	< 10.8	ug/Kg	8/4/2021	15:36
Cyclohexane	< 54.0	ug/Kg	8/4/2021	15:36
Dibromochloromethane	< 10.8	ug/Kg	8/4/2021	15:36
Dichlorodifluoromethane	< 10.8	ug/Kg	8/4/2021	15:36
Ethylbenzene	< 10.8	ug/Kg	8/4/2021	15:36
Freon 113	< 10.8	ug/Kg	8/4/2021	15:36
Isopropylbenzene	< 10.8	ug/Kg	8/4/2021	15:36
m,p-Xylene	< 10.8	ug/Kg	8/4/2021	15:36
Methyl acetate	< 10.8	ug/Kg	8/4/2021	15:36
Methyl tert-butyl Ether	< 10.8	ug/Kg	8/4/2021	15:36
Methylcyclohexane	< 10.8	ug/Kg	8/4/2021	15:36
Methylene chloride	< 27.0	ug/Kg	8/4/2021	15:36
Naphthalene	< 27.0	ug/Kg	8/4/2021	15:36
n-Butylbenzene	< 10.8	ug/Kg	8/4/2021	15:36
n-Propylbenzene	< 10.8	ug/Kg	8/4/2021	15:36
o-Xylene	< 10.8	ug/Kg	8/4/2021	15:36
p-Isopropyltoluene	< 10.8	ug/Kg	8/4/2021	15:36
sec-Butylbenzene	< 10.8	ug/Kg	8/4/2021	15:36
Styrene	< 27.0	ug/Kg	8/4/2021	15:36
tert-Butylbenzene	< 10.8	ug/Kg	8/4/2021	15:36
Tetrachloroethene	< 10.8	ug/Kg	8/4/2021	15:36
Toluene	< 10.8	ug/Kg	8/4/2021	15:36
trans-1,2-Dichloroethene	< 10.8	ug/Kg	8/4/2021	15:36
trans-1,3-Dichloropropene	< 10.8	ug/Kg	8/4/2021	15:36
Trichloroethene	< 10.8	ug/Kg	8/4/2021	15:36

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-01-BLT		
Lab Sample ID:	213459-01A	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Trichlorofluoromethane	< 10.8	ug/Kg			8/4/2021	15:36
Vinyl chloride	< 10.8	ug/Kg			8/4/2021	15:36

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	**99.9**	88.8 - 123		8/4/2021	15:36
4-Bromofluorobenzene	**76.8**	68.7 - 115		8/4/2021	15:36
Pentafluorobenzene	**98.9**	80.2 - 112		8/4/2021	15:36
Toluene-D8	**95.1**	83.5 - 123		8/4/2021	15:36

Method Reference(s): EPA 8260C
EPA 5035A - L

Data File: z03387.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-02-BLT		
Lab Sample ID:	213459-02	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.316**	mg/Kg		8/6/2021 10:34

Method Reference(s): EPA 7471B
Preparation Date: 8/5/2021
Data File: Hg210806A

RCRA Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**10.0**	mg/Kg		8/5/2021 20:24
Barium	**77.7**	mg/Kg		8/5/2021 20:24
Cadmium	< 0.276	mg/Kg		8/5/2021 20:24
Chromium	**11.6**	mg/Kg		8/5/2021 20:24
Lead	**62.9**	mg/Kg		8/5/2021 20:24
Selenium	< 1.10	mg/Kg		8/5/2021 20:24
Silver	< 0.552	mg/Kg		8/5/2021 20:24

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 8/5/2021
Data File: 210805D

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.153	mg/Kg		8/4/2021 19:17
PCB-1221	< 0.153	mg/Kg		8/4/2021 19:17
PCB-1232	< 0.153	mg/Kg		8/4/2021 19:17
PCB-1242	< 0.153	mg/Kg		8/4/2021 19:17
PCB-1248	< 0.153	mg/Kg		8/4/2021 19:17
PCB-1254	< 0.153	mg/Kg		8/4/2021 19:17
PCB-1260	< 0.153	mg/Kg		8/4/2021 19:17
PCB-1262	< 0.153	mg/Kg		8/4/2021 19:17
PCB-1268	< 0.153	mg/Kg		8/4/2021 19:17

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-02-BLT		
Lab Sample ID:	213459-02	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	**68.3**	18.5 - 93.4		8/4/2021 19:17

Method Reference(s): EPA 8082A
EPA 3546
Preparation Date: 8/4/2021

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 312	ug/Kg		8/6/2021 15:31
1,2,4,5-Tetrachlorobenzene	< 312	ug/Kg		8/6/2021 15:31
1,2,4-Trichlorobenzene	< 312	ug/Kg		8/6/2021 15:31
1,2-Dichlorobenzene	< 312	ug/Kg		8/6/2021 15:31
1,3-Dichlorobenzene	< 312	ug/Kg		8/6/2021 15:31
1,4-Dichlorobenzene	< 312	ug/Kg		8/6/2021 15:31
2,2-Oxybis (1-chloropropane)	< 312	ug/Kg		8/6/2021 15:31
2,3,4,6-Tetrachlorophenol	< 312	ug/Kg		8/6/2021 15:31
2,4,5-Trichlorophenol	< 312	ug/Kg		8/6/2021 15:31
2,4,6-Trichlorophenol	< 312	ug/Kg		8/6/2021 15:31
2,4-Dichlorophenol	< 312	ug/Kg		8/6/2021 15:31
2,4-Dimethylphenol	< 312	ug/Kg		8/6/2021 15:31
2,4-Dinitrophenol	< 1250	ug/Kg		8/6/2021 15:31
2,4-Dinitrotoluene	< 312	ug/Kg		8/6/2021 15:31
2,6-Dinitrotoluene	< 312	ug/Kg		8/6/2021 15:31
2-Chloronaphthalene	< 312	ug/Kg		8/6/2021 15:31
2-Chlorophenol	< 312	ug/Kg		8/6/2021 15:31
2-Methylnapthalene	< 312	ug/Kg		8/6/2021 15:31
2-Methylphenol	< 312	ug/Kg		8/6/2021 15:31
2-Nitroaniline	< 312	ug/Kg		8/6/2021 15:31
2-Nitrophenol	< 312	ug/Kg		8/6/2021 15:31
3&4-Methylphenol	< 312	ug/Kg		8/6/2021 15:31
3,3'-Dichlorobenzidine	< 312	ug/Kg		8/6/2021 15:31

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-02-BLT		
Lab Sample ID:	213459-02	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

3-Nitroaniline	< 312	ug/Kg	8/6/2021 15:31
4,6-Dinitro-2-methylphenol	< 418	ug/Kg	8/6/2021 15:31
4-Bromophenyl phenyl ether	< 312	ug/Kg	8/6/2021 15:31
4-Chloro-3-methylphenol	< 312	ug/Kg	8/6/2021 15:31
4-Chloroaniline	< 312	ug/Kg	8/6/2021 15:31
4-Chlorophenyl phenyl ether	< 312	ug/Kg	8/6/2021 15:31
4-Nitroaniline	< 312	ug/Kg	8/6/2021 15:31
4-Nitrophenol	< 312	ug/Kg	8/6/2021 15:31
Acenaphthene	< 312	ug/Kg	8/6/2021 15:31
Acenaphthylene	< 312	ug/Kg	8/6/2021 15:31
Acetophenone	< 312	ug/Kg	8/6/2021 15:31
Anthracene	< 312	ug/Kg	8/6/2021 15:31
Atrazine	< 312	ug/Kg	8/6/2021 15:31
Benzaldehyde	< 312	ug/Kg	8/6/2021 15:31
Benzo (a) anthracene	< 312	ug/Kg	8/6/2021 15:31
Benzo (a) pyrene	< 312	ug/Kg	8/6/2021 15:31
Benzo (b) fluoranthene	< 312	ug/Kg	8/6/2021 15:31
Benzo (g,h,i) perylene	< 312	ug/Kg	8/6/2021 15:31
Benzo (k) fluoranthene	< 312	ug/Kg	8/6/2021 15:31
Bis (2-chloroethoxy) methane	< 312	ug/Kg	8/6/2021 15:31
Bis (2-chloroethyl) ether	< 312	ug/Kg	8/6/2021 15:31
Bis (2-ethylhexyl) phthalate	< 312	ug/Kg	8/6/2021 15:31
Butylbenzylphthalate	< 312	ug/Kg	8/6/2021 15:31
Caprolactam	< 312	ug/Kg	8/6/2021 15:31
Carbazole	< 312	ug/Kg	8/6/2021 15:31
Chrysene	< 312	ug/Kg	8/6/2021 15:31
Dibenz (a,h) anthracene	< 312	ug/Kg	8/6/2021 15:31
Dibenzofuran	< 312	ug/Kg	8/6/2021 15:31
Diethyl phthalate	< 312	ug/Kg	8/6/2021 15:31
Dimethyl phthalate	< 312	ug/Kg	8/6/2021 15:31

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-02-BLT
Lab Sample ID: 213459-02 **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Di-n-butyl phthalate	< 312	ug/Kg	8/6/2021	15:31
Di-n-octylphthalate	< 312	ug/Kg	8/6/2021	15:31
Fluoranthene	< 312	ug/Kg	8/6/2021	15:31
Fluorene	< 312	ug/Kg	8/6/2021	15:31
Hexachlorobenzene	< 312	ug/Kg	8/6/2021	15:31
Hexachlorobutadiene	< 312	ug/Kg	8/6/2021	15:31
Hexachlorocyclopentadiene	< 1250	ug/Kg	8/6/2021	15:31
Hexachloroethane	< 312	ug/Kg	8/6/2021	15:31
Indeno (1,2,3-cd) pyrene	< 312	ug/Kg	8/6/2021	15:31
Isophorone	< 312	ug/Kg	8/6/2021	15:31
Naphthalene	< 312	ug/Kg	8/6/2021	15:31
Nitrobenzene	< 312	ug/Kg	8/6/2021	15:31
N-Nitroso-di-n-propylamine	< 312	ug/Kg	8/6/2021	15:31
N-Nitrosodiphenylamine	< 312	ug/Kg	8/6/2021	15:31
Pentachlorophenol	< 625	ug/Kg	8/6/2021	15:31
Phenanthrene	< 312	ug/Kg	8/6/2021	15:31
Phenol	< 312	ug/Kg	8/6/2021	15:31
Pyrene	< 312	ug/Kg	8/6/2021	15:31

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	**59.5**	36.4 - 87.2		8/6/2021	15:31
2-Fluorobiphenyl	**62.9**	44 - 84		8/6/2021	15:31
2-Fluorophenol	**53.5**	43.2 - 82.1		8/6/2021	15:31
Nitrobenzene-d5	**56.1**	36.4 - 82.2		8/6/2021	15:31
Phenol-d5	**56.9**	41.1 - 81.4		8/6/2021	15:31
Terphenyl-d14	**74.1**	43.8 - 103		8/6/2021	15:31

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 8/5/2021
Data File: B55995.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-02-BLT		
Lab Sample ID:	213459-02A	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 9.84	ug/Kg		8/4/2021 15:55
1,1,2,2-Tetrachloroethane	< 9.84	ug/Kg		8/4/2021 15:55
1,1,2-Trichloroethane	< 9.84	ug/Kg		8/4/2021 15:55
1,1-Dichloroethane	< 9.84	ug/Kg		8/4/2021 15:55
1,1-Dichloroethene	< 9.84	ug/Kg		8/4/2021 15:55
1,2,3-Trichlorobenzene	< 24.6	ug/Kg		8/4/2021 15:55
1,2,4-Trichlorobenzene	< 24.6	ug/Kg		8/4/2021 15:55
1,2,4-Trimethylbenzene	< 9.84	ug/Kg		8/4/2021 15:55
1,2-Dibromo-3-Chloropropane	< 49.2	ug/Kg		8/4/2021 15:55
1,2-Dibromoethane	< 9.84	ug/Kg		8/4/2021 15:55
1,2-Dichlorobenzene	< 9.84	ug/Kg		8/4/2021 15:55
1,2-Dichloroethane	< 9.84	ug/Kg		8/4/2021 15:55
1,2-Dichloropropane	< 9.84	ug/Kg		8/4/2021 15:55
1,3,5-Trimethylbenzene	< 9.84	ug/Kg		8/4/2021 15:55
1,3-Dichlorobenzene	< 9.84	ug/Kg		8/4/2021 15:55
1,4-Dichlorobenzene	< 9.84	ug/Kg		8/4/2021 15:55
1,4-Dioxane	< 49.2	ug/Kg		8/4/2021 15:55
2-Butanone	< 49.2	ug/Kg		8/4/2021 15:55
2-Hexanone	< 24.6	ug/Kg		8/4/2021 15:55
4-Methyl-2-pentanone	< 24.6	ug/Kg		8/4/2021 15:55
Acetone	< 49.2	ug/Kg		8/4/2021 15:55
Benzene	< 9.84	ug/Kg		8/4/2021 15:55
Bromochloromethane	< 24.6	ug/Kg		8/4/2021 15:55
Bromodichloromethane	< 9.84	ug/Kg		8/4/2021 15:55
Bromoform	< 24.6	ug/Kg		8/4/2021 15:55
Bromomethane	< 9.84	ug/Kg		8/4/2021 15:55
Carbon disulfide	< 9.84	ug/Kg		8/4/2021 15:55
Carbon Tetrachloride	< 9.84	ug/Kg		8/4/2021 15:55

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-02-BLT		
Lab Sample ID:	213459-02A	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Chlorobenzene	< 9.84	ug/Kg	8/4/2021	15:55
Chloroethane	< 9.84	ug/Kg	8/4/2021	15:55
Chloroform	< 9.84	ug/Kg	8/4/2021	15:55
Chloromethane	< 9.84	ug/Kg	8/4/2021	15:55
cis-1,2-Dichloroethene	< 9.84	ug/Kg	8/4/2021	15:55
cis-1,3-Dichloropropene	< 9.84	ug/Kg	8/4/2021	15:55
Cyclohexane	< 49.2	ug/Kg	8/4/2021	15:55
Dibromochloromethane	< 9.84	ug/Kg	8/4/2021	15:55
Dichlorodifluoromethane	< 9.84	ug/Kg	8/4/2021	15:55
Ethylbenzene	< 9.84	ug/Kg	8/4/2021	15:55
Freon 113	< 9.84	ug/Kg	8/4/2021	15:55
Isopropylbenzene	< 9.84	ug/Kg	8/4/2021	15:55
m,p-Xylene	< 9.84	ug/Kg	8/4/2021	15:55
Methyl acetate	< 9.84	ug/Kg	8/4/2021	15:55
Methyl tert-butyl Ether	< 9.84	ug/Kg	8/4/2021	15:55
Methylcyclohexane	< 9.84	ug/Kg	8/4/2021	15:55
Methylene chloride	< 24.6	ug/Kg	8/4/2021	15:55
Naphthalene	< 24.6	ug/Kg	8/4/2021	15:55
n-Butylbenzene	< 9.84	ug/Kg	8/4/2021	15:55
n-Propylbenzene	< 9.84	ug/Kg	8/4/2021	15:55
o-Xylene	< 9.84	ug/Kg	8/4/2021	15:55
p-Isopropyltoluene	< 9.84	ug/Kg	8/4/2021	15:55
sec-Butylbenzene	< 9.84	ug/Kg	8/4/2021	15:55
Styrene	< 24.6	ug/Kg	8/4/2021	15:55
tert-Butylbenzene	< 9.84	ug/Kg	8/4/2021	15:55
Tetrachloroethene	< 9.84	ug/Kg	8/4/2021	15:55
Toluene	< 9.84	ug/Kg	8/4/2021	15:55
trans-1,2-Dichloroethene	< 9.84	ug/Kg	8/4/2021	15:55
trans-1,3-Dichloropropene	< 9.84	ug/Kg	8/4/2021	15:55
Trichloroethene	< 9.84	ug/Kg	8/4/2021	15:55

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-02-BLT		
Lab Sample ID:	213459-02A	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Trichlorofluoromethane	< 9.84	ug/Kg		8/4/2021	15:55
Vinyl chloride	< 9.84	ug/Kg		8/4/2021	15:55

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	**95.0**	88.8 - 123		8/4/2021	15:55
4-Bromofluorobenzene	**60.9**	68.7 - 115	*	8/4/2021	15:55
Pentafluorobenzene	**96.6**	80.2 - 112		8/4/2021	15:55
Toluene-D8	**85.7**	83.5 - 123		8/4/2021	15:55

Internal standard outliers indicate probable matrix interference

Method Reference(s): EPA 8260C
EPA 5035A - L

Data File: z03388.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-03-BLT
Lab Sample ID: 213459-03 **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.0867**	mg/Kg		8/6/2021 10:35

Method Reference(s): EPA 7471B
Preparation Date: 8/5/2021
Data File: Hg210806A

RCRA Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**3.63**	mg/Kg		8/5/2021 20:28
Barium	**49.2**	mg/Kg		8/5/2021 20:28
Cadmium	< 0.274	mg/Kg		8/5/2021 20:28
Chromium	**7.00**	mg/Kg		8/5/2021 20:28
Lead	**40.4**	mg/Kg		8/5/2021 20:28
Selenium	< 1.10	mg/Kg		8/5/2021 20:28
Silver	< 0.549	mg/Kg		8/5/2021 20:28

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 8/5/2021
Data File: 210805D

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.141	mg/Kg		8/4/2021 19:40
PCB-1221	< 0.141	mg/Kg		8/4/2021 19:40
PCB-1232	< 0.141	mg/Kg		8/4/2021 19:40
PCB-1242	< 0.141	mg/Kg		8/4/2021 19:40
PCB-1248	< 0.141	mg/Kg		8/4/2021 19:40
PCB-1254	< 0.141	mg/Kg		8/4/2021 19:40
PCB-1260	< 0.141	mg/Kg		8/4/2021 19:40
PCB-1262	< 0.141	mg/Kg		8/4/2021 19:40
PCB-1268	< 0.141	mg/Kg		8/4/2021 19:40

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-03-BLT		
Lab Sample ID:	213459-03	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	**73.1**	18.5 - 93.4		8/4/2021 19:40

Method Reference(s): EPA 8082A
EPA 3546
Preparation Date: 8/4/2021

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 276	ug/Kg		8/6/2021 16:01
1,2,4,5-Tetrachlorobenzene	< 276	ug/Kg		8/6/2021 16:01
1,2,4-Trichlorobenzene	< 276	ug/Kg		8/6/2021 16:01
1,2-Dichlorobenzene	< 276	ug/Kg		8/6/2021 16:01
1,3-Dichlorobenzene	< 276	ug/Kg		8/6/2021 16:01
1,4-Dichlorobenzene	< 276	ug/Kg		8/6/2021 16:01
2,2-Oxybis (1-chloropropane)	< 276	ug/Kg		8/6/2021 16:01
2,3,4,6-Tetrachlorophenol	< 276	ug/Kg		8/6/2021 16:01
2,4,5-Trichlorophenol	< 276	ug/Kg		8/6/2021 16:01
2,4,6-Trichlorophenol	< 276	ug/Kg		8/6/2021 16:01
2,4-Dichlorophenol	< 276	ug/Kg		8/6/2021 16:01
2,4-Dimethylphenol	< 276	ug/Kg		8/6/2021 16:01
2,4-Dinitrophenol	< 1100	ug/Kg		8/6/2021 16:01
2,4-Dinitrotoluene	< 276	ug/Kg		8/6/2021 16:01
2,6-Dinitrotoluene	< 276	ug/Kg		8/6/2021 16:01
2-Chloronaphthalene	< 276	ug/Kg		8/6/2021 16:01
2-Chlorophenol	< 276	ug/Kg		8/6/2021 16:01
2-Methylnapthalene	< 276	ug/Kg		8/6/2021 16:01
2-Methylphenol	< 276	ug/Kg		8/6/2021 16:01
2-Nitroaniline	< 276	ug/Kg		8/6/2021 16:01
2-Nitrophenol	< 276	ug/Kg		8/6/2021 16:01
3&4-Methylphenol	< 276	ug/Kg		8/6/2021 16:01
3,3'-Dichlorobenzidine	< 276	ug/Kg		8/6/2021 16:01

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-03-BLT
Lab Sample ID: 213459-03 **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

3-Nitroaniline	< 276	ug/Kg	8/6/2021	16:01
4,6-Dinitro-2-methylphenol	< 369	ug/Kg	8/6/2021	16:01
4-Bromophenyl phenyl ether	< 276	ug/Kg	8/6/2021	16:01
4-Chloro-3-methylphenol	< 276	ug/Kg	8/6/2021	16:01
4-Chloroaniline	< 276	ug/Kg	8/6/2021	16:01
4-Chlorophenyl phenyl ether	< 276	ug/Kg	8/6/2021	16:01
4-Nitroaniline	< 276	ug/Kg	8/6/2021	16:01
4-Nitrophenol	< 276	ug/Kg	8/6/2021	16:01
Acenaphthene	< 276	ug/Kg	8/6/2021	16:01
Acenaphthylene	< 276	ug/Kg	8/6/2021	16:01
Acetophenone	< 276	ug/Kg	8/6/2021	16:01
Anthracene	< 276	ug/Kg	8/6/2021	16:01
Atrazine	< 276	ug/Kg	8/6/2021	16:01
Benzaldehyde	< 276	ug/Kg	8/6/2021	16:01
Benzo (a) anthracene	< 276	ug/Kg	8/6/2021	16:01
Benzo (a) pyrene	< 276	ug/Kg	8/6/2021	16:01
Benzo (b) fluoranthene	< 276	ug/Kg	8/6/2021	16:01
Benzo (g,h,i) perylene	< 276	ug/Kg	8/6/2021	16:01
Benzo (k) fluoranthene	< 276	ug/Kg	8/6/2021	16:01
Bis (2-chloroethoxy) methane	< 276	ug/Kg	8/6/2021	16:01
Bis (2-chloroethyl) ether	< 276	ug/Kg	8/6/2021	16:01
Bis (2-ethylhexyl) phthalate	< 276	ug/Kg	8/6/2021	16:01
Butylbenzylphthalate	< 276	ug/Kg	8/6/2021	16:01
Caprolactam	< 276	ug/Kg	8/6/2021	16:01
Carbazole	< 276	ug/Kg	8/6/2021	16:01
Chrysene	< 276	ug/Kg	8/6/2021	16:01
Dibenz (a,h) anthracene	< 276	ug/Kg	8/6/2021	16:01
Dibenzofuran	< 276	ug/Kg	8/6/2021	16:01
Diethyl phthalate	< 276	ug/Kg	8/6/2021	16:01
Dimethyl phthalate	< 276	ug/Kg	8/6/2021	16:01

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-03-BLT
Lab Sample ID: 213459-03 **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Di-n-butyl phthalate	< 276	ug/Kg	8/6/2021	16:01
Di-n-octylphthalate	< 276	ug/Kg	8/6/2021	16:01
Fluoranthene	< 276	ug/Kg	8/6/2021	16:01
Fluorene	< 276	ug/Kg	8/6/2021	16:01
Hexachlorobenzene	< 276	ug/Kg	8/6/2021	16:01
Hexachlorobutadiene	< 276	ug/Kg	8/6/2021	16:01
Hexachlorocyclopentadiene	< 1100	ug/Kg	8/6/2021	16:01
Hexachloroethane	< 276	ug/Kg	8/6/2021	16:01
Indeno (1,2,3-cd) pyrene	< 276	ug/Kg	8/6/2021	16:01
Isophorone	< 276	ug/Kg	8/6/2021	16:01
Naphthalene	< 276	ug/Kg	8/6/2021	16:01
Nitrobenzene	< 276	ug/Kg	8/6/2021	16:01
N-Nitroso-di-n-propylamine	< 276	ug/Kg	8/6/2021	16:01
N-Nitrosodiphenylamine	< 276	ug/Kg	8/6/2021	16:01
Pentachlorophenol	< 552	ug/Kg	8/6/2021	16:01
Phenanthrene	< 276	ug/Kg	8/6/2021	16:01
Phenol	< 276	ug/Kg	8/6/2021	16:01
Pyrene	< 276	ug/Kg	8/6/2021	16:01

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	**64.8**	36.4 - 87.2		8/6/2021	16:01
2-Fluorobiphenyl	**60.6**	44 - 84		8/6/2021	16:01
2-Fluorophenol	**55.4**	43.2 - 82.1		8/6/2021	16:01
Nitrobenzene-d5	**55.1**	36.4 - 82.2		8/6/2021	16:01
Phenol-d5	**58.0**	41.1 - 81.4		8/6/2021	16:01
Terphenyl-d14	**74.8**	43.8 - 103		8/6/2021	16:01

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 8/5/2021
Data File: B55996.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-03-BLT		
Lab Sample ID:	213459-03A	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 8.17	ug/Kg		8/4/2021 16:14
1,1,2,2-Tetrachloroethane	< 8.17	ug/Kg		8/4/2021 16:14
1,1,2-Trichloroethane	< 8.17	ug/Kg		8/4/2021 16:14
1,1-Dichloroethane	< 8.17	ug/Kg		8/4/2021 16:14
1,1-Dichloroethene	< 8.17	ug/Kg		8/4/2021 16:14
1,2,3-Trichlorobenzene	< 20.4	ug/Kg		8/4/2021 16:14
1,2,4-Trichlorobenzene	< 20.4	ug/Kg		8/4/2021 16:14
1,2,4-Trimethylbenzene	< 8.17	ug/Kg		8/4/2021 16:14
1,2-Dibromo-3-Chloropropane	< 40.9	ug/Kg		8/4/2021 16:14
1,2-Dibromoethane	< 8.17	ug/Kg		8/4/2021 16:14
1,2-Dichlorobenzene	< 8.17	ug/Kg		8/4/2021 16:14
1,2-Dichloroethane	< 8.17	ug/Kg		8/4/2021 16:14
1,2-Dichloropropane	< 8.17	ug/Kg		8/4/2021 16:14
1,3,5-Trimethylbenzene	< 8.17	ug/Kg		8/4/2021 16:14
1,3-Dichlorobenzene	< 8.17	ug/Kg		8/4/2021 16:14
1,4-Dichlorobenzene	< 8.17	ug/Kg		8/4/2021 16:14
1,4-Dioxane	< 40.9	ug/Kg		8/4/2021 16:14
2-Butanone	< 40.9	ug/Kg		8/4/2021 16:14
2-Hexanone	< 20.4	ug/Kg		8/4/2021 16:14
4-Methyl-2-pentanone	< 20.4	ug/Kg		8/4/2021 16:14
Acetone	< 40.9	ug/Kg		8/4/2021 16:14
Benzene	< 8.17	ug/Kg		8/4/2021 16:14
Bromochloromethane	< 20.4	ug/Kg		8/4/2021 16:14
Bromodichloromethane	< 8.17	ug/Kg		8/4/2021 16:14
Bromoform	< 20.4	ug/Kg		8/4/2021 16:14
Bromomethane	< 8.17	ug/Kg		8/4/2021 16:14
Carbon disulfide	< 8.17	ug/Kg		8/4/2021 16:14
Carbon Tetrachloride	< 8.17	ug/Kg		8/4/2021 16:14

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-03-BLT
Lab Sample ID: 213459-03A **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Chlorobenzene	< 8.17	ug/Kg	8/4/2021	16:14
Chloroethane	< 8.17	ug/Kg	8/4/2021	16:14
Chloroform	< 8.17	ug/Kg	8/4/2021	16:14
Chloromethane	< 8.17	ug/Kg	8/4/2021	16:14
cis-1,2-Dichloroethene	< 8.17	ug/Kg	8/4/2021	16:14
cis-1,3-Dichloropropene	< 8.17	ug/Kg	8/4/2021	16:14
Cyclohexane	< 40.9	ug/Kg	8/4/2021	16:14
Dibromochloromethane	< 8.17	ug/Kg	8/4/2021	16:14
Dichlorodifluoromethane	< 8.17	ug/Kg	8/4/2021	16:14
Ethylbenzene	< 8.17	ug/Kg	8/4/2021	16:14
Freon 113	< 8.17	ug/Kg	8/4/2021	16:14
Isopropylbenzene	< 8.17	ug/Kg	8/4/2021	16:14
m,p-Xylene	< 8.17	ug/Kg	8/4/2021	16:14
Methyl acetate	< 8.17	ug/Kg	8/4/2021	16:14
Methyl tert-butyl Ether	< 8.17	ug/Kg	8/4/2021	16:14
Methylcyclohexane	< 8.17	ug/Kg	8/4/2021	16:14
Methylene chloride	< 20.4	ug/Kg	8/4/2021	16:14
Naphthalene	< 20.4	ug/Kg	8/4/2021	16:14
n-Butylbenzene	< 8.17	ug/Kg	8/4/2021	16:14
n-Propylbenzene	< 8.17	ug/Kg	8/4/2021	16:14
o-Xylene	< 8.17	ug/Kg	8/4/2021	16:14
p-Isopropyltoluene	< 8.17	ug/Kg	8/4/2021	16:14
sec-Butylbenzene	< 8.17	ug/Kg	8/4/2021	16:14
Styrene	< 20.4	ug/Kg	8/4/2021	16:14
tert-Butylbenzene	< 8.17	ug/Kg	8/4/2021	16:14
Tetrachloroethene	< 8.17	ug/Kg	8/4/2021	16:14
Toluene	< 8.17	ug/Kg	8/4/2021	16:14
trans-1,2-Dichloroethene	< 8.17	ug/Kg	8/4/2021	16:14
trans-1,3-Dichloropropene	< 8.17	ug/Kg	8/4/2021	16:14
Trichloroethene	< 8.17	ug/Kg	8/4/2021	16:14

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-03-BLT		
Lab Sample ID:	213459-03A	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Trichlorofluoromethane	< 8.17	ug/Kg		8/4/2021 16:14
Vinyl chloride	< 8.17	ug/Kg		8/4/2021 16:14

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**94.4**	88.8 - 123		8/4/2021 16:14
4-Bromofluorobenzene	**68.2**	68.7 - 115	*	8/4/2021 16:14
Pentafluorobenzene	**103**	80.2 - 112		8/4/2021 16:14
Toluene-D8	**90.8**	83.5 - 123		8/4/2021 16:14

Internal standard outliers indicate probable matrix interference

Method Reference(s): EPA 8260C
EPA 5035A - L

Data File: z03389.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-04-BLT-B		
Lab Sample ID:	213459-04	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.249**	mg/Kg		8/6/2021 10:37

Method Reference(s): EPA 7471B
Preparation Date: 8/5/2021
Data File: Hg210806A

RCRA Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**10.1**	mg/Kg		8/5/2021 20:33
Barium	**58.2**	mg/Kg		8/5/2021 20:33
Cadmium	**0.433**	mg/Kg		8/5/2021 20:33
Chromium	**8.90**	mg/Kg		8/5/2021 20:33
Lead	**1450**	mg/Kg		8/5/2021 20:33
Selenium	< 1.15	mg/Kg		8/5/2021 20:33
Silver	< 0.577	mg/Kg		8/5/2021 20:33

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 8/5/2021
Data File: 210805D

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.161	mg/Kg		8/4/2021 20:03
PCB-1221	< 0.161	mg/Kg		8/4/2021 20:03
PCB-1232	< 0.161	mg/Kg		8/4/2021 20:03
PCB-1242	< 0.161	mg/Kg		8/4/2021 20:03
PCB-1248	< 0.161	mg/Kg		8/4/2021 20:03
PCB-1254	< 0.161	mg/Kg		8/4/2021 20:03
PCB-1260	< 0.161	mg/Kg		8/4/2021 20:03
PCB-1262	< 0.161	mg/Kg		8/4/2021 20:03
PCB-1268	< 0.161	mg/Kg		8/4/2021 20:03

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-04-BLT-B		
Lab Sample ID:	213459-04	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	**71.5**	18.5 - 93.4		8/4/2021 20:03

Method Reference(s): EPA 8082A
EPA 3546
Preparation Date: 8/4/2021

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 333	ug/Kg		8/6/2021 16:30
1,2,4,5-Tetrachlorobenzene	< 333	ug/Kg		8/6/2021 16:30
1,2,4-Trichlorobenzene	< 333	ug/Kg		8/6/2021 16:30
1,2-Dichlorobenzene	< 333	ug/Kg		8/6/2021 16:30
1,3-Dichlorobenzene	< 333	ug/Kg		8/6/2021 16:30
1,4-Dichlorobenzene	< 333	ug/Kg		8/6/2021 16:30
2,2-Oxybis (1-chloropropane)	< 333	ug/Kg		8/6/2021 16:30
2,3,4,6-Tetrachlorophenol	< 333	ug/Kg		8/6/2021 16:30
2,4,5-Trichlorophenol	< 333	ug/Kg		8/6/2021 16:30
2,4,6-Trichlorophenol	< 333	ug/Kg		8/6/2021 16:30
2,4-Dichlorophenol	< 333	ug/Kg		8/6/2021 16:30
2,4-Dimethylphenol	< 333	ug/Kg		8/6/2021 16:30
2,4-Dinitrophenol	< 1330	ug/Kg		8/6/2021 16:30
2,4-Dinitrotoluene	< 333	ug/Kg		8/6/2021 16:30
2,6-Dinitrotoluene	< 333	ug/Kg		8/6/2021 16:30
2-Chloronaphthalene	< 333	ug/Kg		8/6/2021 16:30
2-Chlorophenol	< 333	ug/Kg		8/6/2021 16:30
2-Methylnapthalene	< 333	ug/Kg		8/6/2021 16:30
2-Methylphenol	< 333	ug/Kg		8/6/2021 16:30
2-Nitroaniline	< 333	ug/Kg		8/6/2021 16:30
2-Nitrophenol	< 333	ug/Kg		8/6/2021 16:30
3&4-Methylphenol	< 333	ug/Kg		8/6/2021 16:30
3,3'-Dichlorobenzidine	< 333	ug/Kg		8/6/2021 16:30

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-04-BLT-B
Lab Sample ID: 213459-04 **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

3-Nitroaniline	< 333	ug/Kg	8/6/2021	16:30
4,6-Dinitro-2-methylphenol	< 445	ug/Kg	8/6/2021	16:30
4-Bromophenyl phenyl ether	< 333	ug/Kg	8/6/2021	16:30
4-Chloro-3-methylphenol	< 333	ug/Kg	8/6/2021	16:30
4-Chloroaniline	< 333	ug/Kg	8/6/2021	16:30
4-Chlorophenyl phenyl ether	< 333	ug/Kg	8/6/2021	16:30
4-Nitroaniline	< 333	ug/Kg	8/6/2021	16:30
4-Nitrophenol	< 333	ug/Kg	8/6/2021	16:30
Acenaphthene	< 333	ug/Kg	8/6/2021	16:30
Acenaphthylene	< 333	ug/Kg	8/6/2021	16:30
Acetophenone	< 333	ug/Kg	8/6/2021	16:30
Anthracene	< 333	ug/Kg	8/6/2021	16:30
Atrazine	< 333	ug/Kg	8/6/2021	16:30
Benzaldehyde	< 333	ug/Kg	8/6/2021	16:30
Benzo (a) anthracene	**449**	ug/Kg	8/6/2021	16:30
Benzo (a) pyrene	< 333	ug/Kg	8/6/2021	16:30
Benzo (b) fluoranthene	**456**	ug/Kg	8/6/2021	16:30
Benzo (g,h,i) perylene	< 333	ug/Kg	8/6/2021	16:30
Benzo (k) fluoranthene	< 333	ug/Kg	8/6/2021	16:30
Bis (2-chloroethoxy) methane	< 333	ug/Kg	8/6/2021	16:30
Bis (2-chloroethyl) ether	< 333	ug/Kg	8/6/2021	16:30
Bis (2-ethylhexyl) phthalate	< 333	ug/Kg	8/6/2021	16:30
Butylbenzylphthalate	< 333	ug/Kg	8/6/2021	16:30
Caprolactam	< 333	ug/Kg	8/6/2021	16:30
Carbazole	< 333	ug/Kg	8/6/2021	16:30
Chrysene	**506**	ug/Kg	8/6/2021	16:30
Dibenz (a,h) anthracene	< 333	ug/Kg	8/6/2021	16:30
Dibenzofuran	< 333	ug/Kg	8/6/2021	16:30
Diethyl phthalate	< 333	ug/Kg	8/6/2021	16:30
Dimethyl phthalate	< 333	ug/Kg	8/6/2021	16:30

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-04-BLT-B
Lab Sample ID: 213459-04 **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Di-n-butyl phthalate	< 333	ug/Kg	8/6/2021	16:30
Di-n-octylphthalate	< 333	ug/Kg	8/6/2021	16:30
Fluoranthene	**1230**	ug/Kg	8/6/2021	16:30
Fluorene	< 333	ug/Kg	8/6/2021	16:30
Hexachlorobenzene	< 333	ug/Kg	8/6/2021	16:30
Hexachlorobutadiene	< 333	ug/Kg	8/6/2021	16:30
Hexachlorocyclopentadiene	< 1330	ug/Kg	8/6/2021	16:30
Hexachloroethane	< 333	ug/Kg	8/6/2021	16:30
Indeno (1,2,3-cd) pyrene	< 333	ug/Kg	8/6/2021	16:30
Isophorone	< 333	ug/Kg	8/6/2021	16:30
Naphthalene	< 333	ug/Kg	8/6/2021	16:30
Nitrobenzene	< 333	ug/Kg	8/6/2021	16:30
N-Nitroso-di-n-propylamine	< 333	ug/Kg	8/6/2021	16:30
N-Nitrosodiphenylamine	< 333	ug/Kg	8/6/2021	16:30
Pentachlorophenol	< 665	ug/Kg	8/6/2021	16:30
Phenanthrene	**1510**	ug/Kg	8/6/2021	16:30
Phenol	< 333	ug/Kg	8/6/2021	16:30
Pyrene	**963**	ug/Kg	8/6/2021	16:30

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	**57.7**	36.4 - 87.2		8/6/2021	16:30
2-Fluorobiphenyl	**60.4**	44 - 84		8/6/2021	16:30
2-Fluorophenol	**50.4**	43.2 - 82.1		8/6/2021	16:30
Nitrobenzene-d5	**52.6**	36.4 - 82.2		8/6/2021	16:30
Phenol-d5	**54.2**	41.1 - 81.4		8/6/2021	16:30
Terphenyl-d14	**68.9**	43.8 - 103		8/6/2021	16:30

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 8/5/2021
Data File: B55997.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-04-BLT-A		
Lab Sample ID:	213459-04A	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 9.69	ug/Kg		8/4/2021 16:33
1,1,2,2-Tetrachloroethane	< 9.69	ug/Kg		8/4/2021 16:33
1,1,2-Trichloroethane	< 9.69	ug/Kg		8/4/2021 16:33
1,1-Dichloroethane	< 9.69	ug/Kg		8/4/2021 16:33
1,1-Dichloroethene	< 9.69	ug/Kg		8/4/2021 16:33
1,2,3-Trichlorobenzene	< 24.2	ug/Kg		8/4/2021 16:33
1,2,4-Trichlorobenzene	< 24.2	ug/Kg		8/4/2021 16:33
1,2,4-Trimethylbenzene	< 9.69	ug/Kg		8/4/2021 16:33
1,2-Dibromo-3-Chloropropane	< 48.4	ug/Kg		8/4/2021 16:33
1,2-Dibromoethane	< 9.69	ug/Kg		8/4/2021 16:33
1,2-Dichlorobenzene	< 9.69	ug/Kg		8/4/2021 16:33
1,2-Dichloroethane	< 9.69	ug/Kg		8/4/2021 16:33
1,2-Dichloropropane	< 9.69	ug/Kg		8/4/2021 16:33
1,3,5-Trimethylbenzene	< 9.69	ug/Kg		8/4/2021 16:33
1,3-Dichlorobenzene	< 9.69	ug/Kg		8/4/2021 16:33
1,4-Dichlorobenzene	< 9.69	ug/Kg		8/4/2021 16:33
1,4-Dioxane	< 48.4	ug/Kg		8/4/2021 16:33
2-Butanone	< 48.4	ug/Kg		8/4/2021 16:33
2-Hexanone	< 24.2	ug/Kg		8/4/2021 16:33
4-Methyl-2-pentanone	< 24.2	ug/Kg		8/4/2021 16:33
Acetone	< 48.4	ug/Kg		8/4/2021 16:33
Benzene	< 9.69	ug/Kg		8/4/2021 16:33
Bromochloromethane	< 24.2	ug/Kg		8/4/2021 16:33
Bromodichloromethane	< 9.69	ug/Kg		8/4/2021 16:33
Bromoform	< 24.2	ug/Kg		8/4/2021 16:33
Bromomethane	< 9.69	ug/Kg		8/4/2021 16:33
Carbon disulfide	< 9.69	ug/Kg		8/4/2021 16:33
Carbon Tetrachloride	< 9.69	ug/Kg		8/4/2021 16:33

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-04-BLT-A
Lab Sample ID: 213459-04A **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Chlorobenzene	< 9.69	ug/Kg	8/4/2021	16:33
Chloroethane	< 9.69	ug/Kg	8/4/2021	16:33
Chloroform	< 9.69	ug/Kg	8/4/2021	16:33
Chloromethane	< 9.69	ug/Kg	8/4/2021	16:33
cis-1,2-Dichloroethene	< 9.69	ug/Kg	8/4/2021	16:33
cis-1,3-Dichloropropene	< 9.69	ug/Kg	8/4/2021	16:33
Cyclohexane	< 48.4	ug/Kg	8/4/2021	16:33
Dibromochloromethane	< 9.69	ug/Kg	8/4/2021	16:33
Dichlorodifluoromethane	< 9.69	ug/Kg	8/4/2021	16:33
Ethylbenzene	< 9.69	ug/Kg	8/4/2021	16:33
Freon 113	< 9.69	ug/Kg	8/4/2021	16:33
Isopropylbenzene	< 9.69	ug/Kg	8/4/2021	16:33
m,p-Xylene	< 9.69	ug/Kg	8/4/2021	16:33
Methyl acetate	< 9.69	ug/Kg	8/4/2021	16:33
Methyl tert-butyl Ether	< 9.69	ug/Kg	8/4/2021	16:33
Methylcyclohexane	< 9.69	ug/Kg	8/4/2021	16:33
Methylene chloride	< 24.2	ug/Kg	8/4/2021	16:33
Naphthalene	< 24.2	ug/Kg	8/4/2021	16:33
n-Butylbenzene	< 9.69	ug/Kg	8/4/2021	16:33
n-Propylbenzene	< 9.69	ug/Kg	8/4/2021	16:33
o-Xylene	< 9.69	ug/Kg	8/4/2021	16:33
p-Isopropyltoluene	< 9.69	ug/Kg	8/4/2021	16:33
sec-Butylbenzene	< 9.69	ug/Kg	8/4/2021	16:33
Styrene	< 24.2	ug/Kg	8/4/2021	16:33
tert-Butylbenzene	< 9.69	ug/Kg	8/4/2021	16:33
Tetrachloroethene	< 9.69	ug/Kg	8/4/2021	16:33
Toluene	< 9.69	ug/Kg	8/4/2021	16:33
trans-1,2-Dichloroethene	< 9.69	ug/Kg	8/4/2021	16:33
trans-1,3-Dichloropropene	< 9.69	ug/Kg	8/4/2021	16:33
Trichloroethene	< 9.69	ug/Kg	8/4/2021	16:33

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-04-BLT-A		
Lab Sample ID:	213459-04A	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Trichlorofluoromethane	< 9.69	ug/Kg			8/4/2021 16:33
Vinyl chloride	< 9.69	ug/Kg			8/4/2021 16:33

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**97.9**	88.8 - 123		8/4/2021 16:33
4-Bromofluorobenzene	**66.3**	68.7 - 115	*	8/4/2021 16:33
Pentafluorobenzene	**101**	80.2 - 112		8/4/2021 16:33
Toluene-D8	**90.9**	83.5 - 123		8/4/2021 16:33

Internal standard outliers indicate probable matrix interference

Method Reference(s): EPA 8260C
EPA 5035A - L

Data File: z03390.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-05-BLT-B		
Lab Sample ID:	213459-05	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.0913**	mg/Kg		8/6/2021 10:38

Method Reference(s): EPA 7471B
Preparation Date: 8/5/2021
Data File: Hg210806A

RCRA Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**6.73**	mg/Kg		8/5/2021 20:37
Barium	**121**	mg/Kg		8/5/2021 20:37
Cadmium	< 0.278	mg/Kg		8/5/2021 20:37
Chromium	**6.52**	mg/Kg		8/5/2021 20:37
Lead	**69.3**	mg/Kg		8/5/2021 20:37
Selenium	< 1.11	mg/Kg		8/5/2021 20:37
Silver	< 0.557	mg/Kg		8/5/2021 20:37

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 8/5/2021
Data File: 210805D

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.175	mg/Kg		8/4/2021 20:26
PCB-1221	< 0.175	mg/Kg		8/4/2021 20:26
PCB-1232	< 0.175	mg/Kg		8/4/2021 20:26
PCB-1242	< 0.175	mg/Kg		8/4/2021 20:26
PCB-1248	< 0.175	mg/Kg		8/4/2021 20:26
PCB-1254	< 0.175	mg/Kg		8/4/2021 20:26
PCB-1260	< 0.175	mg/Kg		8/4/2021 20:26
PCB-1262	< 0.175	mg/Kg		8/4/2021 20:26
PCB-1268	< 0.175	mg/Kg		8/4/2021 20:26

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-05-BLT-B		
Lab Sample ID:	213459-05	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	**56.6**	18.5 - 93.4		8/4/2021 20:26

Method Reference(s): EPA 8082A
EPA 3546
Preparation Date: 8/4/2021

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 321	ug/Kg		8/6/2021 17:00
1,2,4,5-Tetrachlorobenzene	< 321	ug/Kg		8/6/2021 17:00
1,2,4-Trichlorobenzene	< 321	ug/Kg		8/6/2021 17:00
1,2-Dichlorobenzene	< 321	ug/Kg		8/6/2021 17:00
1,3-Dichlorobenzene	< 321	ug/Kg		8/6/2021 17:00
1,4-Dichlorobenzene	< 321	ug/Kg		8/6/2021 17:00
2,2-Oxybis (1-chloropropane)	< 321	ug/Kg		8/6/2021 17:00
2,3,4,6-Tetrachlorophenol	< 321	ug/Kg		8/6/2021 17:00
2,4,5-Trichlorophenol	< 321	ug/Kg		8/6/2021 17:00
2,4,6-Trichlorophenol	< 321	ug/Kg		8/6/2021 17:00
2,4-Dichlorophenol	< 321	ug/Kg		8/6/2021 17:00
2,4-Dimethylphenol	< 321	ug/Kg		8/6/2021 17:00
2,4-Dinitrophenol	< 1290	ug/Kg		8/6/2021 17:00
2,4-Dinitrotoluene	< 321	ug/Kg		8/6/2021 17:00
2,6-Dinitrotoluene	< 321	ug/Kg		8/6/2021 17:00
2-Chloronaphthalene	< 321	ug/Kg		8/6/2021 17:00
2-Chlorophenol	< 321	ug/Kg		8/6/2021 17:00
2-Methylnapthalene	**497**	ug/Kg		8/6/2021 17:00
2-Methylphenol	< 321	ug/Kg		8/6/2021 17:00
2-Nitroaniline	< 321	ug/Kg		8/6/2021 17:00
2-Nitrophenol	< 321	ug/Kg		8/6/2021 17:00
3&4-Methylphenol	< 321	ug/Kg		8/6/2021 17:00
3,3'-Dichlorobenzidine	< 321	ug/Kg		8/6/2021 17:00

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-05-BLT-B		
Lab Sample ID:	213459-05	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

3-Nitroaniline	< 321	ug/Kg	8/6/2021 17:00
4,6-Dinitro-2-methylphenol	< 430	ug/Kg	8/6/2021 17:00
4-Bromophenyl phenyl ether	< 321	ug/Kg	8/6/2021 17:00
4-Chloro-3-methylphenol	< 321	ug/Kg	8/6/2021 17:00
4-Chloroaniline	< 321	ug/Kg	8/6/2021 17:00
4-Chlorophenyl phenyl ether	< 321	ug/Kg	8/6/2021 17:00
4-Nitroaniline	< 321	ug/Kg	8/6/2021 17:00
4-Nitrophenol	< 321	ug/Kg	8/6/2021 17:00
Acenaphthene	< 321	ug/Kg	8/6/2021 17:00
Acenaphthylene	< 321	ug/Kg	8/6/2021 17:00
Acetophenone	< 321	ug/Kg	8/6/2021 17:00
Anthracene	< 321	ug/Kg	8/6/2021 17:00
Atrazine	< 321	ug/Kg	8/6/2021 17:00
Benzaldehyde	< 321	ug/Kg	8/6/2021 17:00
Benzo (a) anthracene	< 321	ug/Kg	8/6/2021 17:00
Benzo (a) pyrene	< 321	ug/Kg	8/6/2021 17:00
Benzo (b) fluoranthene	**432**	ug/Kg	8/6/2021 17:00
Benzo (g,h,i) perylene	< 321	ug/Kg	8/6/2021 17:00
Benzo (k) fluoranthene	< 321	ug/Kg	8/6/2021 17:00
Bis (2-chloroethoxy) methane	< 321	ug/Kg	8/6/2021 17:00
Bis (2-chloroethyl) ether	< 321	ug/Kg	8/6/2021 17:00
Bis (2-ethylhexyl) phthalate	< 321	ug/Kg	8/6/2021 17:00
Butylbenzylphthalate	< 321	ug/Kg	8/6/2021 17:00
Caprolactam	< 321	ug/Kg	8/6/2021 17:00
Carbazole	< 321	ug/Kg	8/6/2021 17:00
Chrysene	**390**	ug/Kg	8/6/2021 17:00
Dibenz (a,h) anthracene	< 321	ug/Kg	8/6/2021 17:00
Dibenzofuran	< 321	ug/Kg	8/6/2021 17:00
Diethyl phthalate	< 321	ug/Kg	8/6/2021 17:00
Dimethyl phthalate	< 321	ug/Kg	8/6/2021 17:00

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-05-BLT-B
Lab Sample ID: 213459-05 **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Di-n-butyl phthalate	< 321	ug/Kg	8/6/2021	17:00
Di-n-octylphthalate	< 321	ug/Kg	8/6/2021	17:00
Fluoranthene	**602**	ug/Kg	8/6/2021	17:00
Fluorene	< 321	ug/Kg	8/6/2021	17:00
Hexachlorobenzene	< 321	ug/Kg	8/6/2021	17:00
Hexachlorobutadiene	< 321	ug/Kg	8/6/2021	17:00
Hexachlorocyclopentadiene	< 1290	ug/Kg	8/6/2021	17:00
Hexachloroethane	< 321	ug/Kg	8/6/2021	17:00
Indeno (1,2,3-cd) pyrene	< 321	ug/Kg	8/6/2021	17:00
Isophorone	< 321	ug/Kg	8/6/2021	17:00
Naphthalene	**331**	ug/Kg	8/6/2021	17:00
Nitrobenzene	< 321	ug/Kg	8/6/2021	17:00
N-Nitroso-di-n-propylamine	< 321	ug/Kg	8/6/2021	17:00
N-Nitrosodiphenylamine	< 321	ug/Kg	8/6/2021	17:00
Pentachlorophenol	< 643	ug/Kg	8/6/2021	17:00
Phenanthrene	**745**	ug/Kg	8/6/2021	17:00
Phenol	< 321	ug/Kg	8/6/2021	17:00
Pyrene	**353**	ug/Kg	8/6/2021	17:00

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	**52.4**	36.4 - 87.2		8/6/2021	17:00
2-Fluorobiphenyl	**57.8**	44 - 84		8/6/2021	17:00
2-Fluorophenol	**46.0**	43.2 - 82.1		8/6/2021	17:00
Nitrobenzene-d5	**51.4**	36.4 - 82.2		8/6/2021	17:00
Phenol-d5	**49.8**	41.1 - 81.4		8/6/2021	17:00
Terphenyl-d14	**64.9**	43.8 - 103		8/6/2021	17:00

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 8/5/2021
Data File: B55998.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-05-BLT-A		
Lab Sample ID:	213459-05A	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 8.86	ug/Kg		8/4/2021 16:53
1,1,2,2-Tetrachloroethane	< 8.86	ug/Kg		8/4/2021 16:53
1,1,2-Trichloroethane	< 8.86	ug/Kg		8/4/2021 16:53
1,1-Dichloroethane	< 8.86	ug/Kg		8/4/2021 16:53
1,1-Dichloroethene	< 8.86	ug/Kg		8/4/2021 16:53
1,2,3-Trichlorobenzene	< 22.1	ug/Kg		8/4/2021 16:53
1,2,4-Trichlorobenzene	< 22.1	ug/Kg		8/4/2021 16:53
1,2,4-Trimethylbenzene	< 8.86	ug/Kg		8/4/2021 16:53
1,2-Dibromo-3-Chloropropane	< 44.3	ug/Kg		8/4/2021 16:53
1,2-Dibromoethane	< 8.86	ug/Kg		8/4/2021 16:53
1,2-Dichlorobenzene	< 8.86	ug/Kg		8/4/2021 16:53
1,2-Dichloroethane	< 8.86	ug/Kg		8/4/2021 16:53
1,2-Dichloropropane	< 8.86	ug/Kg		8/4/2021 16:53
1,3,5-Trimethylbenzene	< 8.86	ug/Kg		8/4/2021 16:53
1,3-Dichlorobenzene	< 8.86	ug/Kg		8/4/2021 16:53
1,4-Dichlorobenzene	< 8.86	ug/Kg		8/4/2021 16:53
1,4-Dioxane	< 44.3	ug/Kg		8/4/2021 16:53
2-Butanone	< 44.3	ug/Kg		8/4/2021 16:53
2-Hexanone	< 22.1	ug/Kg		8/4/2021 16:53
4-Methyl-2-pentanone	< 22.1	ug/Kg		8/4/2021 16:53
Acetone	< 44.3	ug/Kg		8/4/2021 16:53
Benzene	< 8.86	ug/Kg		8/4/2021 16:53
Bromochloromethane	< 22.1	ug/Kg		8/4/2021 16:53
Bromodichloromethane	< 8.86	ug/Kg		8/4/2021 16:53
Bromoform	< 22.1	ug/Kg		8/4/2021 16:53
Bromomethane	< 8.86	ug/Kg		8/4/2021 16:53
Carbon disulfide	< 8.86	ug/Kg		8/4/2021 16:53
Carbon Tetrachloride	< 8.86	ug/Kg		8/4/2021 16:53

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-05-BLT-A
Lab Sample ID: 213459-05A **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Chlorobenzene	< 8.86	ug/Kg	8/4/2021	16:53
Chloroethane	< 8.86	ug/Kg	8/4/2021	16:53
Chloroform	< 8.86	ug/Kg	8/4/2021	16:53
Chloromethane	< 8.86	ug/Kg	8/4/2021	16:53
cis-1,2-Dichloroethene	< 8.86	ug/Kg	8/4/2021	16:53
cis-1,3-Dichloropropene	< 8.86	ug/Kg	8/4/2021	16:53
Cyclohexane	< 44.3	ug/Kg	8/4/2021	16:53
Dibromochloromethane	< 8.86	ug/Kg	8/4/2021	16:53
Dichlorodifluoromethane	< 8.86	ug/Kg	8/4/2021	16:53
Ethylbenzene	< 8.86	ug/Kg	8/4/2021	16:53
Freon 113	< 8.86	ug/Kg	8/4/2021	16:53
Isopropylbenzene	< 8.86	ug/Kg	8/4/2021	16:53
m,p-Xylene	< 8.86	ug/Kg	8/4/2021	16:53
Methyl acetate	< 8.86	ug/Kg	8/4/2021	16:53
Methyl tert-butyl Ether	< 8.86	ug/Kg	8/4/2021	16:53
Methylcyclohexane	< 8.86	ug/Kg	8/4/2021	16:53
Methylene chloride	< 22.1	ug/Kg	8/4/2021	16:53
Naphthalene	< 22.1	ug/Kg	8/4/2021	16:53
n-Butylbenzene	< 8.86	ug/Kg	8/4/2021	16:53
n-Propylbenzene	< 8.86	ug/Kg	8/4/2021	16:53
o-Xylene	< 8.86	ug/Kg	8/4/2021	16:53
p-Isopropyltoluene	< 8.86	ug/Kg	8/4/2021	16:53
sec-Butylbenzene	< 8.86	ug/Kg	8/4/2021	16:53
Styrene	< 22.1	ug/Kg	8/4/2021	16:53
tert-Butylbenzene	< 8.86	ug/Kg	8/4/2021	16:53
Tetrachloroethene	< 8.86	ug/Kg	8/4/2021	16:53
Toluene	< 8.86	ug/Kg	8/4/2021	16:53
trans-1,2-Dichloroethene	< 8.86	ug/Kg	8/4/2021	16:53
trans-1,3-Dichloropropene	< 8.86	ug/Kg	8/4/2021	16:53
Trichloroethene	< 8.86	ug/Kg	8/4/2021	16:53

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-05-BLT-A		
Lab Sample ID:	213459-05A	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Trichlorofluoromethane	< 8.86	ug/Kg		8/4/2021 16:53
Vinyl chloride	< 8.86	ug/Kg		8/4/2021 16:53

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**99.9**	88.8 - 123		8/4/2021 16:53
4-Bromofluorobenzene	**70.3**	68.7 - 115		8/4/2021 16:53
Pentafluorobenzene	**100**	80.2 - 112		8/4/2021 16:53
Toluene-D8	**93.3**	83.5 - 123		8/4/2021 16:53

Internal standard outliers indicate probable matrix interference

Method Reference(s): EPA 8260C
EPA 5035A - L

Data File: z03391.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-08-BLT-B
Lab Sample ID: 213459-06 **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.0198**	mg/Kg		8/6/2021 10:43

Method Reference(s): EPA 7471B
Preparation Date: 8/5/2021
Data File: Hg210806A

RCRA Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**5.16**	mg/Kg		8/5/2021 20:42
Barium	**58.8**	mg/Kg		8/5/2021 20:42
Cadmium	< 0.291	mg/Kg		8/5/2021 20:42
Chromium	**14.2**	mg/Kg		8/5/2021 20:42
Lead	**9.08**	mg/Kg		8/5/2021 20:42
Selenium	< 1.17	mg/Kg		8/5/2021 20:42
Silver	< 0.583	mg/Kg		8/5/2021 20:42

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 8/5/2021
Data File: 210805D

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.164	mg/Kg		8/4/2021 23:31
PCB-1221	< 0.164	mg/Kg		8/4/2021 23:31
PCB-1232	< 0.164	mg/Kg		8/4/2021 23:31
PCB-1242	< 0.164	mg/Kg		8/4/2021 23:31
PCB-1248	< 0.164	mg/Kg		8/4/2021 23:31
PCB-1254	< 0.164	mg/Kg		8/4/2021 23:31
PCB-1260	< 0.164	mg/Kg		8/4/2021 23:31
PCB-1262	< 0.164	mg/Kg		8/4/2021 23:31
PCB-1268	< 0.164	mg/Kg		8/4/2021 23:31

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-08-BLT-B		
Lab Sample ID:	213459-06	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	**69.8**	18.5 - 93.4		8/4/2021 23:31

Method Reference(s): EPA 8082A
EPA 3546
Preparation Date: 8/4/2021

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 305	ug/Kg		8/6/2021 17:30
1,2,4,5-Tetrachlorobenzene	< 305	ug/Kg		8/6/2021 17:30
1,2,4-Trichlorobenzene	< 305	ug/Kg		8/6/2021 17:30
1,2-Dichlorobenzene	< 305	ug/Kg		8/6/2021 17:30
1,3-Dichlorobenzene	< 305	ug/Kg		8/6/2021 17:30
1,4-Dichlorobenzene	< 305	ug/Kg		8/6/2021 17:30
2,2-Oxybis (1-chloropropane)	< 305	ug/Kg		8/6/2021 17:30
2,3,4,6-Tetrachlorophenol	< 305	ug/Kg		8/6/2021 17:30
2,4,5-Trichlorophenol	< 305	ug/Kg		8/6/2021 17:30
2,4,6-Trichlorophenol	< 305	ug/Kg		8/6/2021 17:30
2,4-Dichlorophenol	< 305	ug/Kg		8/6/2021 17:30
2,4-Dimethylphenol	< 305	ug/Kg		8/6/2021 17:30
2,4-Dinitrophenol	< 1220	ug/Kg		8/6/2021 17:30
2,4-Dinitrotoluene	< 305	ug/Kg		8/6/2021 17:30
2,6-Dinitrotoluene	< 305	ug/Kg		8/6/2021 17:30
2-Chloronaphthalene	< 305	ug/Kg		8/6/2021 17:30
2-Chlorophenol	< 305	ug/Kg		8/6/2021 17:30
2-Methylnapthalene	< 305	ug/Kg		8/6/2021 17:30
2-Methylphenol	< 305	ug/Kg		8/6/2021 17:30
2-Nitroaniline	< 305	ug/Kg		8/6/2021 17:30
2-Nitrophenol	< 305	ug/Kg		8/6/2021 17:30
3&4-Methylphenol	< 305	ug/Kg		8/6/2021 17:30
3,3'-Dichlorobenzidine	< 305	ug/Kg		8/6/2021 17:30

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-08-BLT-B
Lab Sample ID: 213459-06 **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

3-Nitroaniline	< 305	ug/Kg	8/6/2021	17:30
4,6-Dinitro-2-methylphenol	< 408	ug/Kg	8/6/2021	17:30
4-Bromophenyl phenyl ether	< 305	ug/Kg	8/6/2021	17:30
4-Chloro-3-methylphenol	< 305	ug/Kg	8/6/2021	17:30
4-Chloroaniline	< 305	ug/Kg	8/6/2021	17:30
4-Chlorophenyl phenyl ether	< 305	ug/Kg	8/6/2021	17:30
4-Nitroaniline	< 305	ug/Kg	8/6/2021	17:30
4-Nitrophenol	< 305	ug/Kg	8/6/2021	17:30
Acenaphthene	< 305	ug/Kg	8/6/2021	17:30
Acenaphthylene	< 305	ug/Kg	8/6/2021	17:30
Acetophenone	< 305	ug/Kg	8/6/2021	17:30
Anthracene	< 305	ug/Kg	8/6/2021	17:30
Atrazine	< 305	ug/Kg	8/6/2021	17:30
Benzaldehyde	< 305	ug/Kg	8/6/2021	17:30
Benzo (a) anthracene	< 305	ug/Kg	8/6/2021	17:30
Benzo (a) pyrene	< 305	ug/Kg	8/6/2021	17:30
Benzo (b) fluoranthene	< 305	ug/Kg	8/6/2021	17:30
Benzo (g,h,i) perylene	< 305	ug/Kg	8/6/2021	17:30
Benzo (k) fluoranthene	< 305	ug/Kg	8/6/2021	17:30
Bis (2-chloroethoxy) methane	< 305	ug/Kg	8/6/2021	17:30
Bis (2-chloroethyl) ether	< 305	ug/Kg	8/6/2021	17:30
Bis (2-ethylhexyl) phthalate	< 305	ug/Kg	8/6/2021	17:30
Butylbenzylphthalate	< 305	ug/Kg	8/6/2021	17:30
Caprolactam	< 305	ug/Kg	8/6/2021	17:30
Carbazole	< 305	ug/Kg	8/6/2021	17:30
Chrysene	< 305	ug/Kg	8/6/2021	17:30
Dibenz (a,h) anthracene	< 305	ug/Kg	8/6/2021	17:30
Dibenzofuran	< 305	ug/Kg	8/6/2021	17:30
Diethyl phthalate	< 305	ug/Kg	8/6/2021	17:30
Dimethyl phthalate	< 305	ug/Kg	8/6/2021	17:30

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-08-BLT-B
Lab Sample ID: 213459-06 **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Di-n-butyl phthalate	< 305	ug/Kg	8/6/2021	17:30
Di-n-octylphthalate	< 305	ug/Kg	8/6/2021	17:30
Fluoranthene	< 305	ug/Kg	8/6/2021	17:30
Fluorene	< 305	ug/Kg	8/6/2021	17:30
Hexachlorobenzene	< 305	ug/Kg	8/6/2021	17:30
Hexachlorobutadiene	< 305	ug/Kg	8/6/2021	17:30
Hexachlorocyclopentadiene	< 1220	ug/Kg	8/6/2021	17:30
Hexachloroethane	< 305	ug/Kg	8/6/2021	17:30
Indeno (1,2,3-cd) pyrene	< 305	ug/Kg	8/6/2021	17:30
Isophorone	< 305	ug/Kg	8/6/2021	17:30
Naphthalene	< 305	ug/Kg	8/6/2021	17:30
Nitrobenzene	< 305	ug/Kg	8/6/2021	17:30
N-Nitroso-di-n-propylamine	< 305	ug/Kg	8/6/2021	17:30
N-Nitrosodiphenylamine	< 305	ug/Kg	8/6/2021	17:30
Pentachlorophenol	< 610	ug/Kg	8/6/2021	17:30
Phenanthrene	< 305	ug/Kg	8/6/2021	17:30
Phenol	< 305	ug/Kg	8/6/2021	17:30
Pyrene	< 305	ug/Kg	8/6/2021	17:30

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	**70.8**	36.4 - 87.2		8/6/2021	17:30
2-Fluorobiphenyl	**59.4**	44 - 84		8/6/2021	17:30
2-Fluorophenol	**58.3**	43.2 - 82.1		8/6/2021	17:30
Nitrobenzene-d5	**55.3**	36.4 - 82.2		8/6/2021	17:30
Phenol-d5	**59.3**	41.1 - 81.4		8/6/2021	17:30
Terphenyl-d14	**76.2**	43.8 - 103		8/6/2021	17:30

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 8/5/2021
Data File: B55999.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-08-BLT-A		
Lab Sample ID:	213459-06A	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 7.19	ug/Kg		8/4/2021 17:12
1,1,2,2-Tetrachloroethane	< 7.19	ug/Kg		8/4/2021 17:12
1,1,2-Trichloroethane	< 7.19	ug/Kg		8/4/2021 17:12
1,1-Dichloroethane	< 7.19	ug/Kg		8/4/2021 17:12
1,1-Dichloroethene	< 7.19	ug/Kg		8/4/2021 17:12
1,2,3-Trichlorobenzene	< 18.0	ug/Kg		8/4/2021 17:12
1,2,4-Trichlorobenzene	< 18.0	ug/Kg		8/4/2021 17:12
1,2,4-Trimethylbenzene	< 7.19	ug/Kg		8/4/2021 17:12
1,2-Dibromo-3-Chloropropane	< 36.0	ug/Kg		8/4/2021 17:12
1,2-Dibromoethane	< 7.19	ug/Kg		8/4/2021 17:12
1,2-Dichlorobenzene	< 7.19	ug/Kg		8/4/2021 17:12
1,2-Dichloroethane	< 7.19	ug/Kg		8/4/2021 17:12
1,2-Dichloropropane	< 7.19	ug/Kg		8/4/2021 17:12
1,3,5-Trimethylbenzene	< 7.19	ug/Kg		8/4/2021 17:12
1,3-Dichlorobenzene	< 7.19	ug/Kg		8/4/2021 17:12
1,4-Dichlorobenzene	< 7.19	ug/Kg		8/4/2021 17:12
1,4-Dioxane	< 36.0	ug/Kg		8/4/2021 17:12
2-Butanone	< 36.0	ug/Kg		8/4/2021 17:12
2-Hexanone	< 18.0	ug/Kg		8/4/2021 17:12
4-Methyl-2-pentanone	< 18.0	ug/Kg		8/4/2021 17:12
Acetone	< 36.0	ug/Kg		8/4/2021 17:12
Benzene	< 7.19	ug/Kg		8/4/2021 17:12
Bromochloromethane	< 18.0	ug/Kg		8/4/2021 17:12
Bromodichloromethane	< 7.19	ug/Kg		8/4/2021 17:12
Bromoform	< 18.0	ug/Kg		8/4/2021 17:12
Bromomethane	< 7.19	ug/Kg		8/4/2021 17:12
Carbon disulfide	< 7.19	ug/Kg		8/4/2021 17:12
Carbon Tetrachloride	< 7.19	ug/Kg		8/4/2021 17:12

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-08-BLT-A
Lab Sample ID: 213459-06A **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Chlorobenzene	< 7.19	ug/Kg	8/4/2021	17:12
Chloroethane	< 7.19	ug/Kg	8/4/2021	17:12
Chloroform	< 7.19	ug/Kg	8/4/2021	17:12
Chloromethane	< 7.19	ug/Kg	8/4/2021	17:12
cis-1,2-Dichloroethene	< 7.19	ug/Kg	8/4/2021	17:12
cis-1,3-Dichloropropene	< 7.19	ug/Kg	8/4/2021	17:12
Cyclohexane	< 36.0	ug/Kg	8/4/2021	17:12
Dibromochloromethane	< 7.19	ug/Kg	8/4/2021	17:12
Dichlorodifluoromethane	< 7.19	ug/Kg	8/4/2021	17:12
Ethylbenzene	< 7.19	ug/Kg	8/4/2021	17:12
Freon 113	< 7.19	ug/Kg	8/4/2021	17:12
Isopropylbenzene	< 7.19	ug/Kg	8/4/2021	17:12
m,p-Xylene	< 7.19	ug/Kg	8/4/2021	17:12
Methyl acetate	< 7.19	ug/Kg	8/4/2021	17:12
Methyl tert-butyl Ether	< 7.19	ug/Kg	8/4/2021	17:12
Methylcyclohexane	< 7.19	ug/Kg	8/4/2021	17:12
Methylene chloride	< 18.0	ug/Kg	8/4/2021	17:12
Naphthalene	< 18.0	ug/Kg	8/4/2021	17:12
n-Butylbenzene	< 7.19	ug/Kg	8/4/2021	17:12
n-Propylbenzene	< 7.19	ug/Kg	8/4/2021	17:12
o-Xylene	< 7.19	ug/Kg	8/4/2021	17:12
p-Isopropyltoluene	< 7.19	ug/Kg	8/4/2021	17:12
sec-Butylbenzene	< 7.19	ug/Kg	8/4/2021	17:12
Styrene	< 18.0	ug/Kg	8/4/2021	17:12
tert-Butylbenzene	< 7.19	ug/Kg	8/4/2021	17:12
Tetrachloroethene	< 7.19	ug/Kg	8/4/2021	17:12
Toluene	< 7.19	ug/Kg	8/4/2021	17:12
trans-1,2-Dichloroethene	< 7.19	ug/Kg	8/4/2021	17:12
trans-1,3-Dichloropropene	< 7.19	ug/Kg	8/4/2021	17:12
Trichloroethene	< 7.19	ug/Kg	8/4/2021	17:12

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-08-BLT-A		
Lab Sample ID:	213459-06A	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Trichlorofluoromethane	< 7.19	ug/Kg			8/4/2021 17:12
Vinyl chloride	< 7.19	ug/Kg			8/4/2021 17:12

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**101**	88.8 - 123		8/4/2021 17:12
4-Bromofluorobenzene	**80.3**	68.7 - 115		8/4/2021 17:12
Pentafluorobenzene	**99.5**	80.2 - 112		8/4/2021 17:12
Toluene-D8	**97.4**	83.5 - 123		8/4/2021 17:12

Method Reference(s): EPA 8260C
EPA 5035A - L

Data File: z03392.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-09-BLT-B		
Lab Sample ID:	213459-07	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	< 0.00840	mg/Kg		8/6/2021 10:45

Method Reference(s): EPA 7471B
Preparation Date: 8/5/2021
Data File: Hg210806A

RCRA Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**2.05**	mg/Kg	D	8/5/2021 20:56
Barium	**36.2**	mg/Kg	D	8/5/2021 20:56
Cadmium	< 0.275	mg/Kg		8/5/2021 20:56
Chromium	**7.05**	mg/Kg	D	8/5/2021 20:56
Lead	**4.76**	mg/Kg	D	8/5/2021 20:56
Selenium	< 1.10	mg/Kg		8/5/2021 20:56
Silver	< 0.549	mg/Kg		8/5/2021 20:56

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 8/5/2021
Data File: 210805D

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.149	mg/Kg		8/4/2021 23:54
PCB-1221	< 0.149	mg/Kg		8/4/2021 23:54
PCB-1232	< 0.149	mg/Kg		8/4/2021 23:54
PCB-1242	< 0.149	mg/Kg		8/4/2021 23:54
PCB-1248	< 0.149	mg/Kg		8/4/2021 23:54
PCB-1254	< 0.149	mg/Kg		8/4/2021 23:54
PCB-1260	< 0.149	mg/Kg		8/4/2021 23:54
PCB-1262	< 0.149	mg/Kg		8/4/2021 23:54
PCB-1268	< 0.149	mg/Kg		8/4/2021 23:54

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-09-BLT-B		
Lab Sample ID:	213459-07	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	**70.6**	18.5 - 93.4		8/4/2021 23:54

Method Reference(s): EPA 8082A
EPA 3546
Preparation Date: 8/4/2021

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 294	ug/Kg		8/6/2021 18:00
1,2,4,5-Tetrachlorobenzene	< 294	ug/Kg		8/6/2021 18:00
1,2,4-Trichlorobenzene	< 294	ug/Kg		8/6/2021 18:00
1,2-Dichlorobenzene	< 294	ug/Kg		8/6/2021 18:00
1,3-Dichlorobenzene	< 294	ug/Kg		8/6/2021 18:00
1,4-Dichlorobenzene	< 294	ug/Kg		8/6/2021 18:00
2,2-Oxybis (1-chloropropane)	< 294	ug/Kg		8/6/2021 18:00
2,3,4,6-Tetrachlorophenol	< 294	ug/Kg		8/6/2021 18:00
2,4,5-Trichlorophenol	< 294	ug/Kg		8/6/2021 18:00
2,4,6-Trichlorophenol	< 294	ug/Kg		8/6/2021 18:00
2,4-Dichlorophenol	< 294	ug/Kg		8/6/2021 18:00
2,4-Dimethylphenol	< 294	ug/Kg		8/6/2021 18:00
2,4-Dinitrophenol	< 1170	ug/Kg		8/6/2021 18:00
2,4-Dinitrotoluene	< 294	ug/Kg		8/6/2021 18:00
2,6-Dinitrotoluene	< 294	ug/Kg		8/6/2021 18:00
2-Chloronaphthalene	< 294	ug/Kg		8/6/2021 18:00
2-Chlorophenol	< 294	ug/Kg		8/6/2021 18:00
2-Methylnapthalene	< 294	ug/Kg		8/6/2021 18:00
2-Methylphenol	< 294	ug/Kg		8/6/2021 18:00
2-Nitroaniline	< 294	ug/Kg		8/6/2021 18:00
2-Nitrophenol	< 294	ug/Kg		8/6/2021 18:00
3&4-Methylphenol	< 294	ug/Kg		8/6/2021 18:00
3,3'-Dichlorobenzidine	< 294	ug/Kg		8/6/2021 18:00

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-09-BLT-B
Lab Sample ID: 213459-07 **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

3-Nitroaniline	< 294	ug/Kg	8/6/2021	18:00
4,6-Dinitro-2-methylphenol	< 393	ug/Kg	8/6/2021	18:00
4-Bromophenyl phenyl ether	< 294	ug/Kg	8/6/2021	18:00
4-Chloro-3-methylphenol	< 294	ug/Kg	8/6/2021	18:00
4-Chloroaniline	< 294	ug/Kg	8/6/2021	18:00
4-Chlorophenyl phenyl ether	< 294	ug/Kg	8/6/2021	18:00
4-Nitroaniline	< 294	ug/Kg	8/6/2021	18:00
4-Nitrophenol	< 294	ug/Kg	8/6/2021	18:00
Acenaphthene	< 294	ug/Kg	8/6/2021	18:00
Acenaphthylene	< 294	ug/Kg	8/6/2021	18:00
Acetophenone	< 294	ug/Kg	8/6/2021	18:00
Anthracene	< 294	ug/Kg	8/6/2021	18:00
Atrazine	< 294	ug/Kg	8/6/2021	18:00
Benzaldehyde	< 294	ug/Kg	8/6/2021	18:00
Benzo (a) anthracene	< 294	ug/Kg	8/6/2021	18:00
Benzo (a) pyrene	< 294	ug/Kg	8/6/2021	18:00
Benzo (b) fluoranthene	< 294	ug/Kg	8/6/2021	18:00
Benzo (g,h,i) perylene	< 294	ug/Kg	8/6/2021	18:00
Benzo (k) fluoranthene	< 294	ug/Kg	8/6/2021	18:00
Bis (2-chloroethoxy) methane	< 294	ug/Kg	8/6/2021	18:00
Bis (2-chloroethyl) ether	< 294	ug/Kg	8/6/2021	18:00
Bis (2-ethylhexyl) phthalate	< 294	ug/Kg	8/6/2021	18:00
Butylbenzylphthalate	< 294	ug/Kg	8/6/2021	18:00
Caprolactam	< 294	ug/Kg	8/6/2021	18:00
Carbazole	< 294	ug/Kg	8/6/2021	18:00
Chrysene	< 294	ug/Kg	8/6/2021	18:00
Dibenz (a,h) anthracene	< 294	ug/Kg	8/6/2021	18:00
Dibenzofuran	< 294	ug/Kg	8/6/2021	18:00
Diethyl phthalate	< 294	ug/Kg	8/6/2021	18:00
Dimethyl phthalate	< 294	ug/Kg	8/6/2021	18:00

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-09-BLT-B
Lab Sample ID: 213459-07 **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Di-n-butyl phthalate	< 294	ug/Kg	8/6/2021	18:00
Di-n-octylphthalate	< 294	ug/Kg	8/6/2021	18:00
Fluoranthene	< 294	ug/Kg	8/6/2021	18:00
Fluorene	< 294	ug/Kg	8/6/2021	18:00
Hexachlorobenzene	< 294	ug/Kg	8/6/2021	18:00
Hexachlorobutadiene	< 294	ug/Kg	8/6/2021	18:00
Hexachlorocyclopentadiene	< 1170	ug/Kg	8/6/2021	18:00
Hexachloroethane	< 294	ug/Kg	8/6/2021	18:00
Indeno (1,2,3-cd) pyrene	< 294	ug/Kg	8/6/2021	18:00
Isophorone	< 294	ug/Kg	8/6/2021	18:00
Naphthalene	< 294	ug/Kg	8/6/2021	18:00
Nitrobenzene	< 294	ug/Kg	8/6/2021	18:00
N-Nitroso-di-n-propylamine	< 294	ug/Kg	8/6/2021	18:00
N-Nitrosodiphenylamine	< 294	ug/Kg	8/6/2021	18:00
Pentachlorophenol	< 587	ug/Kg	8/6/2021	18:00
Phenanthrene	< 294	ug/Kg	8/6/2021	18:00
Phenol	< 294	ug/Kg	8/6/2021	18:00
Pyrene	< 294	ug/Kg	8/6/2021	18:00

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	**72.6**	36.4 - 87.2		8/6/2021	18:00
2-Fluorobiphenyl	**61.4**	44 - 84		8/6/2021	18:00
2-Fluorophenol	**61.3**	43.2 - 82.1		8/6/2021	18:00
Nitrobenzene-d5	**58.3**	36.4 - 82.2		8/6/2021	18:00
Phenol-d5	**61.2**	41.1 - 81.4		8/6/2021	18:00
Terphenyl-d14	**79.4**	43.8 - 103		8/6/2021	18:00

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 8/5/2021
Data File: B56000.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-09-BLT-A		
Lab Sample ID:	213459-07A	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 7.58	ug/Kg		8/4/2021 18:01
1,1,2,2-Tetrachloroethane	< 7.58	ug/Kg		8/4/2021 18:01
1,1,2-Trichloroethane	< 7.58	ug/Kg		8/4/2021 18:01
1,1-Dichloroethane	< 7.58	ug/Kg		8/4/2021 18:01
1,1-Dichloroethene	< 7.58	ug/Kg		8/4/2021 18:01
1,2,3-Trichlorobenzene	< 18.9	ug/Kg		8/4/2021 18:01
1,2,4-Trichlorobenzene	< 18.9	ug/Kg		8/4/2021 18:01
1,2,4-Trimethylbenzene	< 7.58	ug/Kg		8/4/2021 18:01
1,2-Dibromo-3-Chloropropane	< 37.9	ug/Kg		8/4/2021 18:01
1,2-Dibromoethane	< 7.58	ug/Kg		8/4/2021 18:01
1,2-Dichlorobenzene	< 7.58	ug/Kg		8/4/2021 18:01
1,2-Dichloroethane	< 7.58	ug/Kg		8/4/2021 18:01
1,2-Dichloropropane	< 7.58	ug/Kg		8/4/2021 18:01
1,3,5-Trimethylbenzene	< 7.58	ug/Kg		8/4/2021 18:01
1,3-Dichlorobenzene	< 7.58	ug/Kg		8/4/2021 18:01
1,4-Dichlorobenzene	< 7.58	ug/Kg		8/4/2021 18:01
1,4-Dioxane	< 37.9	ug/Kg		8/4/2021 18:01
2-Butanone	< 37.9	ug/Kg		8/4/2021 18:01
2-Hexanone	< 18.9	ug/Kg		8/4/2021 18:01
4-Methyl-2-pentanone	< 18.9	ug/Kg		8/4/2021 18:01
Acetone	< 37.9	ug/Kg		8/4/2021 18:01
Benzene	< 7.58	ug/Kg		8/4/2021 18:01
Bromochloromethane	< 18.9	ug/Kg		8/4/2021 18:01
Bromodichloromethane	< 7.58	ug/Kg		8/4/2021 18:01
Bromoform	< 18.9	ug/Kg		8/4/2021 18:01
Bromomethane	< 7.58	ug/Kg		8/4/2021 18:01
Carbon disulfide	< 7.58	ug/Kg		8/4/2021 18:01
Carbon Tetrachloride	< 7.58	ug/Kg		8/4/2021 18:01

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-09-BLT-A
Lab Sample ID: 213459-07A **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Chlorobenzene	< 7.58	ug/Kg	8/4/2021	18:01
Chloroethane	< 7.58	ug/Kg	8/4/2021	18:01
Chloroform	< 7.58	ug/Kg	8/4/2021	18:01
Chloromethane	< 7.58	ug/Kg	8/4/2021	18:01
cis-1,2-Dichloroethene	< 7.58	ug/Kg	8/4/2021	18:01
cis-1,3-Dichloropropene	< 7.58	ug/Kg	8/4/2021	18:01
Cyclohexane	< 37.9	ug/Kg	8/4/2021	18:01
Dibromochloromethane	< 7.58	ug/Kg	8/4/2021	18:01
Dichlorodifluoromethane	< 7.58	ug/Kg	8/4/2021	18:01
Ethylbenzene	< 7.58	ug/Kg	8/4/2021	18:01
Freon 113	< 7.58	ug/Kg	8/4/2021	18:01
Isopropylbenzene	< 7.58	ug/Kg	8/4/2021	18:01
m,p-Xylene	< 7.58	ug/Kg	8/4/2021	18:01
Methyl acetate	< 7.58	ug/Kg	8/4/2021	18:01
Methyl tert-butyl Ether	< 7.58	ug/Kg	8/4/2021	18:01
Methylcyclohexane	< 7.58	ug/Kg	8/4/2021	18:01
Methylene chloride	< 18.9	ug/Kg	8/4/2021	18:01
Naphthalene	< 18.9	ug/Kg	8/4/2021	18:01
n-Butylbenzene	< 7.58	ug/Kg	8/4/2021	18:01
n-Propylbenzene	< 7.58	ug/Kg	8/4/2021	18:01
o-Xylene	< 7.58	ug/Kg	8/4/2021	18:01
p-Isopropyltoluene	< 7.58	ug/Kg	8/4/2021	18:01
sec-Butylbenzene	< 7.58	ug/Kg	8/4/2021	18:01
Styrene	< 18.9	ug/Kg	8/4/2021	18:01
tert-Butylbenzene	< 7.58	ug/Kg	8/4/2021	18:01
Tetrachloroethene	< 7.58	ug/Kg	8/4/2021	18:01
Toluene	< 7.58	ug/Kg	8/4/2021	18:01
trans-1,2-Dichloroethene	< 7.58	ug/Kg	8/4/2021	18:01
trans-1,3-Dichloropropene	< 7.58	ug/Kg	8/4/2021	18:01
Trichloroethene	< 7.58	ug/Kg	8/4/2021	18:01

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-09-BLT-A		
Lab Sample ID:	213459-07A	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Trichlorofluoromethane	< 7.58	ug/Kg	8/4/2021	18:01
Vinyl chloride	< 7.58	ug/Kg	8/4/2021	18:01

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	**108**	88.8 - 123		8/4/2021	18:01
4-Bromofluorobenzene	**94.9**	68.7 - 115		8/4/2021	18:01
Pentafluorobenzene	**103**	80.2 - 112		8/4/2021	18:01
Toluene-D8	**107**	83.5 - 123		8/4/2021	18:01

Method Reference(s): EPA 8260C
EPA 5035A - L

Data File: z03393.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-11-BLT-B
Lab Sample ID: 213459-08 **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.117**	mg/Kg		8/6/2021 10:50

Method Reference(s): EPA 7471B
Preparation Date: 8/5/2021
Data File: Hg210806A

RCRA Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**2.96**	mg/Kg		8/5/2021 21:09
Barium	**39.5**	mg/Kg		8/5/2021 21:09
Cadmium	**0.490**	mg/Kg		8/5/2021 21:09
Chromium	**10.8**	mg/Kg		8/5/2021 21:09
Lead	**44.7**	mg/Kg		8/5/2021 21:09
Selenium	< 1.08	mg/Kg		8/5/2021 21:09
Silver	< 0.541	mg/Kg		8/5/2021 21:09

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 8/5/2021
Data File: 210805D

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.134	mg/Kg		8/5/2021 00:17
PCB-1221	< 0.134	mg/Kg		8/5/2021 00:17
PCB-1232	< 0.134	mg/Kg		8/5/2021 00:17
PCB-1242	< 0.134	mg/Kg		8/5/2021 00:17
PCB-1248	< 0.134	mg/Kg		8/5/2021 00:17
PCB-1254	< 0.134	mg/Kg		8/5/2021 00:17
PCB-1260	< 0.134	mg/Kg		8/5/2021 00:17
PCB-1262	< 0.134	mg/Kg		8/5/2021 00:17
PCB-1268	< 0.134	mg/Kg		8/5/2021 00:17

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-11-BLT-B		
Lab Sample ID:	213459-08	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	**69.4**	18.5 - 93.4		8/5/2021 00:17

Method Reference(s): EPA 8082A
EPA 3546
Preparation Date: 8/4/2021

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 284	ug/Kg		8/6/2021 18:30
1,2,4,5-Tetrachlorobenzene	< 284	ug/Kg		8/6/2021 18:30
1,2,4-Trichlorobenzene	< 284	ug/Kg		8/6/2021 18:30
1,2-Dichlorobenzene	< 284	ug/Kg		8/6/2021 18:30
1,3-Dichlorobenzene	< 284	ug/Kg		8/6/2021 18:30
1,4-Dichlorobenzene	< 284	ug/Kg		8/6/2021 18:30
2,2-Oxybis (1-chloropropane)	< 284	ug/Kg		8/6/2021 18:30
2,3,4,6-Tetrachlorophenol	< 284	ug/Kg		8/6/2021 18:30
2,4,5-Trichlorophenol	< 284	ug/Kg		8/6/2021 18:30
2,4,6-Trichlorophenol	< 284	ug/Kg		8/6/2021 18:30
2,4-Dichlorophenol	< 284	ug/Kg		8/6/2021 18:30
2,4-Dimethylphenol	< 284	ug/Kg		8/6/2021 18:30
2,4-Dinitrophenol	< 1140	ug/Kg		8/6/2021 18:30
2,4-Dinitrotoluene	< 284	ug/Kg		8/6/2021 18:30
2,6-Dinitrotoluene	< 284	ug/Kg		8/6/2021 18:30
2-Chloronaphthalene	< 284	ug/Kg		8/6/2021 18:30
2-Chlorophenol	< 284	ug/Kg		8/6/2021 18:30
2-Methylnapthalene	< 284	ug/Kg		8/6/2021 18:30
2-Methylphenol	< 284	ug/Kg		8/6/2021 18:30
2-Nitroaniline	< 284	ug/Kg		8/6/2021 18:30
2-Nitrophenol	< 284	ug/Kg		8/6/2021 18:30
3&4-Methylphenol	< 284	ug/Kg		8/6/2021 18:30
3,3'-Dichlorobenzidine	< 284	ug/Kg		8/6/2021 18:30

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-11-BLT-B
Lab Sample ID: 213459-08 **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

3-Nitroaniline	< 284	ug/Kg	8/6/2021	18:30
4,6-Dinitro-2-methylphenol	< 381	ug/Kg	8/6/2021	18:30
4-Bromophenyl phenyl ether	< 284	ug/Kg	8/6/2021	18:30
4-Chloro-3-methylphenol	< 284	ug/Kg	8/6/2021	18:30
4-Chloroaniline	< 284	ug/Kg	8/6/2021	18:30
4-Chlorophenyl phenyl ether	< 284	ug/Kg	8/6/2021	18:30
4-Nitroaniline	< 284	ug/Kg	8/6/2021	18:30
4-Nitrophenol	< 284	ug/Kg	8/6/2021	18:30
Acenaphthene	< 284	ug/Kg	8/6/2021	18:30
Acenaphthylene	< 284	ug/Kg	8/6/2021	18:30
Acetophenone	< 284	ug/Kg	8/6/2021	18:30
Anthracene	< 284	ug/Kg	8/6/2021	18:30
Atrazine	< 284	ug/Kg	8/6/2021	18:30
Benzaldehyde	< 284	ug/Kg	8/6/2021	18:30
Benzo (a) anthracene	< 284	ug/Kg	8/6/2021	18:30
Benzo (a) pyrene	< 284	ug/Kg	8/6/2021	18:30
Benzo (b) fluoranthene	< 284	ug/Kg	8/6/2021	18:30
Benzo (g,h,i) perylene	< 284	ug/Kg	8/6/2021	18:30
Benzo (k) fluoranthene	< 284	ug/Kg	8/6/2021	18:30
Bis (2-chloroethoxy) methane	< 284	ug/Kg	8/6/2021	18:30
Bis (2-chloroethyl) ether	< 284	ug/Kg	8/6/2021	18:30
Bis (2-ethylhexyl) phthalate	< 284	ug/Kg	8/6/2021	18:30
Butylbenzylphthalate	< 284	ug/Kg	8/6/2021	18:30
Caprolactam	< 284	ug/Kg	8/6/2021	18:30
Carbazole	< 284	ug/Kg	8/6/2021	18:30
Chrysene	< 284	ug/Kg	8/6/2021	18:30
Dibenz (a,h) anthracene	< 284	ug/Kg	8/6/2021	18:30
Dibenzofuran	< 284	ug/Kg	8/6/2021	18:30
Diethyl phthalate	< 284	ug/Kg	8/6/2021	18:30
Dimethyl phthalate	< 284	ug/Kg	8/6/2021	18:30

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-11-BLT-B
Lab Sample ID: 213459-08 **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Di-n-butyl phthalate	< 284	ug/Kg	8/6/2021	18:30
Di-n-octylphthalate	< 284	ug/Kg	8/6/2021	18:30
Fluoranthene	**359**	ug/Kg	8/6/2021	18:30
Fluorene	< 284	ug/Kg	8/6/2021	18:30
Hexachlorobenzene	< 284	ug/Kg	8/6/2021	18:30
Hexachlorobutadiene	< 284	ug/Kg	8/6/2021	18:30
Hexachlorocyclopentadiene	< 1140	ug/Kg	8/6/2021	18:30
Hexachloroethane	< 284	ug/Kg	8/6/2021	18:30
Indeno (1,2,3-cd) pyrene	< 284	ug/Kg	8/6/2021	18:30
Isophorone	< 284	ug/Kg	8/6/2021	18:30
Naphthalene	< 284	ug/Kg	8/6/2021	18:30
Nitrobenzene	< 284	ug/Kg	8/6/2021	18:30
N-Nitroso-di-n-propylamine	< 284	ug/Kg	8/6/2021	18:30
N-Nitrosodiphenylamine	< 284	ug/Kg	8/6/2021	18:30
Pentachlorophenol	< 569	ug/Kg	8/6/2021	18:30
Phenanthrene	< 284	ug/Kg	8/6/2021	18:30
Phenol	< 284	ug/Kg	8/6/2021	18:30
Pyrene	**307**	ug/Kg	8/6/2021	18:30

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	**70.3**	36.4 - 87.2		8/6/2021	18:30
2-Fluorobiphenyl	**64.1**	44 - 84		8/6/2021	18:30
2-Fluorophenol	**58.3**	43.2 - 82.1		8/6/2021	18:30
Nitrobenzene-d5	**55.7**	36.4 - 82.2		8/6/2021	18:30
Phenol-d5	**59.7**	41.1 - 81.4		8/6/2021	18:30
Terphenyl-d14	**73.8**	43.8 - 103		8/6/2021	18:30

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 8/5/2021
Data File: B56001.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-11-BLT-A		
Lab Sample ID:	213459-08A	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 8.14	ug/Kg		8/5/2021 16:06
1,1,2,2-Tetrachloroethane	< 8.14	ug/Kg		8/5/2021 16:06
1,1,2-Trichloroethane	< 8.14	ug/Kg		8/5/2021 16:06
1,1-Dichloroethane	< 8.14	ug/Kg		8/5/2021 16:06
1,1-Dichloroethene	< 8.14	ug/Kg		8/5/2021 16:06
1,2,3-Trichlorobenzene	< 20.3	ug/Kg		8/5/2021 16:06
1,2,4-Trichlorobenzene	< 20.3	ug/Kg		8/5/2021 16:06
1,2,4-Trimethylbenzene	< 8.14	ug/Kg		8/5/2021 16:06
1,2-Dibromo-3-Chloropropane	< 40.7	ug/Kg		8/5/2021 16:06
1,2-Dibromoethane	< 8.14	ug/Kg		8/5/2021 16:06
1,2-Dichlorobenzene	< 8.14	ug/Kg		8/5/2021 16:06
1,2-Dichloroethane	< 8.14	ug/Kg		8/5/2021 16:06
1,2-Dichloropropane	< 8.14	ug/Kg		8/5/2021 16:06
1,3,5-Trimethylbenzene	< 8.14	ug/Kg		8/5/2021 16:06
1,3-Dichlorobenzene	< 8.14	ug/Kg		8/5/2021 16:06
1,4-Dichlorobenzene	< 8.14	ug/Kg		8/5/2021 16:06
1,4-Dioxane	< 40.7	ug/Kg		8/5/2021 16:06
2-Butanone	< 40.7	ug/Kg		8/5/2021 16:06
2-Hexanone	< 20.3	ug/Kg		8/5/2021 16:06
4-Methyl-2-pentanone	< 20.3	ug/Kg		8/5/2021 16:06
Acetone	< 40.7	ug/Kg		8/5/2021 16:06
Benzene	< 8.14	ug/Kg		8/5/2021 16:06
Bromochloromethane	< 20.3	ug/Kg		8/5/2021 16:06
Bromodichloromethane	< 8.14	ug/Kg		8/5/2021 16:06
Bromoform	< 20.3	ug/Kg		8/5/2021 16:06
Bromomethane	< 8.14	ug/Kg		8/5/2021 16:06
Carbon disulfide	< 8.14	ug/Kg		8/5/2021 16:06
Carbon Tetrachloride	< 8.14	ug/Kg		8/5/2021 16:06

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: SB-11-BLT-A
Lab Sample ID: 213459-08A **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Chlorobenzene	< 8.14	ug/Kg	8/5/2021	16:06
Chloroethane	< 8.14	ug/Kg	8/5/2021	16:06
Chloroform	< 8.14	ug/Kg	8/5/2021	16:06
Chloromethane	< 8.14	ug/Kg	8/5/2021	16:06
cis-1,2-Dichloroethene	< 8.14	ug/Kg	8/5/2021	16:06
cis-1,3-Dichloropropene	< 8.14	ug/Kg	8/5/2021	16:06
Cyclohexane	< 40.7	ug/Kg	8/5/2021	16:06
Dibromochloromethane	< 8.14	ug/Kg	8/5/2021	16:06
Dichlorodifluoromethane	< 8.14	ug/Kg	8/5/2021	16:06
Ethylbenzene	< 8.14	ug/Kg	8/5/2021	16:06
Freon 113	< 8.14	ug/Kg	8/5/2021	16:06
Isopropylbenzene	< 8.14	ug/Kg	8/5/2021	16:06
m,p-Xylene	< 8.14	ug/Kg	8/5/2021	16:06
Methyl acetate	< 8.14	ug/Kg	8/5/2021	16:06
Methyl tert-butyl Ether	< 8.14	ug/Kg	8/5/2021	16:06
Methylcyclohexane	< 8.14	ug/Kg	8/5/2021	16:06
Methylene chloride	< 20.3	ug/Kg	8/5/2021	16:06
Naphthalene	< 20.3	ug/Kg	8/5/2021	16:06
n-Butylbenzene	< 8.14	ug/Kg	8/5/2021	16:06
n-Propylbenzene	< 8.14	ug/Kg	8/5/2021	16:06
o-Xylene	< 8.14	ug/Kg	8/5/2021	16:06
p-Isopropyltoluene	< 8.14	ug/Kg	8/5/2021	16:06
sec-Butylbenzene	< 8.14	ug/Kg	8/5/2021	16:06
Styrene	< 20.3	ug/Kg	8/5/2021	16:06
tert-Butylbenzene	< 8.14	ug/Kg	8/5/2021	16:06
Tetrachloroethene	< 8.14	ug/Kg	8/5/2021	16:06
Toluene	< 8.14	ug/Kg	8/5/2021	16:06
trans-1,2-Dichloroethene	< 8.14	ug/Kg	8/5/2021	16:06
trans-1,3-Dichloropropene	< 8.14	ug/Kg	8/5/2021	16:06
Trichloroethene	< 8.14	ug/Kg	8/5/2021	16:06

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-11-BLT-A		
Lab Sample ID:	213459-08A	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Trichlorofluoromethane	< 8.14	ug/Kg			8/5/2021 16:06
Vinyl chloride	< 8.14	ug/Kg			8/5/2021 16:06

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**100**	88.8 - 123		8/5/2021 16:06
4-Bromofluorobenzene	**84.0**	68.7 - 115		8/5/2021 16:06
Pentafluorobenzene	**103**	80.2 - 112		8/5/2021 16:06
Toluene-D8	**97.3**	83.5 - 123		8/5/2021 16:06

Method Reference(s): EPA 8260C
EPA 5035A - L

Data File: z03413.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: RRS-01-BLT-B
Lab Sample ID: 213459-09 **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.409**	mg/Kg		8/6/2021 10:51

Method Reference(s): EPA 7471B
Preparation Date: 8/5/2021
Data File: Hg210806A

RCRA Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**21.4**	mg/Kg		8/5/2021 21:14
Barium	**82.5**	mg/Kg		8/5/2021 21:14
Cadmium	**0.315**	mg/Kg		8/5/2021 21:14
Chromium	**10.1**	mg/Kg		8/5/2021 21:14
Lead	**88.7**	mg/Kg		8/5/2021 21:14
Selenium	**1.20**	mg/Kg		8/5/2021 21:14
Silver	< 0.564	mg/Kg		8/5/2021 21:14

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 8/5/2021
Data File: 210805D

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.184	mg/Kg		8/5/2021 00:40
PCB-1221	< 0.184	mg/Kg		8/5/2021 00:40
PCB-1232	< 0.184	mg/Kg		8/5/2021 00:40
PCB-1242	< 0.184	mg/Kg		8/5/2021 00:40
PCB-1248	< 0.184	mg/Kg		8/5/2021 00:40
PCB-1254	< 0.184	mg/Kg		8/5/2021 00:40
PCB-1260	< 0.184	mg/Kg		8/5/2021 00:40
PCB-1262	< 0.184	mg/Kg		8/5/2021 00:40
PCB-1268	< 0.184	mg/Kg		8/5/2021 00:40

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	RRS-01-BLT-B		
Lab Sample ID:	213459-09	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	**61.1**	18.5 - 93.4		8/5/2021 00:40

Method Reference(s): EPA 8082A
EPA 3546
Preparation Date: 8/4/2021

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 327	ug/Kg		8/6/2021 18:59
1,2,4,5-Tetrachlorobenzene	< 327	ug/Kg		8/6/2021 18:59
1,2,4-Trichlorobenzene	< 327	ug/Kg		8/6/2021 18:59
1,2-Dichlorobenzene	< 327	ug/Kg		8/6/2021 18:59
1,3-Dichlorobenzene	< 327	ug/Kg		8/6/2021 18:59
1,4-Dichlorobenzene	< 327	ug/Kg		8/6/2021 18:59
2,2-Oxybis (1-chloropropane)	< 327	ug/Kg		8/6/2021 18:59
2,3,4,6-Tetrachlorophenol	< 327	ug/Kg		8/6/2021 18:59
2,4,5-Trichlorophenol	< 327	ug/Kg		8/6/2021 18:59
2,4,6-Trichlorophenol	< 327	ug/Kg		8/6/2021 18:59
2,4-Dichlorophenol	< 327	ug/Kg		8/6/2021 18:59
2,4-Dimethylphenol	< 327	ug/Kg		8/6/2021 18:59
2,4-Dinitrophenol	< 1310	ug/Kg		8/6/2021 18:59
2,4-Dinitrotoluene	< 327	ug/Kg		8/6/2021 18:59
2,6-Dinitrotoluene	< 327	ug/Kg		8/6/2021 18:59
2-Chloronaphthalene	< 327	ug/Kg		8/6/2021 18:59
2-Chlorophenol	< 327	ug/Kg		8/6/2021 18:59
2-Methylnapthalene	< 327	ug/Kg		8/6/2021 18:59
2-Methylphenol	< 327	ug/Kg		8/6/2021 18:59
2-Nitroaniline	< 327	ug/Kg		8/6/2021 18:59
2-Nitrophenol	< 327	ug/Kg		8/6/2021 18:59
3&4-Methylphenol	< 327	ug/Kg		8/6/2021 18:59
3,3'-Dichlorobenzidine	< 327	ug/Kg		8/6/2021 18:59

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	RRS-01-BLT-B		
Lab Sample ID:	213459-09	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

3-Nitroaniline	< 327	ug/Kg	8/6/2021 18:59
4,6-Dinitro-2-methylphenol	< 437	ug/Kg	8/6/2021 18:59
4-Bromophenyl phenyl ether	< 327	ug/Kg	8/6/2021 18:59
4-Chloro-3-methylphenol	< 327	ug/Kg	8/6/2021 18:59
4-Chloroaniline	< 327	ug/Kg	8/6/2021 18:59
4-Chlorophenyl phenyl ether	< 327	ug/Kg	8/6/2021 18:59
4-Nitroaniline	< 327	ug/Kg	8/6/2021 18:59
4-Nitrophenol	< 327	ug/Kg	8/6/2021 18:59
Acenaphthene	< 327	ug/Kg	8/6/2021 18:59
Acenaphthylene	**445**	ug/Kg	8/6/2021 18:59
Acetophenone	< 327	ug/Kg	8/6/2021 18:59
Anthracene	**436**	ug/Kg	8/6/2021 18:59
Atrazine	< 327	ug/Kg	8/6/2021 18:59
Benzaldehyde	< 327	ug/Kg	8/6/2021 18:59
Benzo (a) anthracene	**1110**	ug/Kg	8/6/2021 18:59
Benzo (a) pyrene	**805**	ug/Kg	8/6/2021 18:59
Benzo (b) fluoranthene	**1470**	ug/Kg	8/6/2021 18:59
Benzo (g,h,i) perylene	**499**	ug/Kg	8/6/2021 18:59
Benzo (k) fluoranthene	**781**	ug/Kg	8/6/2021 18:59
Bis (2-chloroethoxy) methane	< 327	ug/Kg	8/6/2021 18:59
Bis (2-chloroethyl) ether	< 327	ug/Kg	8/6/2021 18:59
Bis (2-ethylhexyl) phthalate	< 327	ug/Kg	8/6/2021 18:59
Butylbenzylphthalate	< 327	ug/Kg	8/6/2021 18:59
Caprolactam	< 327	ug/Kg	8/6/2021 18:59
Carbazole	< 327	ug/Kg	8/6/2021 18:59
Chrysene	**1330**	ug/Kg	8/6/2021 18:59
Dibenz (a,h) anthracene	< 327	ug/Kg	8/6/2021 18:59
Dibenzofuran	< 327	ug/Kg	8/6/2021 18:59
Diethyl phthalate	< 327	ug/Kg	8/6/2021 18:59
Dimethyl phthalate	< 327	ug/Kg	8/6/2021 18:59

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: RRS-01-BLT-B
Lab Sample ID: 213459-09 **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Di-n-butyl phthalate	< 327	ug/Kg	8/6/2021	18:59
Di-n-octylphthalate	< 327	ug/Kg	8/6/2021	18:59
Fluoranthene	**2130**	ug/Kg	8/6/2021	18:59
Fluorene	< 327	ug/Kg	8/6/2021	18:59
Hexachlorobenzene	< 327	ug/Kg	8/6/2021	18:59
Hexachlorobutadiene	< 327	ug/Kg	8/6/2021	18:59
Hexachlorocyclopentadiene	< 1310	ug/Kg	8/6/2021	18:59
Hexachloroethane	< 327	ug/Kg	8/6/2021	18:59
Indeno (1,2,3-cd) pyrene	**621**	ug/Kg	8/6/2021	18:59
Isophorone	< 327	ug/Kg	8/6/2021	18:59
Naphthalene	< 327	ug/Kg	8/6/2021	18:59
Nitrobenzene	< 327	ug/Kg	8/6/2021	18:59
N-Nitroso-di-n-propylamine	< 327	ug/Kg	8/6/2021	18:59
N-Nitrosodiphenylamine	< 327	ug/Kg	8/6/2021	18:59
Pentachlorophenol	< 654	ug/Kg	8/6/2021	18:59
Phenanthrene	**912**	ug/Kg	8/6/2021	18:59
Phenol	< 327	ug/Kg	8/6/2021	18:59
Pyrene	**1770**	ug/Kg	8/6/2021	18:59

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	**52.8**	36.4 - 87.2		8/6/2021	18:59
2-Fluorobiphenyl	**50.7**	44 - 84		8/6/2021	18:59
2-Fluorophenol	**40.3**	43.2 - 82.1	*	8/6/2021	18:59
Nitrobenzene-d5	**40.8**	36.4 - 82.2		8/6/2021	18:59
Phenol-d5	**45.7**	41.1 - 81.4		8/6/2021	18:59
Terphenyl-d14	**55.2**	43.8 - 103		8/6/2021	18:59

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 8/5/2021
Data File: B56002.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	RRS-01-BLT-A		
Lab Sample ID:	213459-09A	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 9.39	ug/Kg		8/5/2021 16:26
1,1,2,2-Tetrachloroethane	< 9.39	ug/Kg		8/5/2021 16:26
1,1,2-Trichloroethane	< 9.39	ug/Kg		8/5/2021 16:26
1,1-Dichloroethane	< 9.39	ug/Kg		8/5/2021 16:26
1,1-Dichloroethene	< 9.39	ug/Kg		8/5/2021 16:26
1,2,3-Trichlorobenzene	< 23.5	ug/Kg		8/5/2021 16:26
1,2,4-Trichlorobenzene	< 23.5	ug/Kg		8/5/2021 16:26
1,2,4-Trimethylbenzene	< 9.39	ug/Kg		8/5/2021 16:26
1,2-Dibromo-3-Chloropropane	< 47.0	ug/Kg		8/5/2021 16:26
1,2-Dibromoethane	< 9.39	ug/Kg		8/5/2021 16:26
1,2-Dichlorobenzene	< 9.39	ug/Kg		8/5/2021 16:26
1,2-Dichloroethane	< 9.39	ug/Kg		8/5/2021 16:26
1,2-Dichloropropane	< 9.39	ug/Kg		8/5/2021 16:26
1,3,5-Trimethylbenzene	< 9.39	ug/Kg		8/5/2021 16:26
1,3-Dichlorobenzene	< 9.39	ug/Kg		8/5/2021 16:26
1,4-Dichlorobenzene	< 9.39	ug/Kg		8/5/2021 16:26
1,4-Dioxane	< 47.0	ug/Kg		8/5/2021 16:26
2-Butanone	< 47.0	ug/Kg		8/5/2021 16:26
2-Hexanone	< 23.5	ug/Kg		8/5/2021 16:26
4-Methyl-2-pentanone	< 23.5	ug/Kg		8/5/2021 16:26
Acetone	< 47.0	ug/Kg		8/5/2021 16:26
Benzene	< 9.39	ug/Kg		8/5/2021 16:26
Bromochloromethane	< 23.5	ug/Kg		8/5/2021 16:26
Bromodichloromethane	< 9.39	ug/Kg		8/5/2021 16:26
Bromoform	< 23.5	ug/Kg		8/5/2021 16:26
Bromomethane	< 9.39	ug/Kg		8/5/2021 16:26
Carbon disulfide	< 9.39	ug/Kg		8/5/2021 16:26
Carbon Tetrachloride	< 9.39	ug/Kg		8/5/2021 16:26

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: RRS-01-BLT-A
Lab Sample ID: 213459-09A **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Chlorobenzene	< 9.39	ug/Kg	8/5/2021	16:26
Chloroethane	< 9.39	ug/Kg	8/5/2021	16:26
Chloroform	< 9.39	ug/Kg	8/5/2021	16:26
Chloromethane	< 9.39	ug/Kg	8/5/2021	16:26
cis-1,2-Dichloroethene	< 9.39	ug/Kg	8/5/2021	16:26
cis-1,3-Dichloropropene	< 9.39	ug/Kg	8/5/2021	16:26
Cyclohexane	< 47.0	ug/Kg	8/5/2021	16:26
Dibromochloromethane	< 9.39	ug/Kg	8/5/2021	16:26
Dichlorodifluoromethane	< 9.39	ug/Kg	8/5/2021	16:26
Ethylbenzene	< 9.39	ug/Kg	8/5/2021	16:26
Freon 113	< 9.39	ug/Kg	8/5/2021	16:26
Isopropylbenzene	< 9.39	ug/Kg	8/5/2021	16:26
m,p-Xylene	< 9.39	ug/Kg	8/5/2021	16:26
Methyl acetate	< 9.39	ug/Kg	8/5/2021	16:26
Methyl tert-butyl Ether	< 9.39	ug/Kg	8/5/2021	16:26
Methylcyclohexane	< 9.39	ug/Kg	8/5/2021	16:26
Methylene chloride	< 23.5	ug/Kg	8/5/2021	16:26
Naphthalene	< 23.5	ug/Kg	8/5/2021	16:26
n-Butylbenzene	< 9.39	ug/Kg	8/5/2021	16:26
n-Propylbenzene	< 9.39	ug/Kg	8/5/2021	16:26
o-Xylene	< 9.39	ug/Kg	8/5/2021	16:26
p-Isopropyltoluene	< 9.39	ug/Kg	8/5/2021	16:26
sec-Butylbenzene	< 9.39	ug/Kg	8/5/2021	16:26
Styrene	< 23.5	ug/Kg	8/5/2021	16:26
tert-Butylbenzene	< 9.39	ug/Kg	8/5/2021	16:26
Tetrachloroethene	< 9.39	ug/Kg	8/5/2021	16:26
Toluene	< 9.39	ug/Kg	8/5/2021	16:26
trans-1,2-Dichloroethene	< 9.39	ug/Kg	8/5/2021	16:26
trans-1,3-Dichloropropene	< 9.39	ug/Kg	8/5/2021	16:26
Trichloroethene	< 9.39	ug/Kg	8/5/2021	16:26

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	RRS-01-BLT-A		
Lab Sample ID:	213459-09A	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Trichlorofluoromethane	< 9.39	ug/Kg			8/5/2021 16:26
Vinyl chloride	< 9.39	ug/Kg			8/5/2021 16:26

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**99.3**	88.8 - 123		8/5/2021 16:26
4-Bromofluorobenzene	**74.4**	68.7 - 115		8/5/2021 16:26
Pentafluorobenzene	**96.2**	80.2 - 112		8/5/2021 16:26
Toluene-D8	**88.1**	83.5 - 123		8/5/2021 16:26

Method Reference(s): EPA 8260C
EPA 5035A - L

Data File: z03414.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: RRS-02-BLT-B
Lab Sample ID: 213459-10 **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.306**	mg/Kg		8/6/2021 10:53

Method Reference(s): EPA 7471B
Preparation Date: 8/5/2021
Data File: Hg210806A

RCRA Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**8.63**	mg/Kg		8/5/2021 21:19
Barium	**68.5**	mg/Kg		8/5/2021 21:19
Cadmium	< 0.289	mg/Kg		8/5/2021 21:19
Chromium	**10.8**	mg/Kg		8/5/2021 21:19
Lead	**87.2**	mg/Kg		8/5/2021 21:19
Selenium	< 1.15	mg/Kg		8/5/2021 21:19
Silver	< 0.577	mg/Kg		8/5/2021 21:19

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 8/5/2021
Data File: 210805D

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.179	mg/Kg		8/5/2021 01:03
PCB-1221	< 0.179	mg/Kg		8/5/2021 01:03
PCB-1232	< 0.179	mg/Kg		8/5/2021 01:03
PCB-1242	< 0.179	mg/Kg		8/5/2021 01:03
PCB-1248	< 0.179	mg/Kg		8/5/2021 01:03
PCB-1254	< 0.179	mg/Kg		8/5/2021 01:03
PCB-1260	< 0.179	mg/Kg		8/5/2021 01:03
PCB-1262	< 0.179	mg/Kg		8/5/2021 01:03
PCB-1268	< 0.179	mg/Kg		8/5/2021 01:03

Report Prepared Tuesday, August 10, 2021

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	RRS-02-BLT-B		
Lab Sample ID:	213459-10	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	**65.0**	18.5 - 93.4		8/5/2021 01:03

Method Reference(s): EPA 8082A
EPA 3546
Preparation Date: 8/4/2021

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 316	ug/Kg		8/6/2021 19:29
1,2,4,5-Tetrachlorobenzene	< 316	ug/Kg		8/6/2021 19:29
1,2,4-Trichlorobenzene	< 316	ug/Kg		8/6/2021 19:29
1,2-Dichlorobenzene	< 316	ug/Kg		8/6/2021 19:29
1,3-Dichlorobenzene	< 316	ug/Kg		8/6/2021 19:29
1,4-Dichlorobenzene	< 316	ug/Kg		8/6/2021 19:29
2,2-Oxybis (1-chloropropane)	< 316	ug/Kg		8/6/2021 19:29
2,3,4,6-Tetrachlorophenol	< 316	ug/Kg		8/6/2021 19:29
2,4,5-Trichlorophenol	< 316	ug/Kg		8/6/2021 19:29
2,4,6-Trichlorophenol	< 316	ug/Kg		8/6/2021 19:29
2,4-Dichlorophenol	< 316	ug/Kg		8/6/2021 19:29
2,4-Dimethylphenol	< 316	ug/Kg		8/6/2021 19:29
2,4-Dinitrophenol	< 1260	ug/Kg		8/6/2021 19:29
2,4-Dinitrotoluene	< 316	ug/Kg		8/6/2021 19:29
2,6-Dinitrotoluene	< 316	ug/Kg		8/6/2021 19:29
2-Chloronaphthalene	< 316	ug/Kg		8/6/2021 19:29
2-Chlorophenol	< 316	ug/Kg		8/6/2021 19:29
2-Methylnapthalene	< 316	ug/Kg		8/6/2021 19:29
2-Methylphenol	< 316	ug/Kg		8/6/2021 19:29
2-Nitroaniline	< 316	ug/Kg		8/6/2021 19:29
2-Nitrophenol	< 316	ug/Kg		8/6/2021 19:29
3&4-Methylphenol	< 316	ug/Kg		8/6/2021 19:29
3,3'-Dichlorobenzidine	< 316	ug/Kg		8/6/2021 19:29

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	RRS-02-BLT-B		
Lab Sample ID:	213459-10	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

3-Nitroaniline	< 316	ug/Kg	8/6/2021 19:29
4,6-Dinitro-2-methylphenol	< 423	ug/Kg	8/6/2021 19:29
4-Bromophenyl phenyl ether	< 316	ug/Kg	8/6/2021 19:29
4-Chloro-3-methylphenol	< 316	ug/Kg	8/6/2021 19:29
4-Chloroaniline	< 316	ug/Kg	8/6/2021 19:29
4-Chlorophenyl phenyl ether	< 316	ug/Kg	8/6/2021 19:29
4-Nitroaniline	< 316	ug/Kg	8/6/2021 19:29
4-Nitrophenol	< 316	ug/Kg	8/6/2021 19:29
Acenaphthene	< 316	ug/Kg	8/6/2021 19:29
Acenaphthylene	< 316	ug/Kg	8/6/2021 19:29
Acetophenone	< 316	ug/Kg	8/6/2021 19:29
Anthracene	< 316	ug/Kg	8/6/2021 19:29
Atrazine	< 316	ug/Kg	8/6/2021 19:29
Benzaldehyde	< 316	ug/Kg	8/6/2021 19:29
Benzo (a) anthracene	< 316	ug/Kg	8/6/2021 19:29
Benzo (a) pyrene	< 316	ug/Kg	8/6/2021 19:29
Benzo (b) fluoranthene	< 316	ug/Kg	8/6/2021 19:29
Benzo (g,h,i) perylene	< 316	ug/Kg	8/6/2021 19:29
Benzo (k) fluoranthene	< 316	ug/Kg	8/6/2021 19:29
Bis (2-chloroethoxy) methane	< 316	ug/Kg	8/6/2021 19:29
Bis (2-chloroethyl) ether	< 316	ug/Kg	8/6/2021 19:29
Bis (2-ethylhexyl) phthalate	< 316	ug/Kg	8/6/2021 19:29
Butylbenzylphthalate	< 316	ug/Kg	8/6/2021 19:29
Caprolactam	< 316	ug/Kg	8/6/2021 19:29
Carbazole	< 316	ug/Kg	8/6/2021 19:29
Chrysene	< 316	ug/Kg	8/6/2021 19:29
Dibenz (a,h) anthracene	< 316	ug/Kg	8/6/2021 19:29
Dibenzofuran	< 316	ug/Kg	8/6/2021 19:29
Diethyl phthalate	< 316	ug/Kg	8/6/2021 19:29
Dimethyl phthalate	< 316	ug/Kg	8/6/2021 19:29

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: RRS-02-BLT-B
Lab Sample ID: 213459-10 **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Di-n-butyl phthalate	< 316	ug/Kg	8/6/2021	19:29
Di-n-octylphthalate	< 316	ug/Kg	8/6/2021	19:29
Fluoranthene	< 316	ug/Kg	8/6/2021	19:29
Fluorene	< 316	ug/Kg	8/6/2021	19:29
Hexachlorobenzene	< 316	ug/Kg	8/6/2021	19:29
Hexachlorobutadiene	< 316	ug/Kg	8/6/2021	19:29
Hexachlorocyclopentadiene	< 1260	ug/Kg	8/6/2021	19:29
Hexachloroethane	< 316	ug/Kg	8/6/2021	19:29
Indeno (1,2,3-cd) pyrene	< 316	ug/Kg	8/6/2021	19:29
Isophorone	< 316	ug/Kg	8/6/2021	19:29
Naphthalene	< 316	ug/Kg	8/6/2021	19:29
Nitrobenzene	< 316	ug/Kg	8/6/2021	19:29
N-Nitroso-di-n-propylamine	< 316	ug/Kg	8/6/2021	19:29
N-Nitrosodiphenylamine	< 316	ug/Kg	8/6/2021	19:29
Pentachlorophenol	< 632	ug/Kg	8/6/2021	19:29
Phenanthrene	< 316	ug/Kg	8/6/2021	19:29
Phenol	< 316	ug/Kg	8/6/2021	19:29
Pyrene	< 316	ug/Kg	8/6/2021	19:29

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	**52.6**	36.4 - 87.2		8/6/2021	19:29
2-Fluorobiphenyl	**55.3**	44 - 84		8/6/2021	19:29
2-Fluorophenol	**45.0**	43.2 - 82.1		8/6/2021	19:29
Nitrobenzene-d5	**47.6**	36.4 - 82.2		8/6/2021	19:29
Phenol-d5	**49.6**	41.1 - 81.4		8/6/2021	19:29
Terphenyl-d14	**58.4**	43.8 - 103		8/6/2021	19:29

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 8/5/2021
Data File: B56003.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	RRS-02-BLT-A		
Lab Sample ID:	213459-10A	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 7.41	ug/Kg		8/5/2021 16:45
1,1,2,2-Tetrachloroethane	< 7.41	ug/Kg		8/5/2021 16:45
1,1,2-Trichloroethane	< 7.41	ug/Kg		8/5/2021 16:45
1,1-Dichloroethane	< 7.41	ug/Kg		8/5/2021 16:45
1,1-Dichloroethene	< 7.41	ug/Kg		8/5/2021 16:45
1,2,3-Trichlorobenzene	< 18.5	ug/Kg		8/5/2021 16:45
1,2,4-Trichlorobenzene	< 18.5	ug/Kg		8/5/2021 16:45
1,2,4-Trimethylbenzene	< 7.41	ug/Kg		8/5/2021 16:45
1,2-Dibromo-3-Chloropropane	< 37.1	ug/Kg		8/5/2021 16:45
1,2-Dibromoethane	< 7.41	ug/Kg		8/5/2021 16:45
1,2-Dichlorobenzene	< 7.41	ug/Kg		8/5/2021 16:45
1,2-Dichloroethane	< 7.41	ug/Kg		8/5/2021 16:45
1,2-Dichloropropane	< 7.41	ug/Kg		8/5/2021 16:45
1,3,5-Trimethylbenzene	< 7.41	ug/Kg		8/5/2021 16:45
1,3-Dichlorobenzene	< 7.41	ug/Kg		8/5/2021 16:45
1,4-Dichlorobenzene	< 7.41	ug/Kg		8/5/2021 16:45
1,4-Dioxane	< 37.1	ug/Kg		8/5/2021 16:45
2-Butanone	< 37.1	ug/Kg		8/5/2021 16:45
2-Hexanone	< 18.5	ug/Kg		8/5/2021 16:45
4-Methyl-2-pentanone	< 18.5	ug/Kg		8/5/2021 16:45
Acetone	< 37.1	ug/Kg		8/5/2021 16:45
Benzene	< 7.41	ug/Kg		8/5/2021 16:45
Bromochloromethane	< 18.5	ug/Kg		8/5/2021 16:45
Bromodichloromethane	< 7.41	ug/Kg		8/5/2021 16:45
Bromoform	< 18.5	ug/Kg		8/5/2021 16:45
Bromomethane	< 7.41	ug/Kg		8/5/2021 16:45
Carbon disulfide	< 7.41	ug/Kg		8/5/2021 16:45
Carbon Tetrachloride	< 7.41	ug/Kg		8/5/2021 16:45

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: RRS-02-BLT-A
Lab Sample ID: 213459-10A **Date Sampled:** 8/2/2021
Matrix: Soil **Date Received:** 8/3/2021

Chlorobenzene	< 7.41	ug/Kg	8/5/2021	16:45
Chloroethane	< 7.41	ug/Kg	8/5/2021	16:45
Chloroform	< 7.41	ug/Kg	8/5/2021	16:45
Chloromethane	< 7.41	ug/Kg	8/5/2021	16:45
cis-1,2-Dichloroethene	< 7.41	ug/Kg	8/5/2021	16:45
cis-1,3-Dichloropropene	< 7.41	ug/Kg	8/5/2021	16:45
Cyclohexane	< 37.1	ug/Kg	8/5/2021	16:45
Dibromochloromethane	< 7.41	ug/Kg	8/5/2021	16:45
Dichlorodifluoromethane	< 7.41	ug/Kg	8/5/2021	16:45
Ethylbenzene	< 7.41	ug/Kg	8/5/2021	16:45
Freon 113	< 7.41	ug/Kg	8/5/2021	16:45
Isopropylbenzene	< 7.41	ug/Kg	8/5/2021	16:45
m,p-Xylene	< 7.41	ug/Kg	8/5/2021	16:45
Methyl acetate	< 7.41	ug/Kg	8/5/2021	16:45
Methyl tert-butyl Ether	< 7.41	ug/Kg	8/5/2021	16:45
Methylcyclohexane	< 7.41	ug/Kg	8/5/2021	16:45
Methylene chloride	< 18.5	ug/Kg	8/5/2021	16:45
Naphthalene	< 18.5	ug/Kg	8/5/2021	16:45
n-Butylbenzene	< 7.41	ug/Kg	8/5/2021	16:45
n-Propylbenzene	< 7.41	ug/Kg	8/5/2021	16:45
o-Xylene	< 7.41	ug/Kg	8/5/2021	16:45
p-Isopropyltoluene	< 7.41	ug/Kg	8/5/2021	16:45
sec-Butylbenzene	< 7.41	ug/Kg	8/5/2021	16:45
Styrene	< 18.5	ug/Kg	8/5/2021	16:45
tert-Butylbenzene	< 7.41	ug/Kg	8/5/2021	16:45
Tetrachloroethene	< 7.41	ug/Kg	8/5/2021	16:45
Toluene	< 7.41	ug/Kg	8/5/2021	16:45
trans-1,2-Dichloroethene	< 7.41	ug/Kg	8/5/2021	16:45
trans-1,3-Dichloropropene	< 7.41	ug/Kg	8/5/2021	16:45
Trichloroethene	< 7.41	ug/Kg	8/5/2021	16:45

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	RRS-02-BLT-A		
Lab Sample ID:	213459-10A	**Date Sampled:**	8/2/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Trichlorofluoromethane	< 7.41	ug/Kg			8/5/2021 16:45
Vinyl chloride	< 7.41	ug/Kg			8/5/2021 16:45

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**102**	88.8 - 123		8/5/2021 16:45
4-Bromofluorobenzene	**77.3**	68.7 - 115		8/5/2021 16:45
Pentafluorobenzene	**99.3**	80.2 - 112		8/5/2021 16:45
Toluene-D8	**92.4**	83.5 - 123		8/5/2021 16:45

Internal standard outliers indicate probable matrix interference

Method Reference(s): EPA 8260C
EPA 5035A - L

Data File: z03415.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	RRT-01-BLT		
Lab Sample ID:	213459-11	**Date Sampled:**	7/30/2021
Matrix:	Solid	**Date Received:**	8/3/2021

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.0320**	mg/Kg		8/6/2021 10:54

Method Reference(s): EPA 7471B
Preparation Date: 8/5/2021
Data File: Hg210806A

RCRA Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**1.76**	mg/Kg		8/5/2021 21:23
Barium	**23.3**	mg/Kg		8/5/2021 21:23
Cadmium	< 0.231	mg/Kg		8/5/2021 21:23
Chromium	**3.06**	mg/Kg		8/5/2021 21:23
Lead	**16.7**	mg/Kg		8/5/2021 21:23
Selenium	< 0.926	mg/Kg		8/5/2021 21:23
Silver	< 0.463	mg/Kg		8/5/2021 21:23

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 8/5/2021
Data File: 210805D

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 45400	ug/Kg		8/10/2021 15:46
1,2,4,5-Tetrachlorobenzene	< 45400	ug/Kg		8/10/2021 15:46
1,2,4-Trichlorobenzene	< 45400	ug/Kg		8/10/2021 15:46
1,2-Dichlorobenzene	< 45400	ug/Kg		8/10/2021 15:46
1,3-Dichlorobenzene	< 45400	ug/Kg		8/10/2021 15:46
1,4-Dichlorobenzene	< 45400	ug/Kg		8/10/2021 15:46
2,2-Oxybis (1-chloropropane)	< 45400	ug/Kg		8/10/2021 15:46
2,3,4,6-Tetrachlorophenol	< 45400	ug/Kg		8/10/2021 15:46
2,4,5-Trichlorophenol	< 45400	ug/Kg		8/10/2021 15:46

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: RRT-01-BLT
Lab Sample ID: 213459-11 **Date Sampled:** 7/30/2021
Matrix: Solid **Date Received:** 8/3/2021

2,4,6-Trichlorophenol	< 45400	ug/Kg	8/10/2021	15:46
2,4-Dichlorophenol	< 45400	ug/Kg	8/10/2021	15:46
2,4-Dimethylphenol	< 45400	ug/Kg	8/10/2021	15:46
2,4-Dinitrophenol	< 181000	ug/Kg	8/10/2021	15:46
2,4-Dinitrotoluene	< 45400	ug/Kg	8/10/2021	15:46
2,6-Dinitrotoluene	< 45400	ug/Kg	8/10/2021	15:46
2-Chloronaphthalene	< 45400	ug/Kg	8/10/2021	15:46
2-Chlorophenol	< 45400	ug/Kg	8/10/2021	15:46
2-Methylnapthalene	< 45400	ug/Kg	8/10/2021	15:46
2-Methylphenol	< 45400	ug/Kg	8/10/2021	15:46
2-Nitroaniline	< 45400	ug/Kg	8/10/2021	15:46
2-Nitrophenol	< 45400	ug/Kg	8/10/2021	15:46
3&4-Methylphenol	< 45400	ug/Kg	8/10/2021	15:46
3,3'-Dichlorobenzidine	< 45400	ug/Kg	8/10/2021	15:46
3-Nitroaniline	< 45400	ug/Kg	8/10/2021	15:46
4,6-Dinitro-2-methylphenol	< 60700	ug/Kg	8/10/2021	15:46
4-Bromophenyl phenyl ether	< 45400	ug/Kg	8/10/2021	15:46
4-Chloro-3-methylphenol	< 45400	ug/Kg	8/10/2021	15:46
4-Chloroaniline	< 45400	ug/Kg	8/10/2021	15:46
4-Chlorophenyl phenyl ether	< 45400	ug/Kg	8/10/2021	15:46
4-Nitroaniline	< 45400	ug/Kg	8/10/2021	15:46
4-Nitrophenol	< 45400	ug/Kg	8/10/2021	15:46
Acenaphthene	< 45400	ug/Kg	8/10/2021	15:46
Acenaphthylene	< 45400	ug/Kg	8/10/2021	15:46
Acetophenone	< 45400	ug/Kg	8/10/2021	15:46
Anthracene	**70500**	ug/Kg	8/10/2021	15:46
Atrazine	< 45400	ug/Kg	8/10/2021	15:46
Benzaldehyde	< 45400	ug/Kg	8/10/2021	15:46
Benzo (a) anthracene	**287000**	ug/Kg	8/10/2021	15:46
Benzo (a) pyrene	**142000**	ug/Kg	8/10/2021	15:46

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: RRT-01-BLT
Lab Sample ID: 213459-11 **Date Sampled:** 7/30/2021
Matrix: Solid **Date Received:** 8/3/2021

Benzo (b) fluoranthene	**331000**	ug/Kg	8/10/2021	15:46
Benzo (g,h,i) perylene	< 45400	ug/Kg	8/10/2021	15:46
Benzo (k) fluoranthene	**105000**	ug/Kg	8/10/2021	15:46
Bis (2-chloroethoxy) methane	< 45400	ug/Kg	8/10/2021	15:46
Bis (2-chloroethyl) ether	< 45400	ug/Kg	8/10/2021	15:46
Bis (2-ethylhexyl) phthalate	< 45400	ug/Kg	8/10/2021	15:46
Butylbenzylphthalate	< 45400	ug/Kg	8/10/2021	15:46
Caprolactam	< 45400	ug/Kg	8/10/2021	15:46
Carbazole	< 45400	ug/Kg	8/10/2021	15:46
Chrysene	**358000**	ug/Kg	8/10/2021	15:46
Dibenz (a,h) anthracene	< 45400	ug/Kg	8/10/2021	15:46
Dibenzofuran	< 45400	ug/Kg	8/10/2021	15:46
Diethyl phthalate	< 45400	ug/Kg	8/10/2021	15:46
Dimethyl phthalate	< 45400	ug/Kg	8/10/2021	15:46
Di-n-butyl phthalate	< 45400	ug/Kg	8/10/2021	15:46
Di-n-octylphthalate	< 45400	ug/Kg	8/10/2021	15:46
Fluoranthene	**622000**	ug/Kg	8/10/2021	15:46
Fluorene	< 45400	ug/Kg	8/10/2021	15:46
Hexachlorobenzene	< 45400	ug/Kg	8/10/2021	15:46
Hexachlorobutadiene	< 45400	ug/Kg	8/10/2021	15:46
Hexachlorocyclopentadiene	< 181000	ug/Kg	8/10/2021	15:46
Hexachloroethane	< 45400	ug/Kg	8/10/2021	15:46
Indeno (1,2,3-cd) pyrene	**54800**	ug/Kg	8/10/2021	15:46
Isophorone	< 45400	ug/Kg	8/10/2021	15:46
Naphthalene	< 45400	ug/Kg	8/10/2021	15:46
Nitrobenzene	< 45400	ug/Kg	8/10/2021	15:46
N-Nitroso-di-n-propylamine	< 45400	ug/Kg	8/10/2021	15:46
N-Nitrosodiphenylamine	< 45400	ug/Kg	8/10/2021	15:46
Pentachlorophenol	< 90700	ug/Kg	8/10/2021	15:46
Phenanthrene	< 45400	ug/Kg	8/10/2021	15:46

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213459

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: RRT-01-BLT

Lab Sample ID: 213459-11 **Date Sampled:** 7/30/2021

Matrix: Solid **Date Received:** 8/3/2021

Phenol	< 45400	ug/Kg	8/10/2021	15:46
Pyrene	**923000**	ug/Kg	8/10/2021	15:46

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	NC	36.4 - 87.2		8/10/2021	15:46
2-Fluorobiphenyl	NC	44 - 84		8/10/2021	15:46
2-Fluorophenol	NC	43.2 - 82.1		8/10/2021	15:46
Nitrobenzene-d5	NC	36.4 - 82.2		8/10/2021	15:46
Phenol-d5	NC	41.1 - 81.4		8/10/2021	15:46
Terphenyl-d14	NC	43.8 - 103		8/10/2021	15:46

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 8/5/2021
Data File: B56075.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Method Blank Report

Client: **Stantec**

Project Reference: 213414039.400

Lab Project ID: 213459

Matrix: Soil

RCRA Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed	
Arsenic	<0.500	mg/Kg		8/5/2021	20:05
Barium	<5.00	mg/Kg		8/5/2021	20:05
Cadmium	<0.250	mg/Kg		8/5/2021	20:05
Chromium	<0.500	mg/Kg		8/5/2021	20:05
Lead	<0.500	mg/Kg		8/5/2021	20:05
Selenium	<1.00	mg/Kg		8/5/2021	20:05
Silver	<0.500	mg/Kg		8/5/2021	20:05

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 8/5/2021
Data File: 210805D
QC Batch ID: QC210805soil
QC Number: Blk 1

Report Prepared Monday, August 9, 2021

PARADIGM ENVIRONMENTAL SERVICES, INC.

QC Report for Laboratory Control Sample and Control Sample Duplicate

Client: **Stantec**

Project Reference: 213414039.400

Lab Project ID: 213459

Matrix: Soil

RCRA Metals (ICP)

Analyte	LCS Added	LCSD Added	Spike Units	LCS Result	LCSD Result	LCS % Recovery	LCSD % Recovery	% Rec Limits	LCS Outliers	LCSD Outliers	Relative % Difference	RPD Limit	RPD Outliers	Date Analyzed
Arsenic	123	123	mg/Kg	113	112	92.5	91.4	80 - 120			1.11	20		8/5/2021
Barium	123	123	mg/Kg	136	132	111	108	80 - 120			2.90	20		8/5/2021
Cadmium	49.0	49.0	mg/Kg	51.1	49.7	104	101	80 - 120			2.71	20		8/5/2021
Chromium	123	123	mg/Kg	127	123	103	100	80 - 120			2.92	20		8/5/2021
Lead	123	123	mg/Kg	127	125	104	102	80 - 120			1.63	20		8/5/2021
Selenium	123	123	mg/Kg	111	110	90.9	89.7	80 - 120			1.41	20		8/5/2021
Silver	12.3	12.3	mg/Kg	11.5	11.2	93.7	91.4	80 - 120			2.50	20		8/5/2021

Method Reference(s): EPA 6010C
EPA 3050B

Preparation Date: 8/5/2021

Data File: 210805D

QC Number: 1

QC Batch ID: QC210805soil

Report Prepared Monday, August 9, 2021

PARADIGM ENVIRONMENTAL SERVICES, INC.

QC Report for Sample Spike and Sample Duplicate

Client: **Stantec** **Lab Project ID:** 213459

Project Reference: 213414039.400

Lab Sample ID: 213459-07 **Date Sampled:** 8/2/2021
Sample Identifier: SB-09-BLT-B **Date Received:** 8/3/2021
Matrix: Soil

RCRA Metals (ICP)

Analyte	Sample Results	Result Units	Spike Added	Spike Result	Spike % Recovery	% Rec Limits	Spike Outliers	Duplicate Result	Relative % Difference	RPD Limit	RPD Outliers	Date Analyzed
Arsenic	**2.05**	mg/Kg	136	115	82.8	75 - 125		1.11	59.5	20	*	8/5/2021
Barium	**36.2**	mg/Kg	136	147	81.5	75 - 125		22.8	45.6	20	*	8/5/2021
Cadmium	< 0.275	mg/Kg	54.4	41.8	76.9	75 - 125		<0.275	NC	20		8/5/2021
Chromium	**7.05**	mg/Kg	136	115	79.6	75 - 125		4.20	50.6	20	*	8/5/2021
Lead	**4.76**	mg/Kg	136	109	76.8	75 - 125		2.82	51.1	20	*	8/5/2021
Selenium	< 1.10	mg/Kg	136	112	82.2	75 - 125		<1.10	NC	20		8/5/2021
Silver	< 0.549	mg/Kg	13.6	12.0	88.0	75 - 125		<0.549	NC	20		8/5/2021

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 8/5/2021
210805D
QC Batch ID: QC210805soil

NC = Not Calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added.

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.
"E" = Result has been estimated, calibration limit exceeded.
"Z" = See case narrative.
"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.
"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.
"B" = Method blank contained trace levels of analyte. Refer to included method blank report.
"J" = Result estimated between the quantitation limit and half the quantitation limit.
"L" = Laboratory Control Sample recovery outside accepted QC limits.
"P" = Concentration differs by more than 40% between the primary and secondary analytical columns.
"NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.
"" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted.*
"(1)" = Indicates data from primary column used for QC calculation.
"A" = denotes a parameter for which ELAP does not offer approval as part of their laboratory certification program.
"F" = denotes a parameter for which Paradigm does not carry certification, the results for which should therefore only be used where ELAP certification is not required, such as personal exposure assessment.

GENERAL TERMS AND CONDITIONS
LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, tern or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty. Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.

Scope and Compensation. LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB wi use LAB default method for all tests unless specified otherwise on the Work Order.

Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.

Prices. Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs may incur additional fees.

Limitations of Liability. In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re-perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services.

LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results.

All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB.

Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.

Hazard Disclosure. Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.

Sample Handling. Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises.

Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on th final report.

Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples.

LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.

Legal Responsibility. LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.

Assignment. LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.

Force Majeure. LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.

Law. This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

PARADIGM

CHAIN OF CUSTODY

REPORT TO:	INVOICE TO:	
CLIENT: Stantec	CLIENT:	LAB PROJECT ID: 213459
ADDRESS: 61 Commercial St. Suite 100	ADDRESS:	Quotation #:
CITY: Rochester STATE: NY ZIP: 14614	CITY: STATE: ZIP:	Email:
PHONE: 585-775-3835	PHONE:	
ATTN: Steve Campbell	ATTN:	

PROJECT REFERENCE: 213414039.400

Matrix Codes:
AQ - Aqueous Liquid; NQ - Non-Aqueous Liquid; WA - Water; WG - Groundwater; DW - Drinking Water; WW - Wastewater; SO - Soil; SL - Sludge; SD - Solid; PT - Paint; WP - Wipe; CK - Caulk; OL - Oil; AR - Air

REQUESTED ANALYSIS

DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	8260C TCL + CP51	8270D TCL + CP51	8082A	6010B/7471B 8 RCRA metals						REMARKS	PARADIGM LAB SAMPLE NUMBER
8/2/2021	0834		X	SB-01-BLT	SO	2	X	X	X	X						Per email add (-A) to	01A
8/2/2021	0855		X	SB-02-BLT	SO	2	X	X	X	X						Sample IDs for VOA jars	02A
8/2/2021	0915		X	SB-03-BLT	SO	2	X	X	X	X						and (-B) to sample IDs	03A
8/2/2021	0950		X	SB-04-BLT	SO	2	X	X	X	X						for SVOA/PCB/metals jars.	04A
8/2/2021	1014		X	SB-05-BLT	SO	2	X	X	X	X						A for VOA aliquots.	05A
8/2/2021	1118		X	SB-08-BLT	SO	2	X	X	X	X						GP 8/4/21	06A
8/2/2021	1143		X	SB-09-BLT	SO	2	X	X	X	X							07A
8/2/2021	1030		X	SB-11-BLT	SO	2	X	X	X	X							08A
~~8/2/2021~~	~~[illegible]~~																
																10°C ice started in field	

Implicit 8/2/21

Turnaround Time		Report Supplements			
Availability contingent upon lab approval; additional fees may apply.					
Standard 5 day	X	None Required	X	None Required	
10 day		Batch QC		Basic EDD	
Rush 3 day		Category A		NYSDEC EDD	
Rush 2 day		Category B			
Rush 1 day					
Date Needed _____ please indicate date needed: _____		Other please indicate package needed: _____		Other EDD please indicate EDD needed: Stantec EDD	

Sampled By: [signature] Date/Time: 8/2/2021 1600

Total Cost: 1640

Relinquished By: [signature] Date/Time: 8/2/21 1636

Received By: [signature] Date/Time: 8/3/21 1201

Received @ Lab By: Date/Time

P.I.F.

By signing this form, client agrees to Paradigm Terms and Conditions (reverse).

See additional page for sample conditions.

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

Page 2 of 2
2 of 3

PARADIGM

CHAIN OF CUSTODY

REPORT TO:	INVOICE TO:	
CLIENT:	CLIENT:	LAB PROJECT ID: 213459
ADDRESS:	ADDRESS:	
CITY: SAME STATE: AS ZIP Page 1	CITY: STATE: ZIP:	Quotation #:
PHONE:	PHONE:	Email:
ATTN:	ATTN:	

PROJECT REFERENCE: 21341439.400

Matrix Codes:
AQ - Aqueous Liquid; NQ - Non-Aqueous Liquid; WA - Water; WG - Groundwater; DW - Drinking Water; WW - Wastewater; SO - Soil; SL - Sludge; SD - Solid; PT - Paint; WP - Wipe; CK - Caulk; OL - Oil; AR - Air

REQUESTED ANALYSIS

DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	8260C TCL+CPSI	82700 TCL+CPSI	8082A	6010D/7471B Metals							REMARKS	PARADIGM LAB SAMPLE NUMBER
8/2/2021	1403		X	RRS-01-BLT	So	2	X	X	X	X								09 A
8/2/2021	1350		X	RRS-02-BLT	So	2	X	X	X	X								10 A
7/30/2021	1052		X	RRT-01-BLT	Wood	1		X		X								11 A
					Solid	8/3/21												GP 8/4/21

Turnaround Time		Report Supplements			
Availability contingent upon lab approval; additional fees may apply.					
Standard 5 day	X	None Required	X	None Required	
10 day		Batch QC		Basic EDD	
Rush 3 day		Category A		NYSDEC EDD	
Rush 2 day		Category B			
Rush 1 day					
Date Needed _____ please indicate date needed: _____		Other please indicate package needed: _____		Other EDD please indicate EDD needed: Stantec EDP	X

Sampled By — Date/Time — Total Cost:

Relinquished By — Date/Time

Received By: Molly Kail 8/3/21 — Date/Time: 1201 — P.I.F.

Received @ Lab By — Date/Time

By signing this form, client agrees to Paradigm Terms and Conditions (reverse).

See additional page for sample conditions.

PARADIGM

Chain of Custody Supplement

Client: Stantec **Completed by:** MolyPaul

Lab Project ID: 213459 **Date:** 8/3/21

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

Condition	NELAC compliance with the sample condition requirements upon receipt: Yes	No	N/A
Container Type	✓	5035	
Comments			
Transferred to method-compliant container			✓
Headspace (<1 mL)			✓
Comments			
Preservation			✓
Comments			
Chlorine Absent (<0.10 ppm per test strip)			✓
Comments			
Holding Time	✓		
Comments			
Temperature	✓		met
Comments	10°C iced started in field		
Compliant Sample Quantity/Type	✓		
Comments			

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

Analytical Report For

Stantec

For Lab Project ID

213618

Referencing

213414039.400

Prepared

Friday, August 13, 2021

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213618

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	SB-04-BLT-B		
Lab Sample ID:	213618-01	**Date Sampled:**	8/2/2021
Matrix:	TCLP Extract	**Date Received:**	8/11/2021

TCLP Metals (ICP)

Analyte	Result	Units	Regulatory Limit	Qualifier	Date Analyzed
Lead	< 0.500	mg/L	5		8/12/2021 15:05

Method Reference(s): EPA 6010C
EPA 1311 / 3005A
Preparation Date: 8/12/2021
Data File: 210812B

Report Prepared Friday, August 13, 2021

Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

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Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.
"E" = Result has been estimated, calibration limit exceeded.
"Z" = See case narrative.
"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.
"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.
"B" = Method blank contained trace levels of analyte. Refer to included method blank report.
"J" = Result estimated between the quantitation limit and half the quantitation limit.
"L" = Laboratory Control Sample recovery outside accepted QC limits.
"P" = Concentration differs by more than 40% between the primary and secondary analytical columns.
"NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.
"" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted.*
"(1)" = Indicates data from primary column used for QC calculation.
"A" = denotes a parameter for which ELAP does not offer approval as part of their laboratory certification program.
"F" = denotes a parameter for which Paradigm does not carry certification, the results for which should therefore only be used where ELAP certification is not required, such as personal exposure assessment.

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LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, tern or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty. Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.

Scope and Compensation. LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB wi use LAB default method for all tests unless specified otherwise on the Work Order.

Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.

Prices. Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs may incur additional fees.

Limitations of Liability. In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re-perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services.

LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results.

All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB.

Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.

Hazard Disclosure. Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.

Sample Handling. Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises.

Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on th final report.

Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples.

LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.

Legal Responsibility. LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.

Assignment. LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.

Force Majeure. LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.

Law. This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

PARADIGM

CHAIN OF CUSTODY

Relog: 213618

REPORT TO:	INVOICE TO:	
CLIENT: Stantec	CLIENT:	LAB PROJECT ID: 213459
ADDRESS: 61 Commercial St. Suite 100	ADDRESS:	Quotation #:
CITY: Rochester STATE: NY ZIP: 14614	CITY: STATE: ZIP:	Email:
PHONE: 585-775-3835	PHONE:	
ATTN: Steve Campbell	ATTN:	

PROJECT REFERENCE: 213414039.400

Matrix Codes:
AQ - Aqueous Liquid; NQ - Non-Aqueous Liquid; WA - Water; WG - Groundwater; DW - Drinking Water; WW - Wastewater; SO - Soil; SL - Sludge; SD - Solid; PT - Paint; WP - Wipe; CK - Caulk; OL - Oil; AR - Air

REQUESTED ANALYSIS

DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	8260C TCLP	8270D TCLP	8082A	6010B/7471B TCLP						REMARKS	PARADIGM LAB SAMPLE NUMBER
			X													Per email relog 213459-04 for TCLP Lead on a 2 day turn. CP 8/11/21	
8/2/2021	0834		X	SB-01-BLT	So	2	X	X	X	X						Per email add (-A) to	01 A
8/2/2021	0855		X	SB-02-BLT	So	2	X	X	X	X						Sample ID s for VOA jars	02 A
8/2/2021	0915		X	SB-03-BLT	So	2	X	X	X	X						and (-B) to sample ID s	03 A
8/2/2021	0950		X	SB-04-BLT	So	2	X	X	X	X						for SVOA/PCB/metals jars	04 A - 01
8/2/2021	1014		X	SB-05-BLT	So	2	X	X	X	X						A for VOA aliquots	05 A
8/2/2021	1118		X	SB-08-BLT	So	2	X	X	X	X						CP 8/4/21	06 A
8/2/2021	1143		X	SB-09-BLT	So	2	X	X	X	X							07 A
8/2/2021	1030		X	SB-11-BLT	So	2	X	X	X	X							08 A
~~8/2/2021~~	~~[illegible]~~																
																Logical started in Lims [illegible] 8/2/21	

Turnaround Time		Report Supplements			
Availability contingent upon lab approval; additional fees may apply.					
Standard 5 day	X	None Required	X	None Required	
10 day		Batch QC		Basic EDD	
Rush 3 day		Category A		NYSDEC EDD	
Rush 2 day		Category B			
Rush 1 day					
Date Needed _____ please indicate date needed: _____		Other please indicate package needed: _____		Other EDD please indicate EDD needed: Stantec EDD	

Sampled By: [signature] Date/Time: 8/2/2021 1600

Total Cost: 1640

Relinquished By: [signature] Date/Time: 8/2/21 1636

Received By: [signature] Date/Time: 8/3/21 1201

P.I.F.

Received @ Lab By: Relog: [signature] Date/Time: 8/11/21 10:37

By signing this form, client agrees to Paradigm Terms and Conditions (reverse).

See additional page for sample conditions.

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

Page 2 of 2

2 of 3

PARADIGM

CHAIN OF CUSTODY

REPORT TO:	INVOICE TO:	
CLIENT:	CLIENT:	LAB PROJECT ID: 213459
ADDRESS:	ADDRESS:	
CITY: SAME STATE: AS ZIP Page 1	CITY: STATE: ZIP:	Quotation #:
PHONE:	PHONE:	Email:
ATTN:	ATTN:	

PROJECT REFERENCE: 21341439.400

Matrix Codes:
AQ - Aqueous Liquid; NQ - Non-Aqueous Liquid; WA - Water; WG - Groundwater; DW - Drinking Water; WW - Wastewater; SO - Soil; SL - Sludge; SD - Solid; PT - Paint; WP - Wipe; CK - Caulk; OL - Oil; AR - Air

REQUESTED ANALYSIS

DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	BTEX TVH+ CPSI	8270D TVH+ LPSI	8082A	6300/7470B SPLP							REMARKS	PARADIGM LAB SAMPLE NUMBER
8/2/2021	1403		X	RRS-01-BLT	So	2	X	X	X	X								09 A
8/2/2021	1350		X	RRS-02-BLT	So	2	X	X	X	X								10 A
7/30/2021	1052		X	RRT-01-BLT	Wood	1		X		X								11 A
					Solid on 8/3/21													SF 8/4/21

Turnaround Time		Report Supplements			
Availability contingent upon lab approval; additional fees may apply.					
Standard 5 day	X	None Required	X	None Required	
10 day		Batch QC		Basic EDD	
Rush 3 day		Category A		NYSDEC EDD	
Rush 2 day		Category B			
Rush 1 day					
Date Needed _____ please indicate date needed: _____		Other please indicate package needed _____		Other EDD please indicate EDD needed: State EDD	X

Sampled By	Date/Time	Total Cost:
Relinquished By	Date/Time	
Received By: Michael	Date/Time: 8/3/21 1201	P.I.F.
Received @ Lab By	Date/Time	

By signing this form, client agrees to Paradigm Terms and Conditions (reverse).

See additional page for sample conditions.

Relog: 213618

PARADIGM

Chain of Custody Supplement

Client: Stantec **Completed by:** McCyrd

Lab Project ID: 213459 **Date:** 8/3/21

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

Condition	NELAC compliance with the sample condition requirements upon receipt: Yes	No	N/A
Container Type	✓	5035	
Comments			
Transferred to method-compliant container			✓
Headspace (<1 mL)			✓
Comments			
Preservation			✓
Comments			
Chlorine Absent (<0.10 ppm per test strip)			✓
Comments			
Holding Time	✓		
Comments			
Temperature	✓		met
Comments	10°C and started in field		
Compliant Sample Quantity/Type	✓		
Comments			

129 Lake Avenue • Rochester NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID # 10950

Analytical Report For

Stantec

For Lab Project ID

213619

Referencing

213414039.400

Prepared

Friday, August 13, 2021

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213619

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	TE-01-BLT-B		
Lab Sample ID:	213619-01	**Date Sampled:**	8/3/2021
Matrix:	TCLP Extract	**Date Received:**	8/11/2021

TCLP Metals (ICP)

Analyte	Result	Units	Regulatory Limit	Qualifier	Date Analyzed
Lead	**68.2**	mg/L	5		8/12/2021 15:14

Method Reference(s): EPA 6010C
EPA 1311 / 3005A
Preparation Date: 8/12/2021
Data File: 210812B

Report Prepared Friday, August 13, 2021

Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

Each page of this document is part of a multipage report. This document may not be reproduced except in its entirety, without the prior consent of Paradigm Environmental Services, Inc.

All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.
"E" = Result has been estimated, calibration limit exceeded.
"Z" = See case narrative.
"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.
"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.
"B" = Method blank contained trace levels of analyte. Refer to included method blank report.
"J" = Result estimated between the quantitation limit and half the quantitation limit.
"L" = Laboratory Control Sample recovery outside accepted QC limits.
"P" = Concentration differs by more than 40% between the primary and secondary analytical columns.
"NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.
"" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted.*
"(1)" = Indicates data from primary column used for QC calculation.
"A" = denotes a parameter for which ELAP does not offer approval as part of their laboratory certification program.
"F" = denotes a parameter for which Paradigm does not carry certification, the results for which should therefore only be used where ELAP certification is not required, such as personal exposure assessment.

GENERAL TERMS AND CONDITIONS
LABORATORY SERVICES

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LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results.

All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB.

Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.

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Legal Responsibility. LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.

Assignment. LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.

Force Majeure. LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.

Law. This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

1 of 2

CHAIN OF CUSTODY

Relog: 213619

PARADIGM

REPORT TO:	INVOICE TO:	
CLIENT: Stantec	CLIENT:	LAB PROJECT ID: 213480
ADDRESS: 61 Commercial St. Suite 100	ADDRESS: SAME	Quotation #:
CITY: Rochester STATE: NY ZIP: 14614	CITY: STATE: ZIP:	Email:
PHONE: 585-775-3835	PHONE:	
ATTN: Steve Campbell	ATTN:	

PROJECT REFERENCE: 213414039.400

Matrix Codes:
AQ - Aqueous Liquid; NQ - Non-Aqueous Liquid; WA - Water; WG - Groundwater; DW - Drinking Water; WW - Wastewater; SO - Soil; SL - Sludge; SD - Solid; PT - Paint; WP - Wipe; CK - Caulk; OL - Oil; AR - Air

REQUESTED ANALYSIS

DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	8260C TCLP	8270D TCLP	8082A	6010D/7470 TCLP						REMARKS	PARADIGM LAB SAMPLE NUMBER
																Per email relog 213480-01 for TCLP Lead on a 2 day turn. GP 8/11/21	
8/3/21	0828		X	TE-01-BLT	So	2	X	X	X	X						Per email add (-A) to	01A -01
8/3/21	0900		X	TE-02-BLT	So	2	X	X	X	X						Sample IDs for VOA jars	02A
8/3/21	0935		X	TE-03-BLT	So	2	X	X	X	X						and (-B) to sample IDs	03A
8/3/21	1011		X	TE-04-BLT	So	2	X	X	X	X						for SVOA/PCB/metals jars	04A
																A for VOA aliquots. GP 8/4/21	
																11°C iced trailer field	
																MW 8/3/21 1520	

Turnaround Time		Report Supplements			
Availability contingent upon lab approval; additional fees may apply.					
Standard 5 day	X	None Required	X	None Required	
10 day		Batch QC		Basic EDD	
Rush 3 day		Category A		NYSDEC EDD	
Rush 2 day		Category B			
Rush 1 day					
Date Needed _____ please indicate date needed		Other please indicate package needed _____		Other EDD please indicate EDD needed: Stantec EDD	X

Sampled By: [signature] Date/Time: 8/3/2021 1515

Total Cost:

Relinquished By: [signature] Date/Time: 8/3/21 1515

Received By: [signature] Date/Time: 8/3/21 1521

P.I.F.

Received @ Lab By: Relog: [signature] Date/Time: 8/11/21 10:40

By signing this form, client agrees to Paradigm Terms and Conditions (reverse).

See additional page for sample conditions.

Relog: 213619

PARADIGM

Chain of Custody Supplement

Client: Stantec **Completed by:** Molly Reid

Lab Project ID: 213480 **Date:** 8/3/21

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

Condition	*NELAC compliance with the sample condition requirements upon receipt* Yes	No	N/A
Container Type	✓	5035	
Comments			
Transferred to method-compliant container			✓
Headspace (<1 mL)			✓
Comments			
Preservation			✓
Comments			
Chlorine Absent (<0.10 ppm per test strip)			✓
Comments			
Holding Time	✓		
Comments			
Temperature	✓		met
Comments	11°C iced started in field		
Compliant Sample Quantity/Type	✓		
Comments			

Analytical Report For

Stantec

For Lab Project ID

213480

Referencing

213414039.400

Prepared

Tuesday, August 10, 2021

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: TE-01-BLT-B
Lab Sample ID: 213480-01 **Date Sampled:** 8/3/2021
Matrix: Soil **Date Received:** 8/3/2021

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**1.91**	mg/Kg		8/6/2021 11:11

Method Reference(s): EPA 7471B
Preparation Date: 8/5/2021
Data File: Hg210806B

RCRA Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**41.7**	mg/Kg		8/4/2021 20:54
Barium	**3510**	mg/Kg		8/5/2021 18:57
Cadmium	**9.47**	mg/Kg		8/4/2021 20:54
Chromium	**126**	mg/Kg		8/4/2021 20:54
Lead	**11400**	mg/Kg		8/5/2021 18:57
Selenium	**2.62**	mg/Kg		8/4/2021 20:54
Silver	< 0.598	mg/Kg		8/4/2021 20:54

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 8/4/2021
Data File: 210804C

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.180	mg/Kg		8/6/2021 14:25
PCB-1221	< 0.180	mg/Kg		8/6/2021 14:25
PCB-1232	< 0.180	mg/Kg		8/6/2021 14:25
PCB-1242	< 0.180	mg/Kg		8/6/2021 14:25
PCB-1248	< 0.180	mg/Kg		8/6/2021 14:25
PCB-1254	< 0.180	mg/Kg		8/6/2021 14:25
PCB-1260	< 0.180	mg/Kg		8/6/2021 14:25
PCB-1262	< 0.180	mg/Kg		8/6/2021 14:25
PCB-1268	< 0.180	mg/Kg		8/6/2021 14:25

Report Prepared Tuesday, August 10, 2021

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	TE-01-BLT-B		
Lab Sample ID:	213480-01	**Date Sampled:**	8/3/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	**60.3**	18.5 - 93.4		8/6/2021 14:25

Method Reference(s): EPA 8082A
EPA 3546
Preparation Date: 8/5/2021

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 311	ug/Kg		8/6/2021 20:58
1,2,4,5-Tetrachlorobenzene	< 311	ug/Kg		8/6/2021 20:58
1,2,4-Trichlorobenzene	< 311	ug/Kg		8/6/2021 20:58
1,2-Dichlorobenzene	< 311	ug/Kg		8/6/2021 20:58
1,3-Dichlorobenzene	< 311	ug/Kg		8/6/2021 20:58
1,4-Dichlorobenzene	< 311	ug/Kg		8/6/2021 20:58
2,2-Oxybis (1-chloropropane)	< 311	ug/Kg		8/6/2021 20:58
2,3,4,6-Tetrachlorophenol	< 311	ug/Kg		8/6/2021 20:58
2,4,5-Trichlorophenol	< 311	ug/Kg		8/6/2021 20:58
2,4,6-Trichlorophenol	< 311	ug/Kg		8/6/2021 20:58
2,4-Dichlorophenol	< 311	ug/Kg		8/6/2021 20:58
2,4-Dimethylphenol	< 311	ug/Kg		8/6/2021 20:58
2,4-Dinitrophenol	< 1250	ug/Kg		8/6/2021 20:58
2,4-Dinitrotoluene	< 311	ug/Kg		8/6/2021 20:58
2,6-Dinitrotoluene	< 311	ug/Kg		8/6/2021 20:58
2-Chloronaphthalene	< 311	ug/Kg		8/6/2021 20:58
2-Chlorophenol	< 311	ug/Kg		8/6/2021 20:58
2-Methylnapthalene	**505**	ug/Kg		8/6/2021 20:58
2-Methylphenol	< 311	ug/Kg		8/6/2021 20:58
2-Nitroaniline	< 311	ug/Kg		8/6/2021 20:58
2-Nitrophenol	< 311	ug/Kg		8/6/2021 20:58
3&4-Methylphenol	< 311	ug/Kg		8/6/2021 20:58
3,3'-Dichlorobenzidine	< 311	ug/Kg		8/6/2021 20:58

Report Prepared Tuesday, August 10, 2021

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: TE-01-BLT-B
Lab Sample ID: 213480-01 **Date Sampled:** 8/3/2021
Matrix: Soil **Date Received:** 8/3/2021

3-Nitroaniline	< 311	ug/Kg	8/6/2021	20:58
4,6-Dinitro-2-methylphenol	< 416	ug/Kg	8/6/2021	20:58
4-Bromophenyl phenyl ether	< 311	ug/Kg	8/6/2021	20:58
4-Chloro-3-methylphenol	< 311	ug/Kg	8/6/2021	20:58
4-Chloroaniline	< 311	ug/Kg	8/6/2021	20:58
4-Chlorophenyl phenyl ether	< 311	ug/Kg	8/6/2021	20:58
4-Nitroaniline	< 311	ug/Kg	8/6/2021	20:58
4-Nitrophenol	< 311	ug/Kg	8/6/2021	20:58
Acenaphthene	< 311	ug/Kg	8/6/2021	20:58
Acenaphthylene	**940**	ug/Kg	8/6/2021	20:58
Acetophenone	< 311	ug/Kg	8/6/2021	20:58
Anthracene	**1130**	ug/Kg	8/6/2021	20:58
Atrazine	< 311	ug/Kg	8/6/2021	20:58
Benzaldehyde	< 311	ug/Kg	8/6/2021	20:58
Benzo (a) anthracene	**3910**	ug/Kg	8/6/2021	20:58
Benzo (a) pyrene	**2830**	ug/Kg	8/6/2021	20:58
Benzo (b) fluoranthene	**4080**	ug/Kg	8/6/2021	20:58
Benzo (g,h,i) perylene	**1950**	ug/Kg	8/6/2021	20:58
Benzo (k) fluoranthene	**2000**	ug/Kg	8/6/2021	20:58
Bis (2-chloroethoxy) methane	< 311	ug/Kg	8/6/2021	20:58
Bis (2-chloroethyl) ether	< 311	ug/Kg	8/6/2021	20:58
Bis (2-ethylhexyl) phthalate	< 311	ug/Kg	8/6/2021	20:58
Butylbenzylphthalate	< 311	ug/Kg	8/6/2021	20:58
Caprolactam	< 311	ug/Kg	8/6/2021	20:58
Carbazole	**501**	ug/Kg	8/6/2021	20:58
Chrysene	**3690**	ug/Kg	8/6/2021	20:58
Dibenz (a,h) anthracene	**573**	ug/Kg	8/6/2021	20:58
Dibenzofuran	**336**	ug/Kg	8/6/2021	20:58
Diethyl phthalate	< 311	ug/Kg	8/6/2021	20:58
Dimethyl phthalate	< 311	ug/Kg	8/6/2021	20:58

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: TE-01-BLT-B
Lab Sample ID: 213480-01 **Date Sampled:** 8/3/2021
Matrix: Soil **Date Received:** 8/3/2021

Di-n-butyl phthalate	< 311	ug/Kg	8/6/2021	20:58
Di-n-octylphthalate	< 311	ug/Kg	8/6/2021	20:58
Fluoranthene	**6190**	ug/Kg	8/6/2021	20:58
Fluorene	< 311	ug/Kg	8/6/2021	20:58
Hexachlorobenzene	< 311	ug/Kg	8/6/2021	20:58
Hexachlorobutadiene	< 311	ug/Kg	8/6/2021	20:58
Hexachlorocyclopentadiene	< 1250	ug/Kg	8/6/2021	20:58
Hexachloroethane	< 311	ug/Kg	8/6/2021	20:58
Indeno (1,2,3-cd) pyrene	**2090**	ug/Kg	8/6/2021	20:58
Isophorone	< 311	ug/Kg	8/6/2021	20:58
Naphthalene	**686**	ug/Kg	8/6/2021	20:58
Nitrobenzene	< 311	ug/Kg	8/6/2021	20:58
N-Nitroso-di-n-propylamine	< 311	ug/Kg	8/6/2021	20:58
N-Nitrosodiphenylamine	< 311	ug/Kg	8/6/2021	20:58
Pentachlorophenol	< 623	ug/Kg	8/6/2021	20:58
Phenanthrene	**2310**	ug/Kg	8/6/2021	20:58
Phenol	< 311	ug/Kg	8/6/2021	20:58
Pyrene	**4620**	ug/Kg	8/6/2021	20:58

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	**47.8**	36.4 - 87.2		8/6/2021	20:58
2-Fluorobiphenyl	**47.3**	44 - 84		8/6/2021	20:58
2-Fluorophenol	**38.7**	43.2 - 82.1	*	8/6/2021	20:58
Nitrobenzene-d5	**40.2**	36.4 - 82.2		8/6/2021	20:58
Phenol-d5	**41.6**	41.1 - 81.4		8/6/2021	20:58
Terphenyl-d14	**48.7**	43.8 - 103		8/6/2021	20:58

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 8/5/2021
Data File: B56006.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	TE-01-BLT-A		
Lab Sample ID:	213480-01A	**Date Sampled:**	8/3/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 11.1	ug/Kg		8/4/2021 14:19
1,1,2,2-Tetrachloroethane	< 11.1	ug/Kg		8/4/2021 14:19
1,1,2-Trichloroethane	< 11.1	ug/Kg		8/4/2021 14:19
1,1-Dichloroethane	< 11.1	ug/Kg		8/4/2021 14:19
1,1-Dichloroethene	< 11.1	ug/Kg		8/4/2021 14:19
1,2,3-Trichlorobenzene	< 27.7	ug/Kg		8/4/2021 14:19
1,2,4-Trichlorobenzene	< 27.7	ug/Kg		8/4/2021 14:19
1,2,4-Trimethylbenzene	< 11.1	ug/Kg		8/4/2021 14:19
1,2-Dibromo-3-Chloropropane	< 55.4	ug/Kg		8/4/2021 14:19
1,2-Dibromoethane	< 11.1	ug/Kg		8/4/2021 14:19
1,2-Dichlorobenzene	< 11.1	ug/Kg		8/4/2021 14:19
1,2-Dichloroethane	< 11.1	ug/Kg		8/4/2021 14:19
1,2-Dichloropropane	< 11.1	ug/Kg		8/4/2021 14:19
1,3,5-Trimethylbenzene	< 11.1	ug/Kg		8/4/2021 14:19
1,3-Dichlorobenzene	< 11.1	ug/Kg		8/4/2021 14:19
1,4-Dichlorobenzene	< 11.1	ug/Kg		8/4/2021 14:19
1,4-Dioxane	< 55.4	ug/Kg		8/4/2021 14:19
2-Butanone	< 55.4	ug/Kg		8/4/2021 14:19
2-Hexanone	< 27.7	ug/Kg		8/4/2021 14:19
4-Methyl-2-pentanone	< 27.7	ug/Kg		8/4/2021 14:19
Acetone	< 55.4	ug/Kg		8/4/2021 14:19
Benzene	< 11.1	ug/Kg		8/4/2021 14:19
Bromochloromethane	< 27.7	ug/Kg		8/4/2021 14:19
Bromodichloromethane	< 11.1	ug/Kg		8/4/2021 14:19
Bromoform	< 27.7	ug/Kg		8/4/2021 14:19
Bromomethane	< 11.1	ug/Kg		8/4/2021 14:19
Carbon disulfide	< 11.1	ug/Kg		8/4/2021 14:19
Carbon Tetrachloride	< 11.1	ug/Kg		8/4/2021 14:19

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: TE-01-BLT-A
Lab Sample ID: 213480-01A **Date Sampled:** 8/3/2021
Matrix: Soil **Date Received:** 8/3/2021

Chlorobenzene	< 11.1	ug/Kg	8/4/2021	14:19
Chloroethane	< 11.1	ug/Kg	8/4/2021	14:19
Chloroform	< 11.1	ug/Kg	8/4/2021	14:19
Chloromethane	< 11.1	ug/Kg	8/4/2021	14:19
cis-1,2-Dichloroethene	< 11.1	ug/Kg	8/4/2021	14:19
cis-1,3-Dichloropropene	< 11.1	ug/Kg	8/4/2021	14:19
Cyclohexane	< 55.4	ug/Kg	8/4/2021	14:19
Dibromochloromethane	< 11.1	ug/Kg	8/4/2021	14:19
Dichlorodifluoromethane	< 11.1	ug/Kg	8/4/2021	14:19
Ethylbenzene	< 11.1	ug/Kg	8/4/2021	14:19
Freon 113	< 11.1	ug/Kg	8/4/2021	14:19
Isopropylbenzene	< 11.1	ug/Kg	8/4/2021	14:19
m,p-Xylene	< 11.1	ug/Kg	8/4/2021	14:19
Methyl acetate	< 11.1	ug/Kg	8/4/2021	14:19
Methyl tert-butyl Ether	< 11.1	ug/Kg	8/4/2021	14:19
Methylcyclohexane	< 11.1	ug/Kg	8/4/2021	14:19
Methylene chloride	< 27.7	ug/Kg	8/4/2021	14:19
Naphthalene	< 27.7	ug/Kg	8/4/2021	14:19
n-Butylbenzene	< 11.1	ug/Kg	8/4/2021	14:19
n-Propylbenzene	< 11.1	ug/Kg	8/4/2021	14:19
o-Xylene	< 11.1	ug/Kg	8/4/2021	14:19
p-Isopropyltoluene	**11.5**	ug/Kg	8/4/2021	14:19
sec-Butylbenzene	< 11.1	ug/Kg	8/4/2021	14:19
Styrene	< 27.7	ug/Kg	8/4/2021	14:19
tert-Butylbenzene	< 11.1	ug/Kg	8/4/2021	14:19
Tetrachloroethene	< 11.1	ug/Kg	8/4/2021	14:19
Toluene	< 11.1	ug/Kg	8/4/2021	14:19
trans-1,2-Dichloroethene	< 11.1	ug/Kg	8/4/2021	14:19
trans-1,3-Dichloropropene	< 11.1	ug/Kg	8/4/2021	14:19
Trichloroethene	< 11.1	ug/Kg	8/4/2021	14:19

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	TE-01-BLT-A		
Lab Sample ID:	213480-01A	**Date Sampled:**	8/3/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Trichlorofluoromethane	< 11.1	ug/Kg			8/4/2021 14:19
Vinyl chloride	< 11.1	ug/Kg			8/4/2021 14:19

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**96.4**	88.8 - 123		8/4/2021 14:19
4-Bromofluorobenzene	**73.3**	68.7 - 115		8/4/2021 14:19
Pentafluorobenzene	**105**	80.2 - 112		8/4/2021 14:19
Toluene-D8	**100**	83.5 - 123		8/4/2021 14:19

Method Reference(s): EPA 8260C
EPA 5035A - L

Data File: z03383.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: TE-02-BLT-B
Lab Sample ID: 213480-02 **Date Sampled:** 8/3/2021
Matrix: Soil **Date Received:** 8/3/2021

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.0773**	mg/Kg		8/6/2021 10:57

Method Reference(s): EPA 7471B
Preparation Date: 8/5/2021
Data File: Hg210806A

RCRA Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**2.77**	mg/Kg		8/4/2021 20:57
Barium	**69.6**	mg/Kg		8/4/2021 20:57
Cadmium	< 0.271	mg/Kg		8/4/2021 20:57
Chromium	**10.7**	mg/Kg		8/4/2021 20:57
Lead	**22.7**	mg/Kg		8/4/2021 20:57
Selenium	< 1.08	mg/Kg		8/4/2021 20:57
Silver	< 0.542	mg/Kg		8/4/2021 20:57

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 8/4/2021
Data File: 210804C

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.181	mg/Kg		8/6/2021 14:49
PCB-1221	< 0.181	mg/Kg		8/6/2021 14:49
PCB-1232	< 0.181	mg/Kg		8/6/2021 14:49
PCB-1242	< 0.181	mg/Kg		8/6/2021 14:49
PCB-1248	< 0.181	mg/Kg		8/6/2021 14:49
PCB-1254	< 0.181	mg/Kg		8/6/2021 14:49
PCB-1260	< 0.181	mg/Kg		8/6/2021 14:49
PCB-1262	< 0.181	mg/Kg		8/6/2021 14:49
PCB-1268	< 0.181	mg/Kg		8/6/2021 14:49

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	TE-02-BLT-B		
Lab Sample ID:	213480-02	**Date Sampled:**	8/3/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	**74.3**	18.5 - 93.4		8/6/2021 14:49

Method Reference(s): EPA 8082A
EPA 3546
Preparation Date: 8/5/2021

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 321	ug/Kg		8/6/2021 21:28
1,2,4,5-Tetrachlorobenzene	< 321	ug/Kg		8/6/2021 21:28
1,2,4-Trichlorobenzene	< 321	ug/Kg		8/6/2021 21:28
1,2-Dichlorobenzene	< 321	ug/Kg		8/6/2021 21:28
1,3-Dichlorobenzene	< 321	ug/Kg		8/6/2021 21:28
1,4-Dichlorobenzene	< 321	ug/Kg	M	8/6/2021 21:28
2,2-Oxybis (1-chloropropane)	< 321	ug/Kg		8/6/2021 21:28
2,3,4,6-Tetrachlorophenol	< 321	ug/Kg		8/6/2021 21:28
2,4,5-Trichlorophenol	< 321	ug/Kg		8/6/2021 21:28
2,4,6-Trichlorophenol	< 321	ug/Kg		8/6/2021 21:28
2,4-Dichlorophenol	< 321	ug/Kg		8/6/2021 21:28
2,4-Dimethylphenol	< 321	ug/Kg		8/6/2021 21:28
2,4-Dinitrophenol	< 1280	ug/Kg		8/6/2021 21:28
2,4-Dinitrotoluene	< 321	ug/Kg		8/6/2021 21:28
2,6-Dinitrotoluene	< 321	ug/Kg		8/6/2021 21:28
2-Chloronaphthalene	< 321	ug/Kg		8/6/2021 21:28
2-Chlorophenol	< 321	ug/Kg	MD	8/6/2021 21:28
2-Methylnapthalene	< 321	ug/Kg		8/6/2021 21:28
2-Methylphenol	< 321	ug/Kg		8/6/2021 21:28
2-Nitroaniline	< 321	ug/Kg		8/6/2021 21:28
2-Nitrophenol	< 321	ug/Kg		8/6/2021 21:28
3&4-Methylphenol	< 321	ug/Kg		8/6/2021 21:28
3,3'-Dichlorobenzidine	< 321	ug/Kg		8/6/2021 21:28

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: TE-02-BLT-B
Lab Sample ID: 213480-02 **Date Sampled:** 8/3/2021
Matrix: Soil **Date Received:** 8/3/2021

3-Nitroaniline	< 321	ug/Kg		8/6/2021	21:28
4,6-Dinitro-2-methylphenol	< 429	ug/Kg		8/6/2021	21:28
4-Bromophenyl phenyl ether	< 321	ug/Kg		8/6/2021	21:28
4-Chloro-3-methylphenol	< 321	ug/Kg		8/6/2021	21:28
4-Chloroaniline	< 321	ug/Kg		8/6/2021	21:28
4-Chlorophenyl phenyl ether	< 321	ug/Kg		8/6/2021	21:28
4-Nitroaniline	< 321	ug/Kg		8/6/2021	21:28
4-Nitrophenol	< 321	ug/Kg	M	8/6/2021	21:28
Acenaphthene	< 321	ug/Kg		8/6/2021	21:28
Acenaphthylene	< 321	ug/Kg		8/6/2021	21:28
Acetophenone	< 321	ug/Kg		8/6/2021	21:28
Anthracene	< 321	ug/Kg		8/6/2021	21:28
Atrazine	< 321	ug/Kg		8/6/2021	21:28
Benzaldehyde	< 321	ug/Kg		8/6/2021	21:28
Benzo (a) anthracene	< 321	ug/Kg		8/6/2021	21:28
Benzo (a) pyrene	< 321	ug/Kg		8/6/2021	21:28
Benzo (b) fluoranthene	< 321	ug/Kg		8/6/2021	21:28
Benzo (g,h,i) perylene	< 321	ug/Kg		8/6/2021	21:28
Benzo (k) fluoranthene	< 321	ug/Kg		8/6/2021	21:28
Bis (2-chloroethoxy) methane	< 321	ug/Kg		8/6/2021	21:28
Bis (2-chloroethyl) ether	< 321	ug/Kg		8/6/2021	21:28
Bis (2-ethylhexyl) phthalate	< 321	ug/Kg		8/6/2021	21:28
Butylbenzylphthalate	< 321	ug/Kg		8/6/2021	21:28
Caprolactam	< 321	ug/Kg		8/6/2021	21:28
Carbazole	< 321	ug/Kg		8/6/2021	21:28
Chrysene	< 321	ug/Kg		8/6/2021	21:28
Dibenz (a,h) anthracene	< 321	ug/Kg		8/6/2021	21:28
Dibenzofuran	< 321	ug/Kg		8/6/2021	21:28
Diethyl phthalate	< 321	ug/Kg		8/6/2021	21:28
Dimethyl phthalate	< 321	ug/Kg		8/6/2021	21:28

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: TE-02-BLT-B
Lab Sample ID: 213480-02 **Date Sampled:** 8/3/2021
Matrix: Soil **Date Received:** 8/3/2021

Di-n-butyl phthalate	< 321	ug/Kg		8/6/2021	21:28
Di-n-octylphthalate	< 321	ug/Kg		8/6/2021	21:28
Fluoranthene	< 321	ug/Kg		8/6/2021	21:28
Fluorene	< 321	ug/Kg		8/6/2021	21:28
Hexachlorobenzene	< 321	ug/Kg		8/6/2021	21:28
Hexachlorobutadiene	< 321	ug/Kg		8/6/2021	21:28
Hexachlorocyclopentadiene	< 1280	ug/Kg		8/6/2021	21:28
Hexachloroethane	< 321	ug/Kg		8/6/2021	21:28
Indeno (1,2,3-cd) pyrene	< 321	ug/Kg		8/6/2021	21:28
Isophorone	< 321	ug/Kg		8/6/2021	21:28
Naphthalene	< 321	ug/Kg		8/6/2021	21:28
Nitrobenzene	< 321	ug/Kg		8/6/2021	21:28
N-Nitroso-di-n-propylamine	< 321	ug/Kg		8/6/2021	21:28
N-Nitrosodiphenylamine	< 321	ug/Kg		8/6/2021	21:28
Pentachlorophenol	< 642	ug/Kg		8/6/2021	21:28
Phenanthrene	< 321	ug/Kg		8/6/2021	21:28
Phenol	< 321	ug/Kg	M	8/6/2021	21:28
Pyrene	< 321	ug/Kg		8/6/2021	21:28

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	**65.1**	36.4 - 87.2		8/6/2021	21:28
2-Fluorobiphenyl	**55.7**	44 - 84		8/6/2021	21:28
2-Fluorophenol	**50.5**	43.2 - 82.1		8/6/2021	21:28
Nitrobenzene-d5	**48.2**	36.4 - 82.2		8/6/2021	21:28
Phenol-d5	**52.4**	41.1 - 81.4		8/6/2021	21:28
Terphenyl-d14	**62.9**	43.8 - 103		8/6/2021	21:28

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 8/5/2021
Data File: B56007.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	TE-02-BLT-A		
Lab Sample ID:	213480-02A	**Date Sampled:**	8/3/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 9.86	ug/Kg		8/4/2021 14:38
1,1,2,2-Tetrachloroethane	< 9.86	ug/Kg		8/4/2021 14:38
1,1,2-Trichloroethane	< 9.86	ug/Kg		8/4/2021 14:38
1,1-Dichloroethane	< 9.86	ug/Kg		8/4/2021 14:38
1,1-Dichloroethene	< 9.86	ug/Kg		8/4/2021 14:38
1,2,3-Trichlorobenzene	< 24.7	ug/Kg		8/4/2021 14:38
1,2,4-Trichlorobenzene	< 24.7	ug/Kg		8/4/2021 14:38
1,2,4-Trimethylbenzene	< 9.86	ug/Kg		8/4/2021 14:38
1,2-Dibromo-3-Chloropropane	< 49.3	ug/Kg		8/4/2021 14:38
1,2-Dibromoethane	< 9.86	ug/Kg		8/4/2021 14:38
1,2-Dichlorobenzene	< 9.86	ug/Kg		8/4/2021 14:38
1,2-Dichloroethane	< 9.86	ug/Kg		8/4/2021 14:38
1,2-Dichloropropane	< 9.86	ug/Kg		8/4/2021 14:38
1,3,5-Trimethylbenzene	< 9.86	ug/Kg		8/4/2021 14:38
1,3-Dichlorobenzene	< 9.86	ug/Kg		8/4/2021 14:38
1,4-Dichlorobenzene	< 9.86	ug/Kg		8/4/2021 14:38
1,4-Dioxane	< 49.3	ug/Kg		8/4/2021 14:38
2-Butanone	< 49.3	ug/Kg		8/4/2021 14:38
2-Hexanone	< 24.7	ug/Kg		8/4/2021 14:38
4-Methyl-2-pentanone	< 24.7	ug/Kg		8/4/2021 14:38
Acetone	< 49.3	ug/Kg		8/4/2021 14:38
Benzene	< 9.86	ug/Kg		8/4/2021 14:38
Bromochloromethane	< 24.7	ug/Kg		8/4/2021 14:38
Bromodichloromethane	< 9.86	ug/Kg		8/4/2021 14:38
Bromoform	< 24.7	ug/Kg		8/4/2021 14:38
Bromomethane	< 9.86	ug/Kg		8/4/2021 14:38
Carbon disulfide	< 9.86	ug/Kg		8/4/2021 14:38
Carbon Tetrachloride	< 9.86	ug/Kg		8/4/2021 14:38

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: TE-02-BLT-A
Lab Sample ID: 213480-02A **Date Sampled:** 8/3/2021
Matrix: Soil **Date Received:** 8/3/2021

Chlorobenzene	< 9.86	ug/Kg	8/4/2021	14:38
Chloroethane	< 9.86	ug/Kg	8/4/2021	14:38
Chloroform	< 9.86	ug/Kg	8/4/2021	14:38
Chloromethane	< 9.86	ug/Kg	8/4/2021	14:38
cis-1,2-Dichloroethene	< 9.86	ug/Kg	8/4/2021	14:38
cis-1,3-Dichloropropene	< 9.86	ug/Kg	8/4/2021	14:38
Cyclohexane	< 49.3	ug/Kg	8/4/2021	14:38
Dibromochloromethane	< 9.86	ug/Kg	8/4/2021	14:38
Dichlorodifluoromethane	< 9.86	ug/Kg	8/4/2021	14:38
Ethylbenzene	< 9.86	ug/Kg	8/4/2021	14:38
Freon 113	< 9.86	ug/Kg	8/4/2021	14:38
Isopropylbenzene	< 9.86	ug/Kg	8/4/2021	14:38
m,p-Xylene	< 9.86	ug/Kg	8/4/2021	14:38
Methyl acetate	< 9.86	ug/Kg	8/4/2021	14:38
Methyl tert-butyl Ether	< 9.86	ug/Kg	8/4/2021	14:38
Methylcyclohexane	< 9.86	ug/Kg	8/4/2021	14:38
Methylene chloride	< 24.7	ug/Kg	8/4/2021	14:38
Naphthalene	< 24.7	ug/Kg	8/4/2021	14:38
n-Butylbenzene	< 9.86	ug/Kg	8/4/2021	14:38
n-Propylbenzene	< 9.86	ug/Kg	8/4/2021	14:38
o-Xylene	< 9.86	ug/Kg	8/4/2021	14:38
p-Isopropyltoluene	< 9.86	ug/Kg	8/4/2021	14:38
sec-Butylbenzene	< 9.86	ug/Kg	8/4/2021	14:38
Styrene	< 24.7	ug/Kg	8/4/2021	14:38
tert-Butylbenzene	< 9.86	ug/Kg	8/4/2021	14:38
Tetrachloroethene	< 9.86	ug/Kg	8/4/2021	14:38
Toluene	< 9.86	ug/Kg	8/4/2021	14:38
trans-1,2-Dichloroethene	< 9.86	ug/Kg	8/4/2021	14:38
trans-1,3-Dichloropropene	< 9.86	ug/Kg	8/4/2021	14:38
Trichloroethene	< 9.86	ug/Kg	8/4/2021	14:38

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	TE-02-BLT-A		
Lab Sample ID:	213480-02A	**Date Sampled:**	8/3/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Trichlorofluoromethane	< 9.86	ug/Kg			8/4/2021 14:38
Vinyl chloride	< 9.86	ug/Kg			8/4/2021 14:38

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**96.4**	88.8 - 123		8/4/2021 14:38
4-Bromofluorobenzene	**78.2**	68.7 - 115		8/4/2021 14:38
Pentafluorobenzene	**95.5**	80.2 - 112		8/4/2021 14:38
Toluene-D8	**91.5**	83.5 - 123		8/4/2021 14:38

Method Reference(s): EPA 8260C
EPA 5035A - L

Data File: z03384.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: TE-03-BLT-B
Lab Sample ID: 213480-03 **Date Sampled:** 8/3/2021
Matrix: Soil **Date Received:** 8/3/2021

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.175**	mg/Kg		8/6/2021 11:03

Method Reference(s): EPA 7471B
Preparation Date: 8/5/2021
Data File: Hg210806A

RCRA Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**5.76**	mg/Kg		8/4/2021 21:02
Barium	**53.5**	mg/Kg		8/4/2021 21:02
Cadmium	**0.289**	mg/Kg		8/4/2021 21:02
Chromium	**10.1**	mg/Kg		8/4/2021 21:02
Lead	**59.5**	mg/Kg		8/4/2021 21:02
Selenium	< 1.11	mg/Kg		8/4/2021 21:02
Silver	< 0.553	mg/Kg		8/4/2021 21:02

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 8/4/2021
Data File: 210804C

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.143	mg/Kg		8/6/2021 16:04
PCB-1221	< 0.143	mg/Kg		8/6/2021 16:04
PCB-1232	< 0.143	mg/Kg		8/6/2021 16:04
PCB-1242	< 0.143	mg/Kg		8/6/2021 16:04
PCB-1248	< 0.143	mg/Kg		8/6/2021 16:04
PCB-1254	< 0.143	mg/Kg		8/6/2021 16:04
PCB-1260	< 0.143	mg/Kg		8/6/2021 16:04
PCB-1262	< 0.143	mg/Kg		8/6/2021 16:04
PCB-1268	< 0.143	mg/Kg		8/6/2021 16:04

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	TE-03-BLT-B		
Lab Sample ID:	213480-03	**Date Sampled:**	8/3/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	**75.5**	18.5 - 93.4		8/6/2021 16:04

Method Reference(s): EPA 8082A
EPA 3546
Preparation Date: 8/5/2021

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 296	ug/Kg		8/6/2021 22:57
1,2,4,5-Tetrachlorobenzene	< 296	ug/Kg		8/6/2021 22:57
1,2,4-Trichlorobenzene	< 296	ug/Kg		8/6/2021 22:57
1,2-Dichlorobenzene	< 296	ug/Kg		8/6/2021 22:57
1,3-Dichlorobenzene	< 296	ug/Kg		8/6/2021 22:57
1,4-Dichlorobenzene	< 296	ug/Kg		8/6/2021 22:57
2,2-Oxybis (1-chloropropane)	< 296	ug/Kg		8/6/2021 22:57
2,3,4,6-Tetrachlorophenol	< 296	ug/Kg		8/6/2021 22:57
2,4,5-Trichlorophenol	< 296	ug/Kg		8/6/2021 22:57
2,4,6-Trichlorophenol	< 296	ug/Kg		8/6/2021 22:57
2,4-Dichlorophenol	< 296	ug/Kg		8/6/2021 22:57
2,4-Dimethylphenol	< 296	ug/Kg		8/6/2021 22:57
2,4-Dinitrophenol	< 1190	ug/Kg		8/6/2021 22:57
2,4-Dinitrotoluene	< 296	ug/Kg		8/6/2021 22:57
2,6-Dinitrotoluene	< 296	ug/Kg		8/6/2021 22:57
2-Chloronaphthalene	< 296	ug/Kg		8/6/2021 22:57
2-Chlorophenol	< 296	ug/Kg		8/6/2021 22:57
2-Methylnapthalene	< 296	ug/Kg		8/6/2021 22:57
2-Methylphenol	< 296	ug/Kg		8/6/2021 22:57
2-Nitroaniline	< 296	ug/Kg		8/6/2021 22:57
2-Nitrophenol	< 296	ug/Kg		8/6/2021 22:57
3&4-Methylphenol	< 296	ug/Kg		8/6/2021 22:57
3,3'-Dichlorobenzidine	< 296	ug/Kg		8/6/2021 22:57

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: TE-03-BLT-B
Lab Sample ID: 213480-03 **Date Sampled:** 8/3/2021
Matrix: Soil **Date Received:** 8/3/2021

3-Nitroaniline	< 296	ug/Kg	8/6/2021	22:57
4,6-Dinitro-2-methylphenol	< 396	ug/Kg	8/6/2021	22:57
4-Bromophenyl phenyl ether	< 296	ug/Kg	8/6/2021	22:57
4-Chloro-3-methylphenol	< 296	ug/Kg	8/6/2021	22:57
4-Chloroaniline	< 296	ug/Kg	8/6/2021	22:57
4-Chlorophenyl phenyl ether	< 296	ug/Kg	8/6/2021	22:57
4-Nitroaniline	< 296	ug/Kg	8/6/2021	22:57
4-Nitrophenol	< 296	ug/Kg	8/6/2021	22:57
Acenaphthene	< 296	ug/Kg	8/6/2021	22:57
Acenaphthylene	< 296	ug/Kg	8/6/2021	22:57
Acetophenone	< 296	ug/Kg	8/6/2021	22:57
Anthracene	< 296	ug/Kg	8/6/2021	22:57
Atrazine	< 296	ug/Kg	8/6/2021	22:57
Benzaldehyde	< 296	ug/Kg	8/6/2021	22:57
Benzo (a) anthracene	< 296	ug/Kg	8/6/2021	22:57
Benzo (a) pyrene	< 296	ug/Kg	8/6/2021	22:57
Benzo (b) fluoranthene	< 296	ug/Kg	8/6/2021	22:57
Benzo (g,h,i) perylene	< 296	ug/Kg	8/6/2021	22:57
Benzo (k) fluoranthene	< 296	ug/Kg	8/6/2021	22:57
Bis (2-chloroethoxy) methane	< 296	ug/Kg	8/6/2021	22:57
Bis (2-chloroethyl) ether	< 296	ug/Kg	8/6/2021	22:57
Bis (2-ethylhexyl) phthalate	< 296	ug/Kg	8/6/2021	22:57
Butylbenzylphthalate	< 296	ug/Kg	8/6/2021	22:57
Caprolactam	< 296	ug/Kg	8/6/2021	22:57
Carbazole	< 296	ug/Kg	8/6/2021	22:57
Chrysene	< 296	ug/Kg	8/6/2021	22:57
Dibenz (a,h) anthracene	< 296	ug/Kg	8/6/2021	22:57
Dibenzofuran	< 296	ug/Kg	8/6/2021	22:57
Diethyl phthalate	< 296	ug/Kg	8/6/2021	22:57
Dimethyl phthalate	< 296	ug/Kg	8/6/2021	22:57

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: TE-03-BLT-B
Lab Sample ID: 213480-03 **Date Sampled:** 8/3/2021
Matrix: Soil **Date Received:** 8/3/2021

Di-n-butyl phthalate	< 296	ug/Kg	8/6/2021	22:57
Di-n-octylphthalate	< 296	ug/Kg	8/6/2021	22:57
Fluoranthene	< 296	ug/Kg	8/6/2021	22:57
Fluorene	< 296	ug/Kg	8/6/2021	22:57
Hexachlorobenzene	< 296	ug/Kg	8/6/2021	22:57
Hexachlorobutadiene	< 296	ug/Kg	8/6/2021	22:57
Hexachlorocyclopentadiene	< 1190	ug/Kg	8/6/2021	22:57
Hexachloroethane	< 296	ug/Kg	8/6/2021	22:57
Indeno (1,2,3-cd) pyrene	< 296	ug/Kg	8/6/2021	22:57
Isophorone	< 296	ug/Kg	8/6/2021	22:57
Naphthalene	< 296	ug/Kg	8/6/2021	22:57
Nitrobenzene	< 296	ug/Kg	8/6/2021	22:57
N-Nitroso-di-n-propylamine	< 296	ug/Kg	8/6/2021	22:57
N-Nitrosodiphenylamine	< 296	ug/Kg	8/6/2021	22:57
Pentachlorophenol	< 593	ug/Kg	8/6/2021	22:57
Phenanthrene	< 296	ug/Kg	8/6/2021	22:57
Phenol	< 296	ug/Kg	8/6/2021	22:57
Pyrene	< 296	ug/Kg	8/6/2021	22:57

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	**57.5**	36.4 - 87.2		8/6/2021	22:57
2-Fluorobiphenyl	**54.7**	44 - 84		8/6/2021	22:57
2-Fluorophenol	**49.6**	43.2 - 82.1		8/6/2021	22:57
Nitrobenzene-d5	**48.2**	36.4 - 82.2		8/6/2021	22:57
Phenol-d5	**50.0**	41.1 - 81.4		8/6/2021	22:57
Terphenyl-d14	**59.1**	43.8 - 103		8/6/2021	22:57

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 8/5/2021
Data File: B56010.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	TE-03-BLT-A		
Lab Sample ID:	213480-03A	**Date Sampled:**	8/3/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 7.04	ug/Kg		8/4/2021 14:57
1,1,2,2-Tetrachloroethane	< 7.04	ug/Kg		8/4/2021 14:57
1,1,2-Trichloroethane	< 7.04	ug/Kg		8/4/2021 14:57
1,1-Dichloroethane	< 7.04	ug/Kg		8/4/2021 14:57
1,1-Dichloroethene	< 7.04	ug/Kg		8/4/2021 14:57
1,2,3-Trichlorobenzene	< 17.6	ug/Kg		8/4/2021 14:57
1,2,4-Trichlorobenzene	< 17.6	ug/Kg		8/4/2021 14:57
1,2,4-Trimethylbenzene	< 7.04	ug/Kg		8/4/2021 14:57
1,2-Dibromo-3-Chloropropane	< 35.2	ug/Kg		8/4/2021 14:57
1,2-Dibromoethane	< 7.04	ug/Kg		8/4/2021 14:57
1,2-Dichlorobenzene	< 7.04	ug/Kg		8/4/2021 14:57
1,2-Dichloroethane	< 7.04	ug/Kg		8/4/2021 14:57
1,2-Dichloropropane	< 7.04	ug/Kg		8/4/2021 14:57
1,3,5-Trimethylbenzene	< 7.04	ug/Kg		8/4/2021 14:57
1,3-Dichlorobenzene	< 7.04	ug/Kg		8/4/2021 14:57
1,4-Dichlorobenzene	< 7.04	ug/Kg		8/4/2021 14:57
1,4-Dioxane	< 35.2	ug/Kg		8/4/2021 14:57
2-Butanone	< 35.2	ug/Kg		8/4/2021 14:57
2-Hexanone	< 17.6	ug/Kg		8/4/2021 14:57
4-Methyl-2-pentanone	< 17.6	ug/Kg		8/4/2021 14:57
Acetone	< 35.2	ug/Kg		8/4/2021 14:57
Benzene	< 7.04	ug/Kg		8/4/2021 14:57
Bromochloromethane	< 17.6	ug/Kg		8/4/2021 14:57
Bromodichloromethane	< 7.04	ug/Kg		8/4/2021 14:57
Bromoform	< 17.6	ug/Kg		8/4/2021 14:57
Bromomethane	< 7.04	ug/Kg		8/4/2021 14:57
Carbon disulfide	< 7.04	ug/Kg		8/4/2021 14:57
Carbon Tetrachloride	< 7.04	ug/Kg		8/4/2021 14:57

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: TE-03-BLT-A
Lab Sample ID: 213480-03A **Date Sampled:** 8/3/2021
Matrix: Soil **Date Received:** 8/3/2021

Chlorobenzene	< 7.04	ug/Kg	8/4/2021	14:57
Chloroethane	< 7.04	ug/Kg	8/4/2021	14:57
Chloroform	< 7.04	ug/Kg	8/4/2021	14:57
Chloromethane	< 7.04	ug/Kg	8/4/2021	14:57
cis-1,2-Dichloroethene	< 7.04	ug/Kg	8/4/2021	14:57
cis-1,3-Dichloropropene	< 7.04	ug/Kg	8/4/2021	14:57
Cyclohexane	< 35.2	ug/Kg	8/4/2021	14:57
Dibromochloromethane	< 7.04	ug/Kg	8/4/2021	14:57
Dichlorodifluoromethane	< 7.04	ug/Kg	8/4/2021	14:57
Ethylbenzene	< 7.04	ug/Kg	8/4/2021	14:57
Freon 113	< 7.04	ug/Kg	8/4/2021	14:57
Isopropylbenzene	< 7.04	ug/Kg	8/4/2021	14:57
m,p-Xylene	< 7.04	ug/Kg	8/4/2021	14:57
Methyl acetate	< 7.04	ug/Kg	8/4/2021	14:57
Methyl tert-butyl Ether	< 7.04	ug/Kg	8/4/2021	14:57
Methylcyclohexane	< 7.04	ug/Kg	8/4/2021	14:57
Methylene chloride	< 17.6	ug/Kg	8/4/2021	14:57
Naphthalene	< 17.6	ug/Kg	8/4/2021	14:57
n-Butylbenzene	< 7.04	ug/Kg	8/4/2021	14:57
n-Propylbenzene	< 7.04	ug/Kg	8/4/2021	14:57
o-Xylene	< 7.04	ug/Kg	8/4/2021	14:57
p-Isopropyltoluene	< 7.04	ug/Kg	8/4/2021	14:57
sec-Butylbenzene	< 7.04	ug/Kg	8/4/2021	14:57
Styrene	< 17.6	ug/Kg	8/4/2021	14:57
tert-Butylbenzene	< 7.04	ug/Kg	8/4/2021	14:57
Tetrachloroethene	< 7.04	ug/Kg	8/4/2021	14:57
Toluene	< 7.04	ug/Kg	8/4/2021	14:57
trans-1,2-Dichloroethene	< 7.04	ug/Kg	8/4/2021	14:57
trans-1,3-Dichloropropene	< 7.04	ug/Kg	8/4/2021	14:57
Trichloroethene	< 7.04	ug/Kg	8/4/2021	14:57

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	TE-03-BLT-A		
Lab Sample ID:	213480-03A	**Date Sampled:**	8/3/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Trichlorofluoromethane	< 7.04	ug/Kg			8/4/2021 14:57
Vinyl chloride	< 7.04	ug/Kg			8/4/2021 14:57

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**103**	88.8 - 123		8/4/2021 14:57
4-Bromofluorobenzene	**81.1**	68.7 - 115		8/4/2021 14:57
Pentafluorobenzene	**104**	80.2 - 112		8/4/2021 14:57
Toluene-D8	**102**	83.5 - 123		8/4/2021 14:57

Method Reference(s): EPA 8260C
EPA 5035A - L

Data File: z03385.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: TE-04-BLT-B
Lab Sample ID: 213480-04 **Date Sampled:** 8/3/2021
Matrix: Soil **Date Received:** 8/3/2021

Mercury

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	**0.285**	mg/Kg		8/6/2021 11:04

Method Reference(s): EPA 7471B
Preparation Date: 8/5/2021
Data File: Hg210806A

RCRA Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**3.71**	mg/Kg	D	8/4/2021 21:16
Barium	**60.1**	mg/Kg		8/4/2021 21:16
Cadmium	**0.289**	mg/Kg	D	8/4/2021 21:16
Chromium	**9.69**	mg/Kg		8/4/2021 21:16
Lead	**62.7**	mg/Kg		8/4/2021 21:16
Selenium	< 1.10	mg/Kg		8/4/2021 21:16
Silver	< 0.550	mg/Kg		8/4/2021 21:16

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 8/4/2021
Data File: 210804C

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.175	mg/Kg		8/6/2021 16:28
PCB-1221	< 0.175	mg/Kg		8/6/2021 16:28
PCB-1232	< 0.175	mg/Kg		8/6/2021 16:28
PCB-1242	< 0.175	mg/Kg		8/6/2021 16:28
PCB-1248	< 0.175	mg/Kg		8/6/2021 16:28
PCB-1254	< 0.175	mg/Kg		8/6/2021 16:28
PCB-1260	< 0.175	mg/Kg		8/6/2021 16:28
PCB-1262	< 0.175	mg/Kg		8/6/2021 16:28
PCB-1268	< 0.175	mg/Kg		8/6/2021 16:28

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	TE-04-BLT-B		
Lab Sample ID:	213480-04	**Date Sampled:**	8/3/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene	**76.4**	18.5 - 93.4		8/6/2021 16:28

Method Reference(s): EPA 8082A
EPA 3546
Preparation Date: 8/5/2021

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 294	ug/Kg		8/6/2021 23:26
1,2,4,5-Tetrachlorobenzene	< 294	ug/Kg		8/6/2021 23:26
1,2,4-Trichlorobenzene	< 294	ug/Kg		8/6/2021 23:26
1,2-Dichlorobenzene	< 294	ug/Kg		8/6/2021 23:26
1,3-Dichlorobenzene	< 294	ug/Kg		8/6/2021 23:26
1,4-Dichlorobenzene	< 294	ug/Kg		8/6/2021 23:26
2,2-Oxybis (1-chloropropane)	< 294	ug/Kg		8/6/2021 23:26
2,3,4,6-Tetrachlorophenol	< 294	ug/Kg		8/6/2021 23:26
2,4,5-Trichlorophenol	< 294	ug/Kg		8/6/2021 23:26
2,4,6-Trichlorophenol	< 294	ug/Kg		8/6/2021 23:26
2,4-Dichlorophenol	< 294	ug/Kg		8/6/2021 23:26
2,4-Dimethylphenol	< 294	ug/Kg		8/6/2021 23:26
2,4-Dinitrophenol	< 1180	ug/Kg		8/6/2021 23:26
2,4-Dinitrotoluene	< 294	ug/Kg		8/6/2021 23:26
2,6-Dinitrotoluene	< 294	ug/Kg		8/6/2021 23:26
2-Chloronaphthalene	< 294	ug/Kg		8/6/2021 23:26
2-Chlorophenol	< 294	ug/Kg		8/6/2021 23:26
2-Methylnapthalene	< 294	ug/Kg		8/6/2021 23:26
2-Methylphenol	< 294	ug/Kg		8/6/2021 23:26
2-Nitroaniline	< 294	ug/Kg		8/6/2021 23:26
2-Nitrophenol	< 294	ug/Kg		8/6/2021 23:26
3&4-Methylphenol	< 294	ug/Kg		8/6/2021 23:26
3,3'-Dichlorobenzidine	< 294	ug/Kg		8/6/2021 23:26

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	TE-04-BLT-B		
Lab Sample ID:	213480-04	**Date Sampled:**	8/3/2021
Matrix:	Soil	**Date Received:**	8/3/2021

3-Nitroaniline	< 294	ug/Kg	8/6/2021 23:26
4,6-Dinitro-2-methylphenol	< 393	ug/Kg	8/6/2021 23:26
4-Bromophenyl phenyl ether	< 294	ug/Kg	8/6/2021 23:26
4-Chloro-3-methylphenol	< 294	ug/Kg	8/6/2021 23:26
4-Chloroaniline	< 294	ug/Kg	8/6/2021 23:26
4-Chlorophenyl phenyl ether	< 294	ug/Kg	8/6/2021 23:26
4-Nitroaniline	< 294	ug/Kg	8/6/2021 23:26
4-Nitrophenol	< 294	ug/Kg	8/6/2021 23:26
Acenaphthene	< 294	ug/Kg	8/6/2021 23:26
Acenaphthylene	< 294	ug/Kg	8/6/2021 23:26
Acetophenone	< 294	ug/Kg	8/6/2021 23:26
Anthracene	< 294	ug/Kg	8/6/2021 23:26
Atrazine	< 294	ug/Kg	8/6/2021 23:26
Benzaldehyde	< 294	ug/Kg	8/6/2021 23:26
Benzo (a) anthracene	< 294	ug/Kg	8/6/2021 23:26
Benzo (a) pyrene	< 294	ug/Kg	8/6/2021 23:26
Benzo (b) fluoranthene	< 294	ug/Kg	8/6/2021 23:26
Benzo (g,h,i) perylene	< 294	ug/Kg	8/6/2021 23:26
Benzo (k) fluoranthene	< 294	ug/Kg	8/6/2021 23:26
Bis (2-chloroethoxy) methane	< 294	ug/Kg	8/6/2021 23:26
Bis (2-chloroethyl) ether	< 294	ug/Kg	8/6/2021 23:26
Bis (2-ethylhexyl) phthalate	< 294	ug/Kg	8/6/2021 23:26
Butylbenzylphthalate	< 294	ug/Kg	8/6/2021 23:26
Caprolactam	< 294	ug/Kg	8/6/2021 23:26
Carbazole	< 294	ug/Kg	8/6/2021 23:26
Chrysene	< 294	ug/Kg	8/6/2021 23:26
Dibenz (a,h) anthracene	< 294	ug/Kg	8/6/2021 23:26
Dibenzofuran	< 294	ug/Kg	8/6/2021 23:26
Diethyl phthalate	< 294	ug/Kg	8/6/2021 23:26
Dimethyl phthalate	< 294	ug/Kg	8/6/2021 23:26

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: TE-04-BLT-B
Lab Sample ID: 213480-04 **Date Sampled:** 8/3/2021
Matrix: Soil **Date Received:** 8/3/2021

Di-n-butyl phthalate	< 294	ug/Kg	8/6/2021	23:26
Di-n-octylphthalate	< 294	ug/Kg	8/6/2021	23:26
Fluoranthene	< 294	ug/Kg	8/6/2021	23:26
Fluorene	< 294	ug/Kg	8/6/2021	23:26
Hexachlorobenzene	< 294	ug/Kg	8/6/2021	23:26
Hexachlorobutadiene	< 294	ug/Kg	8/6/2021	23:26
Hexachlorocyclopentadiene	< 1180	ug/Kg	8/6/2021	23:26
Hexachloroethane	< 294	ug/Kg	8/6/2021	23:26
Indeno (1,2,3-cd) pyrene	< 294	ug/Kg	8/6/2021	23:26
Isophorone	< 294	ug/Kg	8/6/2021	23:26
Naphthalene	< 294	ug/Kg	8/6/2021	23:26
Nitrobenzene	< 294	ug/Kg	8/6/2021	23:26
N-Nitroso-di-n-propylamine	< 294	ug/Kg	8/6/2021	23:26
N-Nitrosodiphenylamine	< 294	ug/Kg	8/6/2021	23:26
Pentachlorophenol	< 588	ug/Kg	8/6/2021	23:26
Phenanthrene	< 294	ug/Kg	8/6/2021	23:26
Phenol	< 294	ug/Kg	8/6/2021	23:26
Pyrene	< 294	ug/Kg	8/6/2021	23:26

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	**65.2**	36.4 - 87.2		8/6/2021	23:26
2-Fluorobiphenyl	**59.1**	44 - 84		8/6/2021	23:26
2-Fluorophenol	**54.2**	43.2 - 82.1		8/6/2021	23:26
Nitrobenzene-d5	**52.2**	36.4 - 82.2		8/6/2021	23:26
Phenol-d5	**54.2**	41.1 - 81.4		8/6/2021	23:26
Terphenyl-d14	**64.0**	43.8 - 103		8/6/2021	23:26

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 8/5/2021
Data File: B56011.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	TE-04-BLT-A		
Lab Sample ID:	213480-04A	**Date Sampled:**	8/3/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 8.50	ug/Kg		8/4/2021 15:16
1,1,2,2-Tetrachloroethane	< 8.50	ug/Kg		8/4/2021 15:16
1,1,2-Trichloroethane	< 8.50	ug/Kg		8/4/2021 15:16
1,1-Dichloroethane	< 8.50	ug/Kg		8/4/2021 15:16
1,1-Dichloroethene	< 8.50	ug/Kg		8/4/2021 15:16
1,2,3-Trichlorobenzene	< 21.3	ug/Kg		8/4/2021 15:16
1,2,4-Trichlorobenzene	< 21.3	ug/Kg		8/4/2021 15:16
1,2,4-Trimethylbenzene	< 8.50	ug/Kg		8/4/2021 15:16
1,2-Dibromo-3-Chloropropane	< 42.5	ug/Kg		8/4/2021 15:16
1,2-Dibromoethane	< 8.50	ug/Kg		8/4/2021 15:16
1,2-Dichlorobenzene	< 8.50	ug/Kg		8/4/2021 15:16
1,2-Dichloroethane	< 8.50	ug/Kg		8/4/2021 15:16
1,2-Dichloropropane	< 8.50	ug/Kg		8/4/2021 15:16
1,3,5-Trimethylbenzene	< 8.50	ug/Kg		8/4/2021 15:16
1,3-Dichlorobenzene	< 8.50	ug/Kg		8/4/2021 15:16
1,4-Dichlorobenzene	< 8.50	ug/Kg		8/4/2021 15:16
1,4-Dioxane	< 42.5	ug/Kg		8/4/2021 15:16
2-Butanone	< 42.5	ug/Kg		8/4/2021 15:16
2-Hexanone	< 21.3	ug/Kg		8/4/2021 15:16
4-Methyl-2-pentanone	< 21.3	ug/Kg		8/4/2021 15:16
Acetone	< 42.5	ug/Kg		8/4/2021 15:16
Benzene	< 8.50	ug/Kg		8/4/2021 15:16
Bromochloromethane	< 21.3	ug/Kg		8/4/2021 15:16
Bromodichloromethane	< 8.50	ug/Kg		8/4/2021 15:16
Bromoform	< 21.3	ug/Kg		8/4/2021 15:16
Bromomethane	< 8.50	ug/Kg		8/4/2021 15:16
Carbon disulfide	< 8.50	ug/Kg		8/4/2021 15:16
Carbon Tetrachloride	< 8.50	ug/Kg		8/4/2021 15:16

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier: TE-04-BLT-A
Lab Sample ID: 213480-04A **Date Sampled:** 8/3/2021
Matrix: Soil **Date Received:** 8/3/2021

Chlorobenzene	< 8.50	ug/Kg	8/4/2021	15:16
Chloroethane	< 8.50	ug/Kg	8/4/2021	15:16
Chloroform	< 8.50	ug/Kg	8/4/2021	15:16
Chloromethane	< 8.50	ug/Kg	8/4/2021	15:16
cis-1,2-Dichloroethene	< 8.50	ug/Kg	8/4/2021	15:16
cis-1,3-Dichloropropene	< 8.50	ug/Kg	8/4/2021	15:16
Cyclohexane	< 42.5	ug/Kg	8/4/2021	15:16
Dibromochloromethane	< 8.50	ug/Kg	8/4/2021	15:16
Dichlorodifluoromethane	< 8.50	ug/Kg	8/4/2021	15:16
Ethylbenzene	< 8.50	ug/Kg	8/4/2021	15:16
Freon 113	< 8.50	ug/Kg	8/4/2021	15:16
Isopropylbenzene	< 8.50	ug/Kg	8/4/2021	15:16
m,p-Xylene	< 8.50	ug/Kg	8/4/2021	15:16
Methyl acetate	< 8.50	ug/Kg	8/4/2021	15:16
Methyl tert-butyl Ether	< 8.50	ug/Kg	8/4/2021	15:16
Methylcyclohexane	< 8.50	ug/Kg	8/4/2021	15:16
Methylene chloride	< 21.3	ug/Kg	8/4/2021	15:16
Naphthalene	< 21.3	ug/Kg	8/4/2021	15:16
n-Butylbenzene	< 8.50	ug/Kg	8/4/2021	15:16
n-Propylbenzene	< 8.50	ug/Kg	8/4/2021	15:16
o-Xylene	< 8.50	ug/Kg	8/4/2021	15:16
p-Isopropyltoluene	< 8.50	ug/Kg	8/4/2021	15:16
sec-Butylbenzene	< 8.50	ug/Kg	8/4/2021	15:16
Styrene	< 21.3	ug/Kg	8/4/2021	15:16
tert-Butylbenzene	< 8.50	ug/Kg	8/4/2021	15:16
Tetrachloroethene	< 8.50	ug/Kg	8/4/2021	15:16
Toluene	< 8.50	ug/Kg	8/4/2021	15:16
trans-1,2-Dichloroethene	< 8.50	ug/Kg	8/4/2021	15:16
trans-1,3-Dichloropropene	< 8.50	ug/Kg	8/4/2021	15:16
Trichloroethene	< 8.50	ug/Kg	8/4/2021	15:16

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 213480

Client: **Stantec**

Project Reference: 213414039.400

Sample Identifier:	TE-04-BLT-A		
Lab Sample ID:	213480-04A	**Date Sampled:**	8/3/2021
Matrix:	Soil	**Date Received:**	8/3/2021

Trichlorofluoromethane	< 8.50	ug/Kg			8/4/2021 15:16
Vinyl chloride	< 8.50	ug/Kg			8/4/2021 15:16

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**96.0**	88.8 - 123		8/4/2021 15:16
4-Bromofluorobenzene	**80.5**	68.7 - 115		8/4/2021 15:16
Pentafluorobenzene	**98.4**	80.2 - 112		8/4/2021 15:16
Toluene-D8	**95.8**	83.5 - 123		8/4/2021 15:16

Method Reference(s): EPA 8260C
EPA 5035A - L

Data File: z03386.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

PARADIGM ENVIRONMENTAL SERVICES, INC.

Method Blank Report

Client: **Stantec**

Project Reference: 213414039.400

Lab Project ID: 213480

Matrix: Soil

RCRA Metals (ICP)

Analyte	Result	Units	Qualifier	Date Analyzed	
Arsenic	<0.500	mg/Kg		8/4/2021	20:30
Barium	<5.00	mg/Kg		8/4/2021	20:30
Cadmium	<0.250	mg/Kg		8/4/2021	20:30
Chromium	<0.500	mg/Kg		8/4/2021	20:30
Lead	<0.500	mg/Kg		8/4/2021	20:30
Selenium	<1.00	mg/Kg		8/4/2021	20:30
Silver	<0.500	mg/Kg		8/4/2021	20:30

Method Reference(s): EPA 6010C
EPA 3050B
Preparation Date: 8/4/2021
Data File: 210804C
QC Batch ID: QC210804soil
QC Number: Blk 1

Report Prepared Tuesday, August 10, 2021

PARADIGM ENVIRONMENTAL SERVICES, INC.

QC Report for Laboratory Control Sample and Control Sample Duplicate

Client: **Stantec**

Project Reference: 213414039.400

Lab Project ID: 213480

Matrix: Soil

RCRA Metals (ICP)

Analyte	LCS Added	LCSD Added	Spike Units	LCS Result	LCSD Result	LCS % Recovery	LCSD % Recovery	% Rec Limits	LCS Outliers	LCSD Outliers	Relative % Difference	RPD Limit	RPD Outliers	Date Analyzed
Arsenic	118	124	mg/Kg	108	115	91.8	93.1	80 - 120			1.41	20		8/4/2021
Barium	118	124	mg/Kg	132	139	112	113	80 - 120			0.544	20		8/4/2021
Cadmium	47.2	49.5	mg/Kg	49.0	51.6	104	104	80 - 120			0.494	20		8/4/2021
Chromium	118	124	mg/Kg	122	129	103	104	80 - 120			0.687	20		8/4/2021
Lead	118	124	mg/Kg	124	131	105	106	80 - 120			0.571	20		8/4/2021
Selenium	118	124	mg/Kg	109	115	92.8	92.9	80 - 120			0.168	20		8/4/2021
Silver	11.8	12.4	mg/Kg	11.1	11.7	93.8	94.6	80 - 120			0.818	20		8/4/2021

Method Reference(s): EPA 6010C
EPA 3050B

Preparation Date: 8/4/2021

Data File: 210804C

QC Number: 1

QC Batch ID: QC210804soil

Report Prepared Tuesday, August 10, 2021

PARADIGM ENVIRONMENTAL SERVICES, INC.

QC Report for Sample Spike and Sample Duplicate

Client: **Stantec** **Lab Project ID:** 213480

Project Reference: 213414039.400

Lab Sample ID: 213480-04 **Date Sampled:** 8/3/2021

Sample Identifier: TE-04-BLT-B **Date Received:** 8/3/2021

Matrix: Soil

RCRA Metals (ICP)

Analyte	Sample Results	Result Units	Spike Added	Spike Result	Spike % Recovery	% Rec Limits	Spike Outliers	Duplicate Result	Relative % Difference	RPD Limit	RPD Outliers	Date Analyzed
Arsenic	**3.71**	mg/Kg	140	113	78.3	75 - 125		4.75	24.7	20	*	8/4/2021
Barium	**60.1**	mg/Kg	140	171	79.0	75 - 125		59.0	1.79	20		8/4/2021
Cadmium	**0.289**	mg/Kg	56.1	43.2	76.5	75 - 125		0.497	53.0	20	*	8/4/2021
Chromium	**9.69**	mg/Kg	140	120	78.5	75 - 125		11.2	14.6	20		8/4/2021
Lead	**62.7**	mg/Kg	140	187	88.8	75 - 125		64.5	2.78	20		8/4/2021
Selenium	< 1.10	mg/Kg	140	112	79.7	75 - 125		<1.12	NC	20		8/4/2021
Silver	< 0.550	mg/Kg	14.0	11.5	82.1	75 - 125		<0.561	NC	20		8/4/2021

Method Reference(s): EPA 6010C
EPA 3050B

Preparation Date: 8/4/2021
210804C

QC Batch ID: QC210804soil

NC = Not Calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added.

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: **Stantec**

Project Reference: 213414039.400

Lab Project ID: 213480

Matrix: Soil

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed	
1,1-Biphenyl	<262	ug/Kg		8/5/2021	13:49
1,2,4,5-Tetrachlorobenzene	<262	ug/Kg		8/5/2021	13:49
1,2,4-Trichlorobenzene	<262	ug/Kg		8/5/2021	13:49
1,2-Dichlorobenzene	<262	ug/Kg		8/5/2021	13:49
1,3-Dichlorobenzene	<262	ug/Kg		8/5/2021	13:49
1,4-Dichlorobenzene	<262	ug/Kg		8/5/2021	13:49
2,2-Oxybis (1-chloropropane)	<262	ug/Kg		8/5/2021	13:49
2,3,4,6-Tetrachlorophenol	<262	ug/Kg		8/5/2021	13:49
2,4,5-Trichlorophenol	<262	ug/Kg		8/5/2021	13:49
2,4,6-Trichlorophenol	<262	ug/Kg		8/5/2021	13:49
2,4-Dichlorophenol	<262	ug/Kg		8/5/2021	13:49
2,4-Dimethylphenol	<262	ug/Kg		8/5/2021	13:49
2,4-Dinitrophenol	<1050	ug/Kg		8/5/2021	13:49
2,4-Dinitrotoluene	<262	ug/Kg		8/5/2021	13:49
2,6-Dinitrotoluene	<262	ug/Kg		8/5/2021	13:49
2-Chloronaphthalene	<262	ug/Kg		8/5/2021	13:49
2-Chlorophenol	<262	ug/Kg		8/5/2021	13:49
2-Methylnapthalene	<262	ug/Kg		8/5/2021	13:49
2-Methylphenol	<262	ug/Kg		8/5/2021	13:49
2-Nitroaniline	<262	ug/Kg		8/5/2021	13:49
2-Nitrophenol	<262	ug/Kg		8/5/2021	13:49
3&4-Methylphenol	<262	ug/Kg		8/5/2021	13:49
3,3'-Dichlorobenzidine	<262	ug/Kg		8/5/2021	13:49
3-Nitroaniline	<262	ug/Kg		8/5/2021	13:49
4,6-Dinitro-2-methylphenol	<524	ug/Kg		8/5/2021	13:49
4-Bromophenyl phenyl ether	<262	ug/Kg		8/5/2021	13:49
4-Chloro-3-methylphenol	<262	ug/Kg		8/5/2021	13:49
4-Chloroaniline	<262	ug/Kg		8/5/2021	13:49

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: **Stantec**
Project Reference: 213414039.400
Lab Project ID: 213480
Matrix: Soil

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed	
4-Chlorophenyl phenyl ether	<262	ug/Kg		8/5/2021	13:49
4-Nitroaniline	<262	ug/Kg		8/5/2021	13:49
4-Nitrophenol	<262	ug/Kg		8/5/2021	13:49
Acenaphthene	<262	ug/Kg		8/5/2021	13:49
Acenaphthylene	<262	ug/Kg		8/5/2021	13:49
Acetophenone	<262	ug/Kg		8/5/2021	13:49
Anthracene	<262	ug/Kg		8/5/2021	13:49
Atrazine	<262	ug/Kg		8/5/2021	13:49
Benzaldehyde	<262	ug/Kg		8/5/2021	13:49
Benzo (a) anthracene	<262	ug/Kg		8/5/2021	13:49
Benzo (a) pyrene	<262	ug/Kg		8/5/2021	13:49
Benzo (b) fluoranthene	<262	ug/Kg		8/5/2021	13:49
Benzo (g,h,i) perylene	<262	ug/Kg		8/5/2021	13:49
Benzo (k) fluoranthene	<262	ug/Kg		8/5/2021	13:49
Bis (2-chloroethoxy) methane	<262	ug/Kg		8/5/2021	13:49
Bis (2-chloroethyl) ether	<262	ug/Kg		8/5/2021	13:49
Bis (2-ethylhexyl) phthalate	<262	ug/Kg		8/5/2021	13:49
Butylbenzylphthalate	<262	ug/Kg		8/5/2021	13:49
Caprolactam	<262	ug/Kg		8/5/2021	13:49
Carbazole	<262	ug/Kg		8/5/2021	13:49
Chrysene	<262	ug/Kg		8/5/2021	13:49
Dibenz (a,h) anthracene	<262	ug/Kg		8/5/2021	13:49
Dibenzofuran	<262	ug/Kg		8/5/2021	13:49
Diethyl phthalate	<262	ug/Kg		8/5/2021	13:49
Dimethyl phthalate	<262	ug/Kg		8/5/2021	13:49
Di-n-butyl phthalate	<262	ug/Kg		8/5/2021	13:49
Di-n-octylphthalate	<262	ug/Kg		8/5/2021	13:49
Fluoranthene	<262	ug/Kg		8/5/2021	13:49

PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: **Stantec**
Project Reference: 213414039.400
Lab Project ID: 213480
Matrix: Soil

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	Units	Qualifier	Date Analyzed	
Fluorene	<262	ug/Kg		8/5/2021	13:49
Hexachlorobenzene	<262	ug/Kg		8/5/2021	13:49
Hexachlorobutadiene	<262	ug/Kg		8/5/2021	13:49
Hexachlorocyclopentadiene	<1050	ug/Kg		8/5/2021	13:49
Hexachloroethane	<262	ug/Kg		8/5/2021	13:49
Indeno (1,2,3-cd) pyrene	<262	ug/Kg		8/5/2021	13:49
Isophorone	<262	ug/Kg		8/5/2021	13:49
Naphthalene	<262	ug/Kg		8/5/2021	13:49
Nitrobenzene	<262	ug/Kg		8/5/2021	13:49
N-Nitroso-di-n-propylamine	<262	ug/Kg		8/5/2021	13:49
N-Nitrosodiphenylamine	<262	ug/Kg		8/5/2021	13:49
Pentachlorophenol	<524	ug/Kg		8/5/2021	13:49
Phenanthrene	<262	ug/Kg		8/5/2021	13:49
Phenol	<262	ug/Kg		8/5/2021	13:49
Pyrene	<262	ug/Kg		8/5/2021	13:49

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2,4,6-Tribromophenol	**61.8**	36.4 - 87.2		8/5/2021	13:49
2-Fluorobiphenyl	**58.5**	44 - 84		8/5/2021	13:49
2-Fluorophenol	**56.5**	43.2 - 82.1		8/5/2021	13:49
Nitrobenzene-d5	**54.1**	36.4 - 82.2		8/5/2021	13:49
Phenol-d5	**58.6**	41.1 - 81.4		8/5/2021	13:49
Terphenyl-d14	**69.3**	43.8 - 103		8/5/2021	13:49

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 8/5/2021
Data File: B55944.D
QC Batch ID: QC210805ABNS
QC Number: 1

PARADIGM
ENVIRONMENTAL SERVICES, INC

QC Report for Laboratory Control Sample

Client: Stantec
Project Reference: 213414039.400
Lab Project ID: 213480
Matrix: Soil

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Spike Added	Spike Units	LCS Result	LCS % Recovery	% Rec Limits	LCS Outliers	Date Analyzed
1,2,4-Trichlorobenzene	2840	ug/Kg			38.8 - 80.6		
1,4-Dichlorobenzene	2840	ug/Kg			38.6 - 76		
2,4-Dinitrotoluene	2840	ug/Kg			43.4 - 93.3		
2-Chlorophenol	4260	ug/Kg			51.8 - 82.6		
4-Chloro-3-methylphenol	4260	ug/Kg			48.4 - 90.3		
4-Nitrophenol	4260	ug/Kg			43.4 - 97		
Acenaphthene	2840	ug/Kg			43.6 - 84.4		
N-Nitroso-di-n-propylamine	2840	ug/Kg			36.1 - 88.4		
Pentachlorophenol	4260	ug/Kg			41.6 - 111		
Phenol	4260	ug/Kg			51.7 - 84.3		
Pyrene	2840	ug/Kg			48.4 - 104		

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 8/5/2021
QC Number: 1
QC Batch ID: QC210805ABNS

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Tuesday, August 10, 2021

PARADIGM ENVIRONMENTAL SERVICES, INC.

QC Report for Matrix Spike and Matrix Spike Duplicate

Client: Stantec

Lab Project ID: 213480

Project Reference: 213414039.400

Lab Sample ID: 213480-02
Sample Identifier: TE-02-BLT-B
Matrix: Soil

Date Sampled: 8/3/2021
Date Received: 8/3/2021
Date Analyzed: 8/6/2021

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Sample Result	Result Units	MS Added	MS Result	MS % Recovery	MSD Added	MSD Result	MSD % Recovery	% Rec. Limits	MS Outlier	MSD Outlier	Relative % Diff.	RPD Limit	RPD Outlier
1,2,4-Trichlorobenzene	< 321	ug/Kg	3260	1790	55.0	3350	1420	42.2	38.8 - 80.6			26.3	44.1	
1,4-Dichlorobenzene	< 321	ug/Kg	3260	1610	49.4	3350	1270	37.9	38.6 - 76		*	26.4	45.5	
2,4-Dinitrotoluene	< 321	ug/Kg	3260	1930	59.2	3350	1680	50.3	43.4 - 93.3			16.3	55.8	
2-Chlorophenol	< 321	ug/Kg	4890	2680	54.8	5030	2190	43.5	51.8 - 82.6		*	23.0	22.1	*
4-Chloro-3-methylphenol	< 321	ug/Kg	4890	2940	60.2	5030	2490	49.6	48.4 - 90.3			19.3	27.5	
4-Nitrophenol	< 321	ug/Kg	4890	1900	38.8	5030	1650	32.9	43.4 - 97	*	*	16.5	44	
Acenaphthene	< 321	ug/Kg	3260	1820	55.8	3350	1550	46.3	43.6 - 84.4			18.6	44.7	
N-Nitroso-di-n-propylamine	< 321	ug/Kg	3260	1550	47.4	3350	1270	37.8	36.1 - 88.4			22.5	48.6	
Pentachlorophenol	< 642	ug/Kg	4890	3650	74.5	5030	3180	63.3	41.6 - 111			16.3	39.4	
Phenol	< 321	ug/Kg	4890	2490	50.9	5030	2100	41.7	51.7 - 84.3	*	*	19.8	23.6	
Pyrene	< 321	ug/Kg	3260	2030	62.3	3350	1670	49.9	48.4 - 104			22.1	52.9	

Any estimated values are displayed, and derived values calculated, based on numeric result only. See primary analytical report for data flags.

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Report Prepared Tuesday, August 10, 2021

PARADIGM
ENVIRONMENTAL SERVICES, INC

QC Report for Matrix Spike and Matrix Spike Duplicate

Client: Stantec

Lab Project ID: 213480

Project Reference: 213414039.400

Lab Sample ID: 213480-02
Sample Identifier: TE-02-BLT-B
Matrix: Soil

Date Sampled: 8/3/2021
Date Received: 8/3/2021
Date Analyzed: 8/6/2021

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Sample Result	Result Units	MS Added	MS Result	MS % Recovery	MSD Added	MSD Result	MSD % Recovery	% Rec. Limits	MS Outlier	MSD Outlier	Relative % Diff.	RPD Limit	RPD Outlier

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 8/5/2021
Data File(s): B56008.D
B56009.D
B56007.D
1
QC Batch ID: QC210805ABNS

Any estimated values are displayed, and derived values calculated, based on numeric result only. See primary analytical report for data flags.

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Report Prepared Tuesday, August 10, 2021

Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.
"E" = Result has been estimated, calibration limit exceeded.
"Z" = See case narrative.
"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.
"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.
"B" = Method blank contained trace levels of analyte. Refer to included method blank report.
"J" = Result estimated between the quantitation limit and half the quantitation limit.
"L" = Laboratory Control Sample recovery outside accepted QC limits.
"P" = Concentration differs by more than 40% between the primary and secondary analytical columns.
"NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.
"" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted.*
"(1)" = Indicates data from primary column used for QC calculation.
"A" = denotes a parameter for which ELAP does not offer approval as part of their laboratory certification program.
"F" = denotes a parameter for which Paradigm does not carry certification, the results for which should therefore only be used where ELAP certification is not required, such as personal exposure assessment.

GENERAL TERMS AND CONDITIONS
LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, tern or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty. Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.

Scope and Compensation. LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB wi use LAB default method for all tests unless specified otherwise on the Work Order.

Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.

Prices. Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs may incur additional fees.

Limitations of Liability. In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re-perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services.

LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results.

All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB.

Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.

Hazard Disclosure. Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.

Sample Handling. Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises.

Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on th final report.

Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples.

LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.

Legal Responsibility. LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.

Assignment. LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.

Force Majeure. LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.

Law. This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

PARADIGM

CHAIN OF CUSTODY

REPORT TO:	INVOICE TO:	
CLIENT: Stantec	CLIENT:	LAB PROJECT ID: 213480
ADDRESS: 61 Commercial St. Suite 100	ADDRESS: SAME	Quotation #:
CITY: Rochester STATE: NY ZIP: 14614	CITY: STATE: ZIP:	Email:
PHONE: 585-775-3835	PHONE:	
ATTN: Steve Campbell	ATTN:	

PROJECT REFERENCE: 213414039.400

Matrix Codes:
AQ - Aqueous Liquid; NQ - Non-Aqueous Liquid; WA - Water; WG - Groundwater; DW - Drinking Water; WW - Wastewater; SO - Soil; SL - Sludge; SD - Solid; PT - Paint; WP - Wipe; CK - Caulk; OL - Oil; AR - Air

REQUESTED ANALYSIS

DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	8260B TCL	8260D TCL + TICs	8082A	6010D/7471B Metals						REMARKS	PARADIGM LAB SAMPLE NUMBER
8/3/21	0828		X	TE-01-BLT	So	2	X	X	X	X						Per email add (-A) to	01A
8/3/21	0900		X	TE-02-BLT	So	2	X	X	X	X						Sample IDs for VOA jars	02A
8/3/21	0935		X	TE-03-BLT	So	2	X	X	X	X						and (-B) to sample IDs	03A
8/3/21	1011		X	TE-04-BLT	So	2	X	X	X	X						for SVOA/PCB/metals jars.	04A
																A for VOA aliquots. GP 8/4/21	
																11°C iced started in field MM 8/3/21 1520	

Turnaround Time		Report Supplements			
Availability contingent upon lab approval; additional fees may apply.					
Standard 5 day	X	None Required	X	None Required	
10 day		Batch QC		Basic EDD	
Rush 3 day		Category A		NYSDEC EDD	
Rush 2 day		Category B			
Rush 1 day					
Date Needed _____ please indicate date needed: _____		Other please indicate package needed: _____		Other EDD please indicate EDD needed: Stantec EDD	X

Sampled By — Date/Time: 8/3/2021 1515

Relinquished By — Date/Time: 8/3/21 1515

Received By — Date/Time: 8/3/21 1521

Received @ Lab By — Date/Time

Total Cost:

P.I.F.

By signing this form, client agrees to Paradigm Terms and Conditions (reverse).

See additional page for sample conditions.

PARADIGM

Chain of Custody Supplement

Client: Stantec **Completed by:** Molly Kail

Lab Project ID: 213480 **Date:** 8/3/21

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

NELAC compliance with the sample condition requirements upon receipt

Condition	Yes	No	N/A
Container Type	✓	5035	
Comments			
Transferred to method-compliant container			✓
Headspace (<1 mL)			✓
Comments			
Preservation			✓
Comments			
Chlorine Absent (<0.10 ppm per test strip)			✓
Comments			
Holding Time	✓		
Comments			
Temperature	✓		met
Comments	11°C and started in field		
Compliant Sample Quantity/Type	✓		
Comments			

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

ATTACHMENT **E ASBESTOS** LABORATORY ANALYTICAL REPORTS

EMSL Analytical, Inc.

2975 Brighton Henrietta Town Line Rd ,100 Ste 130 Rochester, NY 14623
Tel/Fax: (585) 957-9436 / (585) 957-9437
http://www.EMSL.com / rochesterlab@EMSL.com

EMSL Order: 532101324
Customer ID: SRNY42
Customer PO:
Project ID:

Attention: Amanda Matkosky
Stantec
61 Commercial Street
Suite 100
Rochester, NY 14614-1009
Project: 213414039, NY

Phone: (585) 413-5208
Fax: (585) 424-5951
Received Date: 08/03/2021 11:38 AM
Analysis Date: 08/12/2021
Collected Date: 07/30/2021

Test Report:Asbestos Analysis of Bulk Material

Test	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos
Sample ID SACM-1-1		**Description**	Northern Wall - Top JF		
532101324-0001		**Homogeneity**	Heterogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	08/12/2021	Various		100.00% Other	**Inconclusive: None Detected**
TEM NYS 198.4 NOB	08/12/2021	Various		100.00% Other	**None Detected**
Sample ID SACM-1-2		**Description**	Northern Wall - Bottom		
532101324-0002		**Homogeneity**	Heterogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	08/12/2021	Various		100.00% Other	**Inconclusive: None Detected**
TEM NYS 198.4 NOB	08/12/2021	Various		100.00% Other	**None Detected**
Sample ID SACM-2-1		**Description**	Middle Wall - Top JF		
532101324-0003		**Homogeneity**	Heterogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	08/12/2021	Various	<1.00% Glass	100.00% Other	**Inconclusive: None Detected**
TEM NYS 198.4 NOB	08/12/2021	Various		100.00% Other	**None Detected**
Sample ID SACM-2-2		**Description**	Middle Wall - Bottom		
532101324-0004		**Homogeneity**	Heterogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	08/12/2021	Various	<1.00% Glass	100.00% Other	**Inconclusive: None Detected**
TEM NYS 198.4 NOB	08/12/2021	Various		100.00% Other	**None Detected**
Sample ID SACM-3-1-Paint		**Description**	Wall by Gate - Light Tan Paint SC/P		
532101324-0005		**Homogeneity**	Homogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	08/12/2021	Tan		100.00% Other	**Inconclusive: None Detected**
TEM NYS 198.4 NOB	08/12/2021	Tan		100.00% Other	**None Detected**

Initial report from: 08/12/2021 13:27:26

EMSL Analytical, Inc.
2975 Brighton Henrietta Town Line Rd ,100 Ste 130 Rochester, NY 14623
Tel/Fax: (585) 957-9436 / (585) 957-9437
http://www.EMSL.com / rochesterlab@EMSL.com

EMSL Order: 532101324
Customer ID: SRNY42
Customer PO:
Project ID:

Test Report:Asbestos Analysis of Bulk Material

Test	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos
Sample ID SACM-3-1-Plaster *532101324-0005A*		**Description** Wall by Gate - Light Tan Paint SC/P **Homogeneity** Homogeneous			
PLM NYS 198.1 Friable	08/12/2021	Gray		100.00% Non-fibrous (other)	**None Detected**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB					**Not Analyzed**
TEM NYS 198.4 NOB					**Not Analyzed**
Sample ID SACM-3-2-Paint *532101324-0006*		**Description** Wall by Gate - Light Tan Paint SC/P **Homogeneity** Heterogeneous			
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	08/12/2021	Gray/ Tan		100.00% Other	**Inconclusive: None Detected**
Result includes a small amount of inseparable attached material					
TEM NYS 198.4 NOB	08/12/2021	Gray/ Tan		100.00% Other	**None Detected**
Sample ID SACM-3-2-Plaster *532101324-0006A*		**Description** Wall by Gate - Light Tan Paint SC/P **Homogeneity** Homogeneous			
PLM NYS 198.1 Friable	08/12/2021	Gray		100.00% Non-fibrous (other)	**None Detected**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB					**Not Analyzed**
TEM NYS 198.4 NOB					**Not Analyzed**
Sample ID SACM-3-3-Paint *532101324-0007*		**Description** Wall by Gate - Light Tan Paint SC/P **Homogeneity** Heterogeneous			
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	08/12/2021	Various		100.00% Other	**Inconclusive: None Detected**
Result includes a small amount of inseparable attached material					
TEM NYS 198.4 NOB	08/12/2021	Various		100.00% Other	**None Detected**
Sample ID SACM-3-3-Plaster *532101324-0007A*		**Description** Wall by Gate - Light Tan Paint SC/P **Homogeneity** Homogeneous			
PLM NYS 198.1 Friable	08/12/2021	Gray		100.00% Non-fibrous (other)	**None Detected**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB					**Not Analyzed**
TEM NYS 198.4 NOB					**Not Analyzed**
Sample ID SACM-4-1-Paint *532101324-0008*		**Description** Wall by Gate - Dark Tan Paint SC/P **Homogeneity** Heterogeneous			
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	08/12/2021	Various		100.00% Other	**Inconclusive: None Detected**
Result includes a small amount of inseparable attached material					
TEM NYS 198.4 NOB	08/12/2021	Various		100.00% Other	**None Detected**

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Tel/Fax: (585) 957-9436 / (585) 957-9437
http://www.EMSL.com / rochesterlab@EMSL.com

EMSL Order: 532101324
Customer ID: SRNY42
Customer PO:
Project ID:

Test Report:Asbestos Analysis of Bulk Material

Test	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos
Sample ID SACM-4-1-Plaster *532101324-0008A*		**Description** Wall by Gate - Dark Tan Paint SC/P **Homogeneity** Homogeneous			
PLM NYS 198.1 Friable	08/12/2021	Gray		100.00% Non-fibrous (other)	**None Detected**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB					**Not Analyzed**
TEM NYS 198.4 NOB					**Not Analyzed**
Sample ID SACM-4-2-Paint *532101324-0009*		**Description** Wall by Gate - Dark Tan Paint SC/P **Homogeneity** Heterogeneous			
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	08/12/2021	Various		100.00% Other	**Inconclusive: None Detected**
Result includes a small amount of inseparable attached material					
TEM NYS 198.4 NOB	08/12/2021	Various		100.00% Other	**None Detected**
Sample ID SACM-4-2-Plaster *532101324-0009A*		**Description** Wall by Gate - Dark Tan Paint SC/P **Homogeneity** Homogeneous			
PLM NYS 198.1 Friable	08/12/2021	Gray		100.00% Non-fibrous (other)	**None Detected**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB					**Not Analyzed**
TEM NYS 198.4 NOB					**Not Analyzed**
Sample ID SACM-4-3-Paint *532101324-0010*		**Description** Wall by Gate - Dark Tan Paint SC/P **Homogeneity** Heterogeneous			
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	08/12/2021	Various		100.00% Other	**Inconclusive: None Detected**
Result includes a small amount of inseparable attached material					
TEM NYS 198.4 NOB	08/12/2021	Various		100.00% Other	**None Detected**
Sample ID SACM-4-3-Plaster *532101324-0010A*		**Description** Wall by Gate - Dark Tan Paint SC/P **Homogeneity** Homogeneous			
PLM NYS 198.1 Friable	08/12/2021	Gray		100.00% Non-fibrous (other)	**None Detected**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB					**Not Analyzed**
TEM NYS 198.4 NOB					**Not Analyzed**
Sample ID SACM-5-1-Paint *532101324-0011*		**Description** Southern Wall - SC/P **Homogeneity** Heterogeneous			
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	08/12/2021	Gray		100.00% Other	**Inconclusive: None Detected**
Result includes a small amount of inseparable attached material					
TEM NYS 198.4 NOB	08/12/2021	Gray		100.00% Other	**None Detected**

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EMSL Order: 532101324
Customer ID: SRNY42
Customer PO:
Project ID:

Test Report:Asbestos Analysis of Bulk Material

Test	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos
Sample ID SACM-5-1-Plaster *532101324-0011A*		**Description** Southern Wall - SC/P **Homogeneity** Homogeneous			
PLM NYS 198.1 Friable	08/12/2021	Gray		100.00% Non-fibrous (other)	**None Detected**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB					**Not Analyzed**
TEM NYS 198.4 NOB					**Not Analyzed**
Sample ID SACM-5-2-Paint *532101324-0012*		**Description** Southern Wall - SC/P **Homogeneity** Heterogeneous			
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	08/12/2021	Various		100.00% Other	**Inconclusive: None Detected**
Result includes a small amount of inseparable attached material					
TEM NYS 198.4 NOB	08/12/2021	Various		100.00% Other	**None Detected**
Sample ID SACM-5-2-Plaster *532101324-0012A*		**Description** Southern Wall - SC/P **Homogeneity** Homogeneous			
PLM NYS 198.1 Friable	08/12/2021	Gray		100.00% Non-fibrous (other)	**None Detected**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB					**Not Analyzed**
TEM NYS 198.4 NOB					**Not Analyzed**
Sample ID SACM-5-3-Paint *532101324-0013*		**Description** Southern Wall - SC/P **Homogeneity** Heterogeneous			
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	08/12/2021	Various		100.00% Other	**Inconclusive: None Detected**
TEM NYS 198.4 NOB	08/12/2021	Various		100.00% Other	**None Detected**
Sample ID SACM-5-3-Plaster *532101324-0013A*		**Description** Southern Wall - SC/P **Homogeneity** Homogeneous			
PLM NYS 198.1 Friable	08/12/2021	Gray		100.00% Non-fibrous (other)	**None Detected**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB					**Not Analyzed**
TEM NYS 198.4 NOB					**Not Analyzed**
Sample ID SACM-6-1 *532101324-0014*		**Description** Southern Wall - JF **Homogeneity** Homogeneous			
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	08/12/2021	White		100.00% Other	**Inconclusive: None Detected**
TEM NYS 198.4 NOB	08/12/2021	White		100.00% Other	**None Detected**

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EMSL Order: 532101324
Customer ID: SRNY42
Customer PO:
Project ID:

Test Report:Asbestos Analysis of Bulk Material

Test	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos
Sample ID SACM-6-2 *532101324-0015*		**Description**	Southern Wall - JF		
		Homogeneity	Homogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	08/12/2021	White		100.00% Other	**Inconclusive: None Detected**
TEM NYS 198.4 NOB	08/12/2021	White		100.00% Other	**None Detected**

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Customer ID: SRNY42
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Project ID:

Test Report:Asbestos Analysis of Bulk Material

The samples in this report were submitted to EMSL for analysis by Asbestos Analysis of Bulk Materials via NYS ELAP Approved Methods. The reference number for these samples is the EMSL Order ID above. Please use this reference number when calling about these samples.

Report Comments:

Sample Receipt Date: 8/3/2021 Sample Receipt Time: 11:38 AM
Analysis Completed Date: 8/12/2021 Analysis Completed Time: 7:55 AM

Analyst(s):

Jessica Schwartz PLM NYS 198.1 Friable (9)

Jessica Schwartz PLM NYS 198.6 NOB (15)

Peter Donato TEM NYS 198.4 NOB (15)

Samples reviewed and approved by:

Peter Donato, Laboratory Manager
or Other Approved Signatory

Samples analyzed by EMSL Analytical, Inc. Rochester, NY NYS ELAP 12088, NVLAP Lab Code 600183-0

Initial report from: 08/12/2021 13:27:26

ATTACHMENT **F**

MONROE COUNTY SHORT TERM DISCHARGE PERMIT APPLICATION

Department of Environmental Services

Monroe County, New York

Adam J. Bello
County Executive

Michael J. Garland, P.E.
Director

RE: Specialty Short Term Discharge Permit

Enclosed is an application for a Short Term Discharge Permit. Be advised this Permit is a legal document. Please provide all requested information accurately. An officer of the company must sign the permit or appoint a duly authorized representative. The letter of appointment must be included with the permit package.

Monroe County Pure Waters, under Section 57 of the Worker's Compensation Law and Section 220 – Subdivision 8 of the Disability Benefits Law, is required to have on file proof that your company has workers compensation and disability benefits for your employees. A form from your insurance carrier stating such coverage will thus be required before your permit can be processed.

A check for the permit fee of $125.00 should be made payable to the Director of Finance, County of Monroe. All copies of the application, the form from your insurance carrier, and the check should be mailed to the following address:

Monroe County Department of Environmental Services
Industrial Waste Control
145 Paul Road, Bldg. 1
Rochester, New York 14624

Should you have any questions regarding the permit application, please feel free to call Industrial Waste Control at (585) 753-7600, Option #4.

SPECIALTY SHORT TERM DISCHARGE PERMIT

APPLICATION PROCEDURE

1) The applicant must submit a letter requesting permission to discharge and a completed permit application. The letter must contain the information listed in item #2 below.

2) The following information is required before considering a request for discharge:
   a) Contractor or environmental representative name
   b) Contact person name, office phone #, cell phone #, fax #, email
   c) Site name, address
   d) Description of site work and history of site. Site history should include current and past businesses and activities or products produced.
   e) Former/current contents of underground storage tanks and/or material spilled and/or history of site contaminants.
   f) Quantity of wastewater to be discharged
   g) Method of treatment (if applicable)
   h) Method of discharge (direct to sewer, pumped, gravity, hauled)
   i) Method to control solids discharge (if applicable)
   j) Expected date of discharge
   k) Project duration

3) Monroe County Pure Waters, under Section 57 of the Worker's Compensation Law and Section 220 - Subdivision 8 of the Disability Benefits Law, is required to have on file proof that your company has worker's compensation and disability benefits for your employees. A form from your insurance carrier stating such coverage will thus be required before your permit can be processed.

4) A check, for the initial permit fee of $125.00, should be made payable to the Director of Finance, County of Monroe. The request to discharge letter, the application, the insurance form and the check should be mailed to:

Monroe County Department of Environmental Services
Industrial Waste Control
145 Paul Road, Bldg. 1
Rochester, New York 14624

As an alternative - the request to discharge letter, the completed application and the insurance form may be faxed to (585) 324-1213. The check may be given to the inspector at time of field inspection.

5) Monroe County will schedule an inspection of the site upon receipt of the above listed material.

6) Please call the Industrial Waste office at (585) 753-7600, Option #4, for additional information.

GENERAL REQUIRMENTS AND PETROLEUM IMPACTED WATER RULES AND REGULATIONS

1) A Specialty Short Term Discharge Permit is required for discharges to the Monroe County Sewer System or Wastewater Treatment Plant respectively. The permit fee is $125.00 (payable to the Director of Finance, County of Monroe).

2) The following conditions shall apply to this permit:

a) Required analytical testing of wastewater shall be submitted to this office for review and approval prior to discharge. Required analytical testing will be based on site specific contaminants, site history and the Monroe County Sewer Use Law. Analytical testing will be developed from the permit application. Any sample data collected and submitted prior to the permit application may not be acceptable for approval by the County.

b) The Monroe County limit for the summation of all Volatile Organic Compounds and Semi Volatile Organic Compounds (total VOC's) is 2.13 mg/l. Detection levels must be at or less than 10 ug/l. Any detection level above 10 ug/l will be treated as a measured concentration. For petroleum impacted water the analytical shall include purgeable halocarbons, aromatics, and polynuclear aromatic hydrocarbons depending on the site contaminants.

c) Required testing includes, but is not limited to:

(1) Gasoline impacted water – Purgeable Aromatics; and Methyl Tertiary Butyl Ether (MTBE) - monitoring only. Limit not applicable at this time.

(2) Diesel or Fuel Oil impacted water – Polynuclear Aromatic Hydrocarbons.

d) The applicant must identify a suitable sanitary sewer discharge point. Monroe County will confirm the discharge point in the City of Rochester and the Towns of Gates, Chili and Ogden. Should the applicant be working in a location NOT described above, it will be the applicant's responsibility to contact the applicable Town and/or Village for similar service. The Town/Village of Webster, and Honeoye Falls are NOT part of the Monroe County Sewer System.

e) A maximum of 10 gpm discharge rate is permitted. Approval must be received from the appropriate agency (noted above) to exceed this rate.

f) Monroe County will conduct a field inspection of the site and issue a permit pending the completion and/or submission of all required information.

SPECIALTY SHORT TERM DISCHARGE PERMIT

County of Monroe Pure Waters District No. _____ ST- Permit No: _____

Fee: $125.00 Expires: _____

FirmName_____
Address_____
_____

Type of Business or Service _____

I. The above-named applicant is permitted to discharge wastes into the Monroe County Pure Waters Sewer system or Tributary thereto as applied for by an application dated_____ and verified by the applicant except the Director of Pure Waters requires the following terms and conditions to govern the permitted discharge:
A._____
B._____
C._____

II. The applicant further agrees to:
1. Accept and abide by all provisions of the Sewer Use Law of Monroe County and of all pertinent rules or regulations now in force or shall be adopted in the future.
2. Notify the Director of Pure Waters in writing of any revision to the plant sewer system or any change in industrial wastes discharge to the public sewers as listed in the application. The latter encompasses either (1) an increase or decrease in average daily volume or strength of wastes listed in the application or (2) new wastes that were not listed in the application.
3. Furnish the Director of Pure Waters upon request any additional information related to the installation or use of sewer or drain for which this permit is sought.
4. Operate and maintain any waste pretreatment facilities, as may be required as a condition of the acceptance into the public sewer of the industrial wastes involved, in an efficient manner at all times, and at no expense to the County.
5. Cooperate with the Director of Pure Waters or his representatives in their inspecting, sampling, and study of wastes, or the facilities provided for pretreatment.
6. Notify the Director of Pure Waters immediately of any accident, negligence, breakdown of pretreatment equipment, or other occurrence that occasions discharge to the public sewers of any wastes or process waters not covered by this permit.

Applicant's Name (please print)_____

Applicant's Signature _____ Date _____

Applicant's Title _____ Phone _____

Emergency Contact _____ Phone _____

Renewal Approved by: _____ Issued this ___ day of _____ 20 ___.
Michael J. Garland, P.E.
Director of Environmental Services-Pure Waters
Monroe County

ATTACHMENT **G**

BENEFICIAL USE DETERMINATION PETTITION FORM

Beneficial Use Determination Petition – General

OFFICIAL USE ONLY

DATE RECEIVED

PROJECT NUMBER

STAFF INITIALS

DATE

6 NYCRR Part 360.12(c) addresses various pre-determined wastes, residual or by-product materials which, when used in the manner noted in that subdivision, are not considered solid wastes (for the purposes of Parts 360-369). In situations where a particular proposed reuse is not specifically identified in that subdivision, material generators and potential users may petition the Department for a case-specific beneficial use determination (BUD) under Subdivision 360.12(d). This form has been developed to assist applicants in obtaining a case-specific BUD. Before using this form, the petitioner should determine whether another of the BUD petition forms may be appropriate for their material. If no form appears applicable, this form should be used.

Note: This form is intended to address the requirements of 6 NYCRR Part 360.12(d) only and does not cover other federal, state, or local approvals that may be necessary for use of the waste, residual or by-product material.

Petitioner Information

Full Name: _____
Last *First* *M.I.*

Affiliation: _____ _____
Company *Title*

Primary Address: _____ _____
Street Address *City/Town*

_____ _____
County *Zip Code*

Primary Phone: (____) _____ **Primary Email:** _____

Waste, Residual or By-Product Information

Waste Information: _____ _____
Type of Waste, Residual or By-Product *Estimated Annual Quantity (in tons or cubic yards)*

Source or Generation Facility: _____ _____
Facility Name *DEC Facility Authorization, if any (DEC registration; DEC permit; Out of State; Other)*

_____
Source Facility Location (Address, Town, County)

Details of Use: _____ _____
Brief Description of How Material Will Be Used *Duration of project (up to 5 years- can be renewed)*

Location(s) of Use: _____ _____
Location of use, if applicable (Name and Address) *Quantity in tons or cubic yards at this location, annually*

_____ _____
Location of use, if applicable (Name and Address) *Quantity in tons or cubic yards at this location, annually*

NOTE: Attach additional sheets to list other sources of materials and locations of use, if applicable.

Attachments Supporting a BUD

Note to Petitioners : The following is a list of attachments which are commonly found in approvable BUD petitions. This list is not intended to be all inclusive. Each BUD petition is unique and the type of information which may be used to support a determination of beneficial use will vary. Petitioners are encouraged to include all relevant documentation showing that the proposed use is truly beneficial (does not constitute disposal), will not pose a risk to the environment or to public health and safety and will not result in nuisance conditions.

Attached	N/A	
☐	☐	Physical description of waste, residual or by-product material proposed for beneficial use, including weight and volume annually.
☐	☐	Details concerning how the waste will be used as a substitute for a commercial product or raw material. Figures may be helpful; for example, a diagram or flowchart for a manufacturing process, or a plan drawing for use of a material at a construction site.
☐	☐	Detailed description of source, process or treatment system from which the waste originates. Include any and all process chemicals added and their quantity.
☐	☐	Representative physical/geotechnical testing results for the waste with comparison to industry or government standard(s) applicable to the proposed use.
☐	☐	Analytical data concerning the chemical and physical characteristics of the waste.
☐	☐	Analytical data concerning the chemical and physical characteristics of each type of proposed product.
☐	☐	Analytical data concerning the chemical and physical characteristics of any analogous raw material or commercial product for which the waste is proposed to be an effective substitute.
☐	☐	Justification that the waste functions as an effective substitute for the commercial product or raw material and that the use meets or exceeds government or industry standards or specifications.
☐	☐	Demonstration of market (see 360.12(d)(2)(vi)).
☐	☐	Comparison of chemical and physical characteristics of the waste to applicable or relevant and appropriate criteria for beneficial use. For materials placed on the land as fill or cover, note requirements of 360.12(d)(3)(vi).
☐	☐	Describe any other potential adverse effects from use of the waste (including but not limited to odors, roots or seeds of invasive species).
☐	☐	Waste Control Plan: 1. Procedure for periodic testing of the waste, and if necessary the product(s). 2. Type of storage of waste and maximum anticipated storage volume. Note: Storage cannot exceed 365 days without Department approval. 3. Procedures for run-on and run-off control in storage areas. 4. What best management practices will be followed to minimize uncontrolled dispersion of the waste prior to and during beneficial use?

If Petition Request Attachments are not applicable state why. Attach additional sheets as necessary.

Solid Waste Facility Permit Requirements

Yes	No	
☐	☐	Will the proposed material require decontamination or processing before beneficial use? (If yes, describe)
☐	☐	Will a fee be charged for use by any receiving site for acceptance and use of the material?

Certification

I hereby affirm under penalty of perjury that information provided on this form (including attached statements and exhibits) was prepared by me or under my supervision and direction and is true to the best of my knowledge and belief, and that I have authority or am authorized to sign this application pursuant to 6 NYCRR Part 360. I am aware that any false statement made herein is punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law and ECL Section 3-0301(2)(Q).

Signature	Print Name	Date

Before you submit this application, please verify:

- ☐ All fields of the application are complete (indicate N/A (not applicable) if appropriate).
- ☐ You have signed and dated above.
- ☐ You have enclosed all supporting information.

Send this completed form and any supporting attachments to the **Materials Management Supervisor** in your DEC Region (for help, see http://www.dec.ny.gov/about/50230.html), with a copy to:

Kathleen Prather, P.E.
Bureau of Permitting and Planning
Division of Materials Management
NYSDEC
625 Broadway, 9th Floor
Albany, NY 12233-7260

Please contact Ms. Prather at (518) 402-8678 or benuse@dec.ny.gov if you have any questions about petitioning for a case-specific BUD.