August 11, 2025
File: PE4546-LET.13

Selkirk and Main Holdings Inc.
105 Atlantic Avenue
Toronto, Ontario
M6S 1Y1

Attention: **Mr. Daniel Byrne**

Subject: **Phase II - Environmental Site Assessment Update**
280 Montgomery Street
300 Montgomery Street
2 Montreal Road
3 Selkirk Street
Ottawa, Ontario

PATERSON GROUP

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Environmental Engineering
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Materials Testing
Building Science
Rural Development Design
Temporary Shoring Design
Retaining Wall Design
Noise and Vibration Studies

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Dear Sir,

Further to your request, Paterson Group (Paterson) carried out a Phase II - Environmental Site Assessment (ESA) Update for the aforementioned property. This report updates a Phase II-ESA prepared by Paterson Group entitled “Phase II-Environmental Assessment Update, 3 Selkirk Street, 2 Montreal Road, 280 Montgomery Street, and 300 Montgomery Street, Ottawa, Ontario” dated August 9, 2024. This report is only used to update the site conditions for the purposes of filing a Record of Site Condition (RSC) on the property.

Conceptual Site Model

The following section has been prepared in accordance with the requirements of O.Reg. 153/04 - Record of Site Condition regulation as amended, made under the Environmental Protection Act. Conclusions and recommendations are discussed in a subsequent section.

Site Description

The RSC Property and RA Property consist of the properties municipally address as 2 Montreal Road, 3 Selkirk Street, and 280 Montgomery Street in the City of Ottawa, Ontario. The RSC Property and RA Property boundaries are defined by the same boundary and are shown on the Plan of Survey Lots 2, 4, 6, 8, 34, 35 and part of lots 1, 10, 32 and 33 Registered Plan 49 and lots 14, 15, 16 and part of lots 1, 2, 3, 4, and 5 Registered Plan 51 and part of lot 7 Concession Junction Gore, Geographic Township of Gloucester, City of Ottawa, prepared by Annis, O’Sullivan, Vollebekk Ltd, dated July 30, 2024. According to the survey, the RSC Property has an area of 15,226 m^2. The

applicable site condition standards for the RSC Property are the Ministry of the Environment, Conservation and Parks (MECP) Table 3 Standards (coarse textured soil in a non-potable groundwater condition for residential/parkland/institutional land use).

Potentially Contaminating Activities and Areas of Potential Environmental Concern

Based on the results of the Phase I ESA and Phase I ESA Updates completed for the RSC Property, Potentially Contaminating Activities (PCAs) were identified to represent Areas of Potential Environmental Concern (APECs) with respect to the RSC Property. The APECs on the RSC Property are summarized in the table below with their respective Contaminants of Potential Concern (CPC). Areas of Potential Environmental Concern are illustrated on Drawing PE4546 – 1 – Site Plan.

Area of potential environmental concern	Location of area of potential environmental concern on phase one property	Potentially contaminating activity	Location of PCA (on-site or off-site)	Contaminants of potential concern	Media potentially impacted (Groundwater, soil and/or sediment)
APEC 1 – Former Gasoline Underground Storage Tanks (USTs)	Northwestern portion of RSC Property	Item 28 – Gasoline and Associated Products Storage in Fixed Tanks	On-Site	PHC, BTEX, VOCs and Metals	Soil, Groundwater
APEC 2 – Former Pump Islands	Northwestern portion of RSC Property	Item 28 – Gasoline and Associated Products Storage in Fixed Tanks	On-Site	PHC, BTEX, VOCs and Metals	Soil, Groundwater
APEC 3 – Former Pump Islands	Northern portion of RSC Property	Item 28 – Gasoline and Associated Products Storage in Fixed Tanks	On-Site	PHC, BTEX, VOCs and Metals	Soil, Groundwater
APEC 4 – Former Gasoline Service Station	Northern portion of RSC Property	Item 28 – Gasoline and Associated Products Storage in Fixed Tanks	On-Site	PHC, BTEX, VOCs and Metals	Soil, Groundwater
APEC 5 – Former Automotive Service Garage	North central portion of RSC Property	52: Storage, maintenance, fueling and repair of equipment, vehicles, and material used to maintain transportation systems	On-Site	PHC, BTEX, VOCs, PAHs	Soil, Groundwater

Area of potential environmental concern	Location of area of potential environmental concern on phase one property	Potentially contaminating activity	Location of PCA (on-site or off-site)	Contaminants of potential concern	Media potentially impacted (Groundwater, soil and/or sediment)
APEC 6 – Fill Material of Unknown Quality	Entire RSC Property	Item 30 – Importation of Fill Material of Unknown Quality	On-Site	Metals, mercury, chromium (VI), arsenic, selenium antimony and PAHs	Soil (fill material)
APEC 7A – Former Lumber Yard (prior to 1930)	Southern Portion of RSC Property	Not Applicable Storage of Lumber	On-Site	Metals, mercury, chromium (VI), arsenic, selenium antimony	Soil
APEC 7B – Former Lumber Yard (prior and post 1930)	Southeastern Portion of RSC Property	Not Applicable Storage of Lumber	On-Site	Metals, mercury, chromium (VI), arsenic, selenium antimony, ABNs, CPs	Soil
APEC 8 – Former Potential Dry Cleaner	South Central portion of RSC Property	Item 37- Operation of Dry Cleaning Equipment (where chemicals are used)	On-Site	VOCs	Soil, Groundwater
APEC 9- Hydro Vault	South central portion of RSC Property	Item 55 – Transformer Manufacturing, Processing and Use	On-Site	PHC, BTEX, PCBs	Soil
APEC 10 – De-icing Agents Used for the Purpose of Safety[1]	Entire RSC Property	Not applicable	On-Site	EC, SAR	Soil
		De-icing Agents Used for the Purpose of Safety[1]		Sodium, Chloride	Groundwater
APEC 11 – Off Site Gasoline Service Station and Former Automotive Service Garage	Northeastern portion of RSC Property	Item 28 – Gasoline and Associated Products Storage in Fixed Tanks	Off-Site	PHC, BTEX	Groundwater
		52: Storage, maintenance, fueling and repair of equipment, vehicles, and material used to maintain transportation systems	Off-Site	PHC, BTEX, VOCs, PAHs	Groundwater
APEC 12 – Off-site former USTs	Northwestern portion of RSC Property	Item 28 – Gasoline and Associated Products Storage in Fixed Tanks	Off-Site	PHC, BTEX	Soil/groundwater
APEC 13- Off-Site Automotive Service Garage	Eastern central portion of RSC Property	52: Storage, maintenance, fueling and repair of equipment, vehicles,	Off-Site	PHC, BTEX, VOCs, PAHs	Groundwater

Area of potential environmental concern	Location of area of potential environmental concern on phase one property	Potentially contaminating activity	Location of PCA (on-site or off-site)	Contaminants of potential concern	Media potentially impacted (Groundwater, soil and/or sediment)
		and material used to maintain transportation systems			
APEC 14 – Off Site Gasoline Service Station	Northern portion of RSC Property	Item 28 – Gasoline and Associated Products Storage in Fixed Tanks	Off-Site	PHC, BTEX	Groundwater
APEC 15 – Off-Site Potential Former Cleaners and Other Off-Site Industries	Northeastern portion of RSC Property	Item 37- Operation of Dry Cleaning Equipment (where chemicals are used) Canadian Carbon and Ribbon Manufacturer – no applicable item in Table 2 Item 32- Iron and Steel Manufacturing and Processing	Off-Site	VOCs	Groundwater

[1] Relying on Paragraph 1 of Section 49.1 of O.Reg. 153/04, the standards associated with de-icing agents are deemed not to be exceeded on the RSC Property for the purpose of Part XV.1 of the Act.

APEC 1 – Former Gasoline Underground Storage Tanks (USTs) - Former gasoline underground storage tanks (USTs) associated with the former use of the RSC Property as a retail fuel outlet were identified on the 1948 Fire insurance Plan and in previous environmental reports as being located on the north western portion of the RSC Property. The former gasoline USTs represent APEC 1 on the RSC Property.

APEC 2, APEC 3 - Former Pump Islands – Former pump islands associated with the former use of the RSC Property as a retail fuel outlet were identified on the northwestern portion of the RSC Property and the northcentral portion of the RSC Property. The locations of the former pump islands were identified in previous environmental reports. The reported locations of the former pump islands appear consistent with the images in the 1965 and 1991 areal photographs. The former pump island and associated piping are considered to represent APEC 2 and APEC 3 on the northwestern and north central portions of the RSC Property.

APEC 4 – Former Gasoline Service Station Decommissioning– The northwestern portion of the RSC Property was used as a gasoline service station. Historical soil data compared to historical MOE Table B commercial/industrial remedial criteria represents an APEC on the northern portion of the RSC Property. The historical data was collected by others and reported by others under dated sampling protocols and procedures that cannot be relied upon for assessing the RSC Property. This historical data is considered to represent APEC 4 and has been superseded with more recent analytical data collected and analyzed under existing analytical protocols and sampling procedures to assess this APEC. A summary of the MOE Table B Remediation Criteria Exceedances is shown on Drawing PE4546 – 18 – Historical Results Exceeding 1997 Table B Industrial/Commercial Soil Remediation Criteria and summarized below.

Summary of 1997 Sampling

Excavations to remove equipment - Three gasoline storage tanks (two 32.200 L tanks and one 46,000 L tank) and associated piping were reported as removed in April 1997. The pump islands and canopy were removed in June 1997. The excavations for these removals are shown as EXC-1 through EXC-5 in blue on Drawing PE4546 – 18 – Historical Results Exceeding 1997 Table B Industrial/Commercial Soil Remediation Criteria. Soil from these excavations was used to backfill the excavations along with imported sand at the top. Samples were collected from the excavations and one soil sample SS-32 exceeded the MOE Table B commercial/industrial remediation criteria for BTEX and TPH (gas/diesel). Although excavations extents have been added to cross sections, it should be noted that they have been added based on available information and it is considered likely that the ground surface elevation changed between the 1997 and the current site characterization program.

Test Pits – Eight test pits were excavated in 1997. Soil sample results from TP-2 exceeded the MOE Table B commercial/industrial remediation criteria for xylene and TPH (gas/diesel). The location of TP-2 is shown on Drawing PE4546 – 18 – Historical Results Exceeding 1997 Table B Industrial/Commercial Soil Remediation Criteria. *Note: Two soil sample results for lead collected from TP2 and TP4 in 1997 exceed the current MECP Table 3 residential standards. These sample results are discussed further in the fill material of unknown quality APEC 6 section. Historical Lead concentrations compared to the MECP Table 3 Residential standards is shown on d*rawing PE4546 – 21 – Historical Lead Results Compared to MECP Table 3 Residential. Note: only lead was analyzed not the full parameter group.

Boreholes and monitoring wells - Three boreholes with monitoring wells were installed in April 1997. One soil sample from BH-2//MW-2 (shown as MW-2 on Drawing PE4546 – 18 – Historical Results Exceeding 1997 Table B Industrial/Commercial Soil Remediation

Criteria) exceeded the MOE Table B commercial/industrial remediation criteria for benzene and xylenes. The groundwater results for BH-2/MW-2 also exceeded the MOE Table B commercial/industrial remediation criteria for benzene. No free product was observed in the monitoring wells at the time of sampling.

Summary of 1998 Sampling

Test Pits – Eleven test pits were excavated in November and December 1998. Soil sample results from TP9 exceeded the MOE Table B commercial/industrial remediation criteria for TPH (gas/diesel). Soil sample results from TP16 exceeded the MOE Table B commercial/industrial remediation criteria for TPH (heavy oils).

Remedial Excavations – soil was removed from three remedial excavations in 1998. The three remedial excavations are shown as EXC-1 through EXC-3 in pink on Drawing PE4546 – 18 – Historical Results Exceeding 1997 Table B Industrial/Commercial Soil Remediation Criteria. Approximately 1,873 tonnes of soil was reported as disposed at a provincially licensed facility. Soil was stockpiled and sampled for reuse. Soil sample SS-203 from EXC-3 exceeded the MOE Table B commercial/industrial remediation criteria for TPH (heavy oils). The samples collected from the stockpiled soil were considered acceptable for reuse and the stockpiled soil was used to backfill the excavations along with imported sand at the top. Although excavations extents have been added to cross sections, it should be noted that they have been added based on available information and it is considered likely that the ground surface elevation changed between the 1998 and the current site characterization program.

Extent of APEC 4

Based on a review of the 1997 and 1998 sampling and excavations at the former gasoline service station portion of the property the extents of APEC 4 were determined based on the following considerations:

- The historical TPH and BTEX data is not considered appropriate to compare to the current MECP standards as sampling protocols and parameters have changed. However, it is noted that the excavation extents were terminated and soil was used as backfill in these areas based on the MOE Table B commercial/industrial remedial criteria applicable at the time. The current applicable residential standards for BTEX and TPH (now PHC F1 – F4) and sampling equipment and protocols are more stringent than the 1997 MOE Table B commercial/industrial remedial standards that were applicable at the time. Soil excavation sidewall samples, excavation floor samples, spoon samples from BH1(MW1) and BH3 (MW3) and stockpile grab samples for reuse that were considered to be in compliance in 1997 have the potential to exceed the current MECP Table 3 residential standards resulting in the extent of APEC 4 as covering the full extent of the decommissioning area. A comparison of the

historical data compared to the current MECP Table 3 Standards is shown on Drawing PE4546 – 19 – Historical BTEX Soil Results Compared to MECP Table 3 Residential

- The historical data is not considered appropriate to compare to the current standards as sampling protocols have changed. Groundwater concentrations for BTEX and TPH reported in the monitoring wells for MW1, MW2 and MW3 are also considered to have the potential to exceed the current MECP Table 3 residential standards resulting in APEC 4. A comparison of the historical groundwater data compared to the current MECP Table 3 Standards is shown on Drawing PE4546 – 20 – Historical BTEX Groundwater Results Compared to MECP Table 3 Residential

APEC 5 – Former Automotive Service Garage – A former automotive service garage was identified as located on the north central portion of the RSC Property. No features of the former garage associated with APEC 5 are known. FIPs were reviewed as part of the Phase I ESA and no information regarding the location of tanks or hoists associated with the garage could be identified from the FIPs. The former garage can be seen in the 1965 aerial photograph, no information regarding the location of tanks or hoists associated with the garage were noted from the review of the air photographs. No other information was available regarding the historical operations on the former garage portion of the RSC Property. The former automotive service garage is considered to represent APEC 5 on the RSC Property. The former garage portion of the RSC Property was assessed by multiple sample locations providing sufficient coverage within APEC 5 including sampling in the former footprint of the building.

APEC 6 – Fill Material of Unknown Quality - Fill material was encountered across the RSC Property and including in areas of the former USTs and former pump islands. Three soil sample results for lead with concentrations of 170 mg/kg,140 mg/kg and 240 mg/kg collected from TP2 and TP4 in 1997 exceed the current 2011 MECP Table 3 residential standard of 120 ug/g for lead but were in compliance with the MOE Table B commercial remedial criteria at the time. These sample results are considered to be included in the fill material of unknown quality APEC. The results for lead fromTP2 and TP4 is shown on drawing PE4546- 8 – Soil (CrVI, metals including As, Sb and Se).

On-site fill material of unknown quality represents APEC 6 on the RSC Property. The contaminants of potential concern identified for the fill material of unknown quality did not include PHCs as the PHC impacts encountered on the gasoline service station portion of the RSC Property are considered to be from the PCAs associated with the former gas station (USTs, pump island) or former automotive service garage (which have individual APECs) and not from the source location of the imported fill material. Although there were no visual or olfactory signs of PHC contamination in the fill material encountered outside of the former gasoline service station/garage property, PHCs were tested in fill

material outside of the former gasoline service station/garage portion of the RSC Property as a part of the mandatory sampling parameters included in the excess soil regulation.

APEC 7a – Former Lumber Yard (prior to 1930s)– The southern portion of the 3 Selkirk Street portion of the RSC Property was used as a Lumber Yard as shown on the 1915 and1922 Fire Insurance Plans. This portion of the former lumber yard represents APEC 7a on the RSC Property. The yard was identified as W.C. Edwards Eastview Yard on the 1915 and 1922 FIP. The FIP does not indicate wood treatment had occurred at the RSC Property and based on historical research, WC Edwards' operations do not appear to be related to utility poles or railway ties, which traditionally utilize treated wood and there is no indication of utility poles or railway ties being stored on the RSC Property. As such, PAHs were excluded as contaminants of potential concern for the Lumber Yard APECs (APEC 7a and 7b), however PAHs were tested across the RSC Property as part of the fill material of unknown quality APEC 6 identified across the entire RSC Property. Based on historical research, pentachlorophenol started to be used on wood products in Canada in the 1930s and is not considered a potential concern prior to the 1930s within this APEC 7a. Based on the historical research the CPC identified for APEC 7a are metals, mercury, chromium (VI), arsenic, selenium, and antimony.

APEC 7b – Former Lumber Yard (prior to and post 1930s)– The southeastern corner of the 3 Selkirk Street portion of the RSC Property was used as a Lumber Yard post 1930 as shown on the1948 Fire Insurance Plans. D. Kemp Edwards Ltd Builders Supplies was shown on the southeastern corner of the RSC Property on the 1948 FIP. There is no indication on the FIPs that treatment of wood occurred on the RSC Property. Based on the building products of D. Kemp Edwards Ltd Builders Supplies, the lumber products were related to building supplies and not railway ties or utility poles and wood treatment is not expected to have occurred on the RSC Property and there is no indication of utility poles or railway ties being stored on the RSC Property. As such, PAHs were excluded as contaminants of potential concern for the Lumber Yard APECs, however PAHs were tested across the RSC Property as part of the fill material of unknown quality APEC 6 identified across the entire RSC Property.

Pentachlorophenol started to be used in Canada in the 1930s and it is considered unlikely to be used at the RSC Property based on the building supply products listed in the historical research. Based on a historical review, there was no indication that D. Kemp Edwards Ltd Builders Supplies used pentachlorophenol as a wood preservative or stored treated (preserved) lumber. As a conservative approach, ABNs and Chlorophenols have been included as CPCs on the southeastern corner of the RSC Property, if treated lumber was stored it would be located on the southeastern portion of the RSC Property where the FIP showed the lumber yard to be located post-1930. This area, with a former lumber yard prior to and post 1930, represents APEC 7b on the RSC Property with ABNs and Chlorophenols added as additional contaminants of potential concern (in addition to

metals, mercury, chromium (VI), arsenic, selenium, and antimony) to this portion of the APEC 7 in the unlikely event that treated lumber was stored at the RSC Property. Analytical testing for ABNs and Chlorophenols was included as part of an excess soil testing program and all concentrations of ABNs and Chlorophenols were in compliance with the MECP Table 3 Standards. The locations of theses samples is shown on Drawing PE4546 – 11 – Analytical Testing Plan – Soil (Chlorophenols & ABNs)

APEC 8 – Former Potential Dry Cleaner – A former cleaner was listed in the city directories for an address located in the former commercial building and shown on an old plan as located centrally in the former commercial building. It could not be confirmed if dry cleaning equipment was used. The former potential dry cleaner is considered to be a PCA representing APEC 8 on the RSC Property.

APEC 9 – Hydro Vault – A former hydro vault was located in the former commercial building. Upon inspection there were no signs of spills or staining and the floor was in good condition. The transformers in the hydro vault are PCAs resulting in APEC 9. Given the thickness of the concrete slab encountered during the subsurface investigation at other locations within the building, impacts below the building were not anticipated. The off site hydro vault to the southeast is not considered to represent an APEC on the RSC Property.

APEC 10 – De-icing Agents Used for the Purpose of Safety - Based on our experience with road salting applications for the purpose of safety on similar sites in the City of Ottawa, de-icing agents would have been used for the purpose of safety under conditions of snow and ice on the RSC Property and adjacent roadways Montreal Road, Selkirk Street, and Montgomery Street. In accordance with Section 49.1 of O.Reg. 153/04, EC, SAR, sodium and chloride concentrations on the RSC Property are deemed *not to be exceeded* for the purpose of Part XV.1 of the Act. EC, SAR, chloride and sodium are not considered to be contaminants of concern to the RSC Property.

APEC 11 – Off Site Gasoline Service Station and Off-site Former Automotive Service Garage – A current gasoline service station is located off site to the east of the RSC Property across Montgomery Street (located at the corner of Montgomery and Montreal Road). The 1948 FIPs show a former Garage/Repairs located in a commercial building at this location. These PCAs are considered to represent APEC 11 on the RSC Property.

APEC 12 – Off-Site Former USTs – Three USTs were located on the small parcel of land at the corner of Montreal Road and North River Road, adjacent to the RSC Property, as identified in a previous environmental report. These USTs are considered to be a PCA resulting in APEC 12 on the RSC Property.

APEC 13 – Off Site Automotive Service Garage – an automotive service garage is located to the east of the RSC Property. This garage is considered to represent APEC 13 on the RSC Property.

APEC 14 – Off Site Gasoline Service Station – A former gasoline service station with two USTs was located on the property to the northwest as shown on the 1948 Fire Insurance Plans. Pump islands can also be seen in the 1991 aerial photographs. The gasoline service station represents APEC 14 on the RSC Property. There is currently a gasoline service station operating at this location.

APEC 15- Off-Site Potential Former Cleaners and Other Off-Site Industries – A former cleaner was identified through historical searches as located to the north of the RSC Property. It is unknown if chemicals were used at the potential former cleaner location or if it was a drop off location. In addition, other former industries were listed at this location including Canadian Carbon and Ribbon Co from 1956 to 1971 and ironworks. Canadian Carbon and Ribbon Co was a Canadian Company that manufactured carbon paper and ribbons for typewriters and no additional information on the ironworks was provided. Based on the depth to groundwater, cross gradient location and the distance of over 25 m from the RSC Property, VOCs are the only contaminant of potential concern identified from these PCAs with respect to the APEC created on the RSC Property. These concerns have been identified as APEC 15 on the RSC Property.

Additional PCAs identified within the Phase I ESA Study Area

Remaining PCAs within the Phase I Study area were not considered to represent APECs on the RSC Property based on separation distance.

Contaminants of Potential Concern

The following Contaminants of Potential Concern (CPCs) were identified during the Phase I ESA and Phase I ESA Update.

- Benzene, toluene, ethylbenzene and xylenes (BTEX)
- Petroleum Hydrocarbon Fractions 1 through 4 (PHCs F_1-F_4)
- Polycyclic Aromatic Hydrocarbons (PAHs)
- Metals (including arsenic, selenium and antimony)
- Mercury (Hg)
- Chromium VI (Cr VI)
- Polychlorinated Biphenyls (PCBs)
- Volatile Organic Compounds (VOCs)
- CPs & ABNs

- Sodium, chloride, EC and SAR - in accordance with Paragraph 1 of Section 49.1 of O.Reg. 153/04, EC, SAR, sodium and chloride concentrations on the RSC Property are not considered to be contaminants of concern to the RSC Property.

Subsurface Structures and Utilities

Historical services will be removed as part of the redevelopment. The approximate location of the former USTs and former pump island are shown on drawing PE4546 – 1 – Site Plan.

Based on the location of the soil and groundwater exceedances, the former USTs and former pump islands structures may have contributed to contaminant distribution at the RSC Property.

Although these structures may have contributed to contaminant distribution, these subsurface structures are not considered to have significantly affected contaminant migration as the concentrations of contaminants were in compliance in groundwater samples with the exception of a localized plume with benzene exceedances that has been delineated within the RSC Property boundary.

Physical Setting

Site Stratigraphy

The site stratigraphy, from ground surface to the deepest aquifer investigated at the RSC Property is illustrated on the following drawings:

- Drawing PE4546 – 4A – Cross-Section A-A' – Soil (VOCs)
- Drawing PE4546 – 4C – Cross-Section C-C' – Soil (VOCs)
- Drawing PE4546 – 5A – Cross-Section A-A' – Soil (PHCs)
- Drawing PE4546 – 5C – Cross-Section C-C' – Soil (PHCs)
- Drawing PE4546 – 6A – Cross-Section A-A' – Soil (PAHs)
- Drawing PE4546 – 6C – Cross-Section C-C' – Soil (PAHs)
- Drawing PE4546 – 7A – Cross-Section A-A' – Soil (BTEX)
- Drawing PE4546 – 7C – Cross-Section C-C' – Soil (BTEX)
- Drawing PE4546 – 8A – Cross-Section A-A' – Soil (Cr VI, Metals including As, Sb and Se)
- Drawing PE4546 – 8C – Cross-Section C-C' – Soil (Cr VI, Metals including As, Sb and Se)
- Drawing PE4546 – 9A – Cross-Section A-A' – Soil (Mercury & Methyl Mercury)
- Drawing PE4546 – 9C – Cross-Section C-C' – Soil (Mercury & Methyl Mercury)
- Drawing PE4546 – 15A – Cross-Section A-A' – Groundwater (BTEX)

- Drawing PE4546 – 15C – Cross-Section C-C' – Groundwater (BTEX)

Previous investigations were completed by others (EXP in 2014 and Golder in 2020) for the 2 Montreal Road Property. Golder advanced boreholes in similar locations as EXP and reported different depths to bedrock than the EXP report. When Paterson completed the 2021 subsurface investigation on the 2 Montreal Road property, Paterson encountered the depth to bedrock and stratigraphy to be more consistent with the reported Golder stratigraphy. Thus, the stratigraphy shown on cross sections and described below is primarily based on the Paterson and Golder reported information. During the excavation of Phase I of Development, Paterson confirmed that the depth to bedrock and stratigraphy to be consistent with the Golder and Paterson subsurface investigations.

It should be noted that the ground surface at the 2 Montreal Road property is higher than the ground surface at the 3 Selkirk Street property.

In general, site stratigraphy consisted of the following:

A pavement structure up to 0.15 m thick was encountered on the 3 Selkirk Street portion of the property in the parking lot area. A concrete slab up to 0.2 m thick was encountered inside the former commercial building on 3 Selkirk Street. In some locations on the 2 Montreal Road property, up to 0.3 m of topsoil was encountered.

A silty sand fill material with crushed stone or gravel was encountered across the RSC Property ranging in thickness from 0.5 to 6.24 m.

Glacial Till material consisting of brown silty sand with shale fragments with gravel, cobbles and boulders was encountered in some test hole locations at depths ranging from 0.76 to 3.5 m bgs and extending to depths ranging from 2.3 to 8.5 m bgs.

The weathered shale bedrock surface fluctuates across the RSC Property. Weathered shale bedrock was encountered at depths ranging from 1.5 to 7.6 m bgs. Sound shale bedrock was encountered at depths ranging from 2.7 to 7.8 m bgs as reported in the Geotechnical Report prepared by Paterson.

Hydrogeological Characteristics

Depth to water in the pre excavation groundwater monitoring wells at the RSC Property was measured between approximately 5.56 m and 7.45 m below original ground surface. As discussed above, it is important to note that the ground surface of the 2 Montreal Road property is higher in elevation than the ground surface at the 3 Selkirk Street property. Seasonal variation of water levels is expected. The groundwater table is located in the

bedrock, this unit is interpreted to function as a local unconfined aquifer at the RSC Property.

In April 2022, depth to groundwater was measured in 34 monitoring wells and the geodetic groundwater elevations ranged between 50.55 and 50.35. As shown on the cross sections listed above, there are minor variations in the groundwater levels measured across the RSC Property. The regional groundwater flow direction is considered to be to the west-northwest towards the Rideau River.

The localized groundwater flow direction on the RSC property was estimated to be in a south-easterly direction. It should be noted that the groundwater elevations used to determine the localized flow path were collected in April 2022, a period when the Rideau River was experiencing elevated water elevations due to spring freshet conditions. Therefore, during this time, the Rideau River was acting as a localized recharge source for groundwater systems directly adjacent to the river, which is why the localized groundwater flow direction on the RSC property differed at that time from the general regional trend. During periods where spring freshet is not prevalent, it is expected that the localized groundwater flow direction will follow the regional trend and exhibit a westerly-north-westerly flow path. A hydraulic gradient of approximately 0.02 m/m was calculated. A vertical hydraulic gradient of 0.003 up was calculated at BH7-23 and BH8-23. Groundwater contours are shown on Drawing PE4546 – 3 – Groundwater Contour Plan.

Approximate Depth to Bedrock

The weathered shale bedrock surface fluctuates across the RSC Property. Weathered shale bedrock was encountered at depths ranging from 1.5 to 7.6 m bgs. Sound shale bedrock was encountered at depths ranging from 2.7 to 7.8 m bgs as reported in the Geotechnical Report prepared by Paterson.

Approximate Depth to Water Table

Depth to water in the pre excavation groundwater monitoring wells at the RSC Property was measured between approximately 5.56 m and 7.45 m below original ground surface. Seasonal variation of water levels is expected. As discussed above, it is important to note that the ground surface at the 2 Montreal Road property is higher in elevation than the 3 Selkirk Street property.

Section 35 of the Regulation

Section 35 of the Regulation applies to the RSC Property as follows:

- The RSC Property, and all other properties located, in whole or in part, within 250 metres of the boundaries of the RSC Property, are located in an area supplied by a municipal drinking water system, as defined in the Safe Drinking Water Act, 2002.

- The Record of Site Condition will not specify agricultural or other use as the type of property use for which the Record of Site Condition is intended to be filed.

- The RSC Property is not located in an area designated in the municipal official plan as a well-head protection area or other designation identified by the municipality for the protection of groundwater.

- Neither the RSC Property nor any of the properties in the phase one study area has a well used or intended for use as a source of water for human consumption or agriculture.

- The QP has given the clerk of the municipality written notice of the intention to apply the non-potable standards in preparing a record of site condition for the property, and the municipality has not given any written notice to the QP that it objects to the application of the standards within 30 days after receiving the notice.

Sections 41 and 43.1 of the Regulation

Section 41 of the Regulation (Site Condition Standards, Environmentally Sensitive Areas) does not apply to the RSC Property, in that there are no areas of natural significance in the vicinity of the RSC Property and the surface soil pH was between 5 and 9 and subsurface soil pH was between 5 and 11.

Section 43.1 of the Regulation does not apply to the RSC Property in that the RSC Property is not a Shallow Soil Property and not within 30 m of a water body. Although the depth to weathered shale in limited locations was encountered at less than 2 m bgs, the RSC Property is not a shallow soil property as 2/3 or more of the RSC Property consists of soil greater than 2 meters in depth beneath the soil surface.

Areas on, in or under the Phase Two Property where Excess Soil is Finally Placed

Less than 160 m^3 of topsoil was brought from Greely Sand and Gravel Inc. located in Greely, Ontario to the RSC Property. As required, one soil sample was collected and submitted for analytical testing of PHC, BTEX, metals, PAHs and OC Pesticides. The soil analytical test results were in compliance with the MECP Table 3 Standards. Engineered fill was brought to the RSC Property and is not considered soil as defined in O.Reg. 153/04 or excess soil as defined by O.Reg 406/19.

Proposed Buildings and Other Structures

It is our understanding that the RSC Property will be redeveloped in three phases, each with a multi-storey residential tower and one level of underground parking. At this time, Phase 1 of development including 1 level of underground parking is under construction and considered existing. Phase 3 of development is planned to start in early 2025 and Phase 2 of development will be completed in the future.

Environmental Condition

Areas Where Contaminants are Present

Soil

Based on the results of the Phase II ESA, soil exceeded the applicable site condition standards on the northern, western, southern and central portions of the RSC Property.

The locations where soil exceeded the applicable site condition standards is shown on the following Drawings:

- Drawing PE4546 – 4 – Analytical Testing Plan – Soil (VOCs)
- Drawing PE4546 – 5 – Analytical Testing Plan – Soil (PHCs)
- Drawing PE4546 – 6 – Analytical Testing Plan – Soil (PAHs)
- Drawing PE4546 – 7 – Analytical Testing Plan – Soil (BTEX)
- Drawing PE4546 – 8 – Analytical Testing Plan – Soil (Cr VI, Metals including As, Sb and Se)
- Drawing PE4546 – 9 – Analytical Testing Plan – Soil (Mercury, Methyl Mercury)

It should be noted that concentrations of hexane, PHCs, Metals, PAHs and BTEX were also reported above the MECP Table 3 soil standards in samples that were collected from below the reported bedrock surface. The Paterson geotechnical department reported the sound bedrock surface at the borehole locations in their geotechnical investigation.

Based on the depth of the samples below the reported sound bedrock surface, these samples are considered to be samples of shale rock that were augered through and not representative of soil quality. These samples are shown as grey on the above-mentioned drawings as they are not considered to be soil and not representative of exceedances of the soil standards. Groundwater samples have been collected in the vicinity of each of these locations and were in compliance with the applicable site condition standards as summarized below:

Rock Sample Location	Parameter Group	Monitoring Well Location Where Compliant Groundwater Samples were Collected in Vicinity of Rock Sample Location
TH201	PHC, BTEX	BH1-21
TH202	VOCs, PHC, BTEX and PAHs	MW19-01
TH203	VOCs, PHC, BTEX and PAHs	TH203A
TH204	VOCs, PHC, BTEX and metals	MW5-23 or BH1
TH205A	VOCs, PHC, BTEX and metals	TH205A
TH206	VOCs, PHC, BTEX and PAHs	TH206
TH208	PHC, BTEX, metals	MW19-05
TH209	VOCs, PHC, BTEX	MW9-23
TH210	PHC BTEX	TH210 and BH5-21
TH211	BTEX	MW2-23
TH212	PHC and metals	TH212
TH213	PHCs	BH5-21
TH214	PHC, PAHs	MW19-08
TH215	PHCs	MW19-09 and MW1-23
BH2-21	VOCs and BTEX	BH2-21
BH1-SS7	PHC/BTEX	BH1
BH2-SS8	PHC BTEX	BH2
BH2-23-SS8	PHCs	BH2-23

Benzene at BH3-22-SS7

The concentration of benzene in soil from BH3-22-SS7 at a depth of 4.57-4.78 m bgs was deemed to comply in accordance with Section 48(2) of O.Reg.153/04.

Parameter	Applicable Site Condition Standard µg/g	BH3-22-SS7 µg/g 4.57-4.78 m bgs	BH3-22-SS7R µg/g 4.7 m bgs	BH3-22-SS7 Calculated Average µg/g
benzene	0.21	0.22	ND (0.02)	0.12

Soil samples BH3-22-SS7 and BH3-22-SS7R were collected from the same sample depth in an area of the RSC Property that does not have a radius larger than 2 m. In accordance

with Section 48 (2) of O.Reg. 153/04, as amended under the Environmental Protection Act, “if two or more samples of soil or sediment are taken from sampling points at the same sampling location that are at the same depth in, on or under the property, the property meets a standard mentioned in subsection (1) if the average of the sampling results meets the standard and in no other circumstances.” The average concentration of 0.12 µg/g are considered to be in compliance with applicable site condition standard of 0.21 µg/g.

Groundwater

Based on the results of the Phase II ESA, groundwater exceeded the applicable site condition standards for benzene on the northern portion of the RSC Property.

The location where groundwater exceeded the applicable site condition standards is shown on the following Drawing:

- Drawing PE4546 – 13 – Analytical Testing Plan – Groundwater (BTEX)

Several of the groundwater monitoring wells (MW19-04, TH206, TH210 and TH212) that originally exceeded the MECP Table 3 standards for benzene in groundwater have been resampled multiple times with more recent complaint groundwater samples in compliance with the MECP Table 3 Standards. Groundwater samples collected from MW19-03 and BH3-21 continued to exceed the MECP Table 3 Standards for groundwater prior to remediation. Post-remediation groundwater monitoring wells MW6-23 and MW7-23 reported minor exceedances of the MECP Table 3 Standard for benzene during post-remediation groundwater sampling events.

Sediment in Samples Tend to Produce a Bias High

In section 2.1.4 *Ground Water Samples – Organic Parameters* of the document entitled “Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act” it is indicated that “extractable organic analytes tend to be hydrophobic and will adsorb to both the sample bottle and any particulate in the sample.” The document indicates that the inclusion of particulates will “tend to produce a high bias.” Based on this information, resampling is warranted. It is our understanding that industry standard of two compliant samples can be used to confirm a result is bias high due to sediment in a sample.

PHC in Sample TH201

The concentration of PHC(F2) marginally exceeded the MECP Table 3 Standards in the initial groundwater sample (TH201) collected in October 2014 by others from the monitoring well installed in TH201. Five subsequent groundwater samples were in compliance for PHC (F2). Given the drilling equipment augured through the shale bedrock that the monitoring well screen was installed in, it is suspected that this initial sample result exceeding the standard was due to sediment in the sample and not representative of actual groundwater quality at that location. In section 2.1.4 *Ground Water Samples – Organic Parameters* of the document entitled "Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act" it is indicated that "extractable organic analytes tend to be hydrophobic and will adsorb to both the sample bottle and any particulate in the sample." The document indicates that the inclusion of particulates will "tend to produce a high bias." Based on this information, and the initial sample result reported after drilling, resampling is warranted. It is our understanding that two compliant samples can be used to confirm a result is bias high due to sediment in a sample.

Summary of TH201 PHC F2 Concentrations		
Sample Date	**Sample ID**	**Sample Result PHC (F2)**
October 15, 2014	TH201	170
December 19, 2016	TH201	<100
November 22, 2017	TH201	<100
November 15 2018	TH201	<100
May 28, 2019	TH201	<100
September 14, 2020	TH201-GW	<100

The subsequent 5 compliant groundwater sample results with PHC F2 not detected above the detection limit of 100 ug/L supersede the initial sample result. Prior to subsequent sample collection, the groundwater monitoring wells were purged which can remove any remaining sediment in the monitoring well.

Similar to TH201, the original sample result from MW5-23 exceeded the MECP Table 3 Standards for PHC (F2) and PHC (F3). It is suspected that this initial sample result exceeding the standard was due to sediment in the sample and not representative of actual groundwater quality at this location. In section 2.1.4 *Ground Water Samples – Organic Parameters* of the document entitled "Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act" it is indicated that "extractable organic analytes tend to be hydrophobic and will adsorb to both the sample bottle and any particulate in the sample." The document indicates that the inclusion of particulates will "tend to produce a high bias." Based on this information, and

the initial sample results, resampling is warranted. It is our understanding that two compliant samples can be used to confirm a result is bias high due to sediment in a sample.

As such, the monitoring well was re-developed by purging the monitoring well and two additional groundwater samples were collected and were in compliance with the MECP Table 3 Standards for PHC F2 and PHC F3.

Summary of MW5-23 PHC F2 and F3 Concentrations			
Sample Date	Sample ID	Sample Result PHC (F2)	Sample Result PHC (F3)
February 7, 2023	MW5-23-GW1	1650	1060
February 22, 2023	MW5-23-GW2	<100	<100
February 28, 2023	MW5-23-GW3	<100	<100

The subsequent two compliant groundwater sample results with PHC F2 and PHC F3 not detected above the detection limit of 100 ug/L supersede the initial sample result. PHCs F2 and F3 are not considered to be contaminants of concern in groundwater.

Groundwater samples at MW6-23-GW4 and MW9-23-GW4 were reported above the MECP Table 3 standard during a December 2023 sampling event for PHC F3 and PHC F4. Each monitoring well was resampled twice in December 2023.

It is suspected that the December 1, 2023 sample results exceeding the standard was due to sediment in the sample and not representative of actual groundwater quality at this location. In section 2.1.4 *Ground Water Samples – Organic Parameters* of the document entitled “Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act” it is indicated that “extractable organic analytes tend to be hydrophobic and will adsorb to both the sample bottle and any particulate in the sample.” The document indicates that the inclusion of particulates will “tend to produce a high bias.” Based on this information, additional purging of the monitoring wells was completed and resampling was warranted. It is our understanding that two compliant samples can be used to confirm a result is bias high due to sediment in a sample.

A summary of the sampling results is provided below. PHC F3 and F4 are not considered to be contaminants of concern to the RSC Property in groundwater.

Summary of MW6-23 and MW9-23 PHC F3 and F4 December 2023 Concentrations			
Sample Date	Sample ID	Sample Result PHC (F3)	Sample Result PHC (F4)
MW6-23			
December 1, 2023	MW6-23-GW4	1010	1980
December 7, 2023	MW6-23-GW5	<100	<100
December 15, 2023	MW6-23-GW6	<100	<100
MW9-23			
December 1, 2023	MW9-23-GW4	1290	580
December 7, 2023	MW9-23-GW5	<100	<100
December 15, 2023	MW6-23-GW6	<100	<100

Types of Contaminants

Based on the results of the Phase II ESA, the Contaminants of Concern (COCs) in soil at the RSC Property were considered to be:

- Metals including Selenium and Mercury
- PAHs
- PHC F1-F4
- BTEX
- Hexane

Methyl mercury was analyzed in soil in locations where mercury exceeded the applicable site condition standard. All methyl mercury samples were in compliance with the MECP Table 3 standards. As such, methyl mercury is not a contaminant of concern to the RSC Property.

Based on the results of the Phase II ESA, the Contaminants of Concern (COCs) in groundwater at the RSC Property were considered to be:

- Benzene

As discussed above, EC, SAR, sodium, and chloride are not considered contaminants of concern at the RSC Property.

Contaminated Media

Based on the results of the Phase II-ESA, soil on the RSC Property exceeded the applicable site condition standards for metals, selenium, mercury, various PAH parameters, hexane, PHC (F1- F4) and BTEX.

Based on the results of the Phase II ESA, concentrations of benzene in groundwater were reported above the applicable site condition standards.

What Is Known About Areas Where Contaminants Are Present

Northern Portion of the RSC Property

Soil and groundwater exceedances were reported on the northern portion of the RSC Property. A former gasoline service station with pump islands and USTs operated on the northern portion of the RSC Property. A former automotive service garage was also reported to have operated on the northern portion of the RSC Property.

Southern Portion of the RSC Property

A former lumber yard was identified on the southern portion of the RSC Property.

Entire RSC Property

Fill material of unknown quality was encountered across the RSC Property.

Distribution of Contaminants

VOCs in Soil

The approximate horizontal delineation of VOCs exceeding the MECP Table 3 Standards in soil is shown on the following drawing:

- Drawing PE4546 – 4 – Analytical Testing Plan – VOCs

Analytical testing of VOCs detected concentrations of hexane in soil exceeding the applicable site condition standard in samples TH207-10 and TH201-10 on the northeastern portion of the RSC Property.

Exceedances at TH207-10 and TH201-10 are shown on Drawing PE4546 – 4 – Analytical Testing Plan – VOCs as extending horizontally to the western RSC Property boundary and compliant samples MW19-01-06, MW19-02-08, BH4-21-SS7, BH4-21-SS8, MW19-04-05, and BH6-22-SS6. Vertical delineation of soil samples could not be achieved with deeper soil samples at TH207-10 and TH201-10. Vertical delineation was achieved with compliant groundwater samples collected from the monitoring wells installed in TH201, BH1-21 and TH207. The approximate vertical delineation of hexane exceeding the MECP Table 3 Standards is shown on the following drawings:

- Drawing PE4546 – 4A – Cross-Section A-A' – Soil (VOCs)
- Drawing PE4546 – 4C – Cross-Section C-C' – Soil (VOCs)

Metals (including Selenium) in Soil

The approximate horizontal delineation of metals (including selenium) exceeding the MECP Table 3 Standards in soil is shown on the following drawing:

- Drawing PE4546 – 8 – Analytical Testing Plan – Soil (Cr VI, Metals including As, Sb and Se)

Analytical testing of metals including selenium detected concentrations exceeding the applicable site condition standards on the western, northern and southern portion of the RSC Property. Soil impacted with metals including selenium is shown on Drawing PE4546 – 8 – Analytical Testing Plan Soil (Cr VI, Metals including As, Sb and Se) as extending horizontally to compliant soil samples from TP16-21, TP15-21, BH6-20, BH8-22, TP12-21, BH2-22, BH9-22, HV2, TP5-23, TP3-23, and TP7-23.

Vertical delineation was achieved at several locations with compliant deeper soil samples. In some locations, vertical delineation of soil samples could not be achieved with deeper soil samples, as such vertical delineation was achieved with compliant groundwater samples collected from the monitoring wells installed across the RSC Property including in the area of:

- BH1-22 - vertically delineated with a compliant groundwater sample from the monitoring well installed in BH1-22
- BH7-22, TP10-21 and TP7-21 - vertically delineated with a compliant groundwater sample from the monitoring well installed in BH7-22
- MW19-03 - vertically delineated with a compliant groundwater sample from the monitoring well installed in MW19-03
- MW19-04 - vertically delineated with a compliant groundwater sample from the monitoring well installed in MW19-04
- BH3-21 - vertically delineated with a compliant groundwater sample from the monitoring well installed in BH3-21
- MW19-05 - vertically delineated with a compliant groundwater sample from the monitoring well installed in MW19-05
- MW19-07 - vertically delineated with a compliant groundwater sample from the monitoring well installed in MW19-07
- BH5-21 - vertically delineated with a compliant groundwater sample from the monitoring well installed in TH210
- MW19-08 and TP3-21 - vertically delineated with a compliant groundwater sample from the monitoring well installed in MW19-08
- BH4-21 - vertically delineated with a compliant groundwater sample from the monitoring well installed in BH4-21

- MW19-06 - vertically delineated with compliant groundwater samples from the monitoring wells installed in BH4-21 and BH3-21
- MW19-09 - vertically delineated with a compliant groundwater sample from the monitoring well installed in MW19-09
- BH4-22 - vertically delineated with a compliant groundwater sample from the monitoring well installed in BH4-22
- BH3-22 - vertically delineated with a compliant groundwater sample from the monitoring well installed in BH3-22
- BH6-22 - vertically delineated with a compliant groundwater sample from the monitoring well installed in BH6-22
- TP4- vertically delineated with a compliant groundwater sample from the monitoring wells installed in MW1-23 and MW19-09.

The approximate vertical delineation of metals including selenium exceeding the MECP Table 3 Standards is shown on the following drawings:

- Drawing PE4546 – 8A – Cross-Section A-A' – Soil (Cr VI, Metals including As, Sb and Se)
- Drawing PE4546 – 8C – Cross-Section C-C' – Soil (Cr VI, Metals including As, Sb and Se)

Mercury in Soil

The approximate horizontal delineation of mercury exceeding the MECP Table 3 Standards in soil is shown on the following drawing:

- Drawing PE4546 – 9 – Analytical Testing Plan – Soil (Mercury, Methyl Mercury)

The mercury exceedance in TP7-21-G1 was horizontally delineated by the western property line and compliant soil samples from BH7-22, BH6-22, and TP5-21 and vertically delineated by the compliant soil sample from TP7-G1-G3.

The mercury exceedance in TP1-21-G2 and TP2-21-G2 was horizontally delineated by the eastern property line and compliant soil samples from TP6-21, BH3-22, TP15-21 and TP16-21 and vertically delineated by the compliant soil samples TP1-21-G3 and TP2-21-G4.

The mercury exceedance in TP9-21-G2 was horizontally delineated by the compliant soil samples collected from TP8-21, BH8-22, BH6-SS2 and TP12-21 and vertically delineated by compliant soil sample TP9-21-G4.

The mercury exceedance in TP6-23-G1 was horizontally delineated by soil samples from TP16-21, BH5, BH1-23 and TP2-23 and vertically delineated by soil sample TP6-23-G4.

The mercury exceedance from TP9-23-G1 was horizontally delineated by soil samples from TP10-23, TP8-23 and TP1-23 and vertically delineated by soil sample TP9-23-G2.

Methyl mercury was analyzed in soil in locations where mercury exceeded the applicable site condition standard. All methyl mercury samples were in compliance with the MECP Table 3 standards. As such, methyl mercury is not a contaminant of concern to the RSC Property.

The approximate vertical delineation of mercury exceeding the MECP Table 3 Standards is shown on the following drawings:

- Drawing PE4546 – 9A – Cross-Section A-A' – Soil (Mercury & Methyl Mercury)
- Drawing PE4546 – 9C – Cross-Section C-C' – Soil (Mercury & Methyl Mercury)
  Drawing PE4546 – 9F – Cross-Section F-F' – Soil (Mercury & Methyl Mercury)
- Drawing PE4546 – 9G – Cross-Section G-G' – Soil (Mercury & Methyl Mercury)
- Drawing PE4546 – 9H – Cross-Section H-H' – Soil (Mercury & Methyl Mercury)
- Drawing PE4546 – 9I – Cross-Section I-I' – Soil (Mercury & Methyl Mercury)
- Drawing PE4546 – 9J – Cross-Section J-J' – Soil (Mercury & Methyl Mercury)
- Drawing PE4546 – 9K – Cross-Section K-K' – Soil (Mercury & Methyl Mercury)

PHCs in Soil

The approximate horizontal delineation of PHCs exceeding the MECP Table 3 Standards is shown on the following drawing:

- Drawing PE4546 – 5 – Analytical Testing Plan – Soil (PHCs)

Analytical testing of PHCs in soil detected concentrations of PHCs exceeding the applicable site condition standards on the northern and central portion of the RSC Property.

Concentrations of PHCs are shown as extending horizontally to the RSC Property Boundary to the west, north and east and compliant samples BH5-22-SS5, BH5-22-SS7, BH8-20-SS4, TP14-21-G5 and TP16-21-G5 to the south.

Vertical delineation was achieved at some locations with compliant deeper soil samples. In other cases, vertical delineation of soil samples could not be achieved with deeper soil samples. Thus, PHCs are vertically delineated by the compliant groundwater samples collected from the monitoring wells installed across the RSC Property including in the area of:

- BH6-20 and BH8-22 - vertically delineated with a compliant groundwater sample from the monitoring well installed in BH8-22
- BH3-22 and BH3-20 - vertically delineated with a compliant groundwater sample from the monitoring well installed in BH3-22
- BH1-20 - vertically delineated with a compliant groundwater sample from the monitoring well installed in BH5-22
- BH6-22 - vertically delineated with a compliant groundwater sample from the monitoring well installed in BH6-22
- BH2-20 - vertically delineated with a compliant groundwater sample from the monitoring well installed in BH1
- TH201 - vertically delineated with a compliant groundwater sample from the monitoring well installed in BH1-21
- TH207, MW19-03 and SV19-02 - vertically delineated with compliant groundwater samples from the monitoring wells installed in TH206 and TH207
- SV19-01 - vertically delineated with a compliant groundwater sample from the monitoring well installed in TH203A
- MW19-05 and SV19-03 - vertically delineated with compliant groundwater samples from the monitoring wells installed in MW19-05 and MW19-07
- MW19-08 - vertically delineated with a compliant groundwater sample from the monitoring well installed in MW19-08
- BH4-21 - vertically delineated with a compliant groundwater sample from the monitoring well installed in BH4-21
- MW19-09 - vertically delineated with a compliant groundwater sample from the monitoring well installed in MW19-09
- TP1-21 - vertically delineated with a compliant soil sample B1
- BH5-20 - vertically delineated with a compliant groundwater sample from the monitoring well installed in BH4

The approximate vertical delineation of PHCs exceeding the MECP Table 3 Standards is shown on the following drawings:

- Drawing PE4546 – 5A – Cross-Section A-A’ – Soil (PHCs)
- Drawing PE4546 – 5C – Cross-Section C-C’ – Soil (PHCs)

PAHs in Soil

Analytical testing of PAHs in soil detected concentrations of PAHs exceeding the applicable site condition standards on several areas of the RSC Property. The approximate horizontal delineation of PAHs exceeding the MECP Table 3 Standards is shown on the following Drawing PE4546 – 6 – Analytical Testing Plan – Soil (PAHs):

- Northwestern portion of RSC Property: Soil sample TH201-2 is shown as extending horizontally to compliant soil samples at BH1-21 and TH202 and is vertically delineated by sample BH1-21-SS5.

- Western central portion of RSC Property: Soil samples TP11-21-G2 and BH7-22-AU1 are shown as extending horizontally to compliant samples at TP7-21, BH6-22, TP10-21 and BH5-22. TP11-21-G2 was vertically delineated by sample TP11-21-G6 and BH7-22-AU1 was vertically delineated by sample BH7-22-SS2.

- Central portion of RSC Property: Soil sample TP9-21-G4 is shown as extending horizontally to compliant soil samples at BH3-22, BH8-22, BH8-20, BH5-22 and TP8-21 and vertically delineated by sample TP9-21-G5.

- Northern central portion of RSC Property: Soil samples MW19-03-05 and TH208-2 are shown as extending horizontally to compliant soil samples at TH213, BH4-21, MW19-04, TH207, TP4-21, MW19-02 and TH203. MW19-03-05 was vertically delineated by the compliant groundwater sample from the monitoring well installed in MW19-03. Soil sample TH208-2 was vertically delineated with a compliant groundwater sample from the monitoring well installed in MW19-05.

- Exceedances on the northeastern portion of the RSC Property at TP3-21, TP6-21, TH215, TP1-21 and TP2-21 were shown as extending horizontally to compliant soil samples from TH210, TH211, BH2-21, BH3-22, TP15-21 and TP16-21. The exceedances on the eastern portion of the RSC Property were all vertically delineated by soil samples from a lower depth:
    - TP3-21-G1 - vertically delineated by TP3-21-G3
    - TP6-21-G1 - vertically delineated by TP6-21-G5
    - TH215-2 - vertically delineated by MW19-09-05
    - TP1-21-G2 - was vertically delineated by TP1-21-G3
    - TP2-21-G2 - was vertically delineated by TP2-21-G4

- Exceedances on the southeastern portion of the RSC Property at TP3-23 and BH4-23 were shown as extending horizontally to complaint soil samples from BH1-23, TP2-23, TP1-23, TP5-23, TP4-23 and TP13-21. The exceedances on the southern portion of the RSC Property were all vertically delineated by soil samples from a lower depth:
    - TP3-23-G2 – was vertically delineated by TP3-23-G3
    - BH4-23-SS4 – was vertically delineated by BH4-23-SS5

The approximate vertical delineation of PAHs exceeding the MECP Table 3 Standards prior to remediation is shown on the following drawings:

- Drawing PE4546 – 6A – Cross-Section A-A' – Soil (PAHs)
- Drawing PE4546 – 6C – Cross-Section F-F' – Soil (PAHs)

BTEX in Soil

The approximate horizontal delineation of BTEX exceeding the MECP Table 3 Standards is shown on the following drawing:

- Drawing PE4546 – 7 – Analytical Testing Plan – Soil (BTEX)

Analytical testing of BTEX in soil detected concentrations of BTEX exceeding the applicable site condition standards on the northern portion of the RSC Property.

Concentrations of BTEX are shown as extending horizontally to the western and northern property boundaries and compliant samples MW19-09-05, the average of BH3-22-SS7 and BH3-22-SS7R, BH2-20-SS6 and BH6-22-SS6 to the south and BH4-21-SS7 to the east.

Vertical delineation was achieved at some locations with compliant deeper soil samples. In other cases, vertical delineation could not be achieved with deeper soil samples, as such vertical delineation was achieved with compliant groundwater samples collected from the monitoring wells installed across the RSC Property including in the area of:

- TH201 - vertically delineated with a compliant groundwater sample from the monitoring well installed in BH1-21
- TH207, MW19-03 and SV19-02 - vertically delineated with a compliant groundwater sample from the monitoring well installed in TH207
- SV19-01 - vertically delineated with a compliant groundwater sample from the monitoring well installed in TH203A
- MW19-07 and SV19-03 - vertically delineated with compliant groundwater samples from the monitoring wells installed in MW19-05 and MW19-07

The approximate vertical delineation of BTEX exceeding the MECP Table 3 Standards is shown on the following drawings:

- Drawing PE4546 – 7A – Cross-Section A-A' – Soil (BTEX)
- Drawing PE4546 – 7C – Cross-Section C-C' – Soil (BTEX)

Benzene in Groundwater

Analytical testing of BTEX in groundwater detected concentrations of benzene exceeding the applicable site condition standards on the northern portion of the RSC Property.

Monitoring wells MW19-04, TH206, MW19-03, BH3-21, TH210 and TH212 detected concentrations of benzene exceeding the MECP Table 3 Standards. Concentrations of benzene have been horizontally delineated by the compliant groundwater samples collected from monitoring wells MW19-01, TH205A, BH6-22, BH2, BH4-21, BH6-21 MW19-07 and TH203A.

The approximate horizontal delineation of benzene in groundwater exceeding the MECP Table 3 Standards prior to excavation is shown on the following drawing:

- Drawing PE4546 – 15– Analytical Testing Plan – Groundwater (BTEX)

Concentrations of benzene have been vertically delineated by the compliant groundwater samples collected from the monitoring wells installed in TH207, BH2-21, BH5-21 and MW8-23.

The approximate vertical delineation of benzene exceeding the MECP Table 3 Standards is shown on the following drawings:

- Drawing PE4546 – 15A – Cross-Section A-A' – Groundwater (BTEX)
- Drawing PE4546 – 15C – Cross-Section C-C' – Groundwater (BTEX)

Several of the groundwater monitoring wells (MW19-04, TH206, TH210 and TH212) that originally exceeded the MECP Table 3 standards for benzene in groundwater have been resampled multiple times with more recent groundwater samples in compliance with the MECP Table 3 Standards. Groundwater samples collected from MW19-03 and BH3-21 continued to exceed the MECP Table 3 Standards for groundwater prior to remediation. Post-remediation groundwater monitoring wells MW6-23 and MW7-23 reported minor exceedances of the MECP Table 3 Standard for benzene during the May 2023 sampling event and were in compliance with the MECP Table 3 Standard for benzene during the August 2023 groundwater sampling event.

Discharge of Contaminants

The potential sources of the metals, mercury and PAH contaminants in soil included fill material of unknown quality. In addition, the former lumber yard is also noted to be a potential source of the metals and mercury contaminants.

The potential sources of the PHC and BTEX contaminants in soil included the former USTs, former pump islands and former automotive service garage that were located on the northern portion of the RSC Property.

The source of the benzene concentration in groundwater is considered to be the former USTs and/or former pump island that were located on the northern portion of the RSC.

Migration of Contaminants

Concentrations of PHCs, metals, mercury and PAHs exceeding the applicable site condition standards in soil at the RSC Property appear to be confined to the soil.

The source of the benzene concentration in groundwater is considered to be the former USTs and/or former pump island that were located on the northern portion of the RSC Property. Benzene is considered to have migrated from a pump island or UST leak into soil and then into the groundwater at the RSC Property.

As discussed above, seasonal changes in groundwater levels and flow are expected. Given the horizontal delineation of the benzene in groundwater remained within a limited area within the RSC Property boundary and the horizontal hydraulic gradient was minimal, the seasonal variations at the RSC Property do not appear to have significantly affected the migration of contaminated groundwater at the RSC Property.

Climatic and Meteorological Conditions

In general, climatic and meteorological conditions have the potential to affect contaminant distribution. Two ways by which climatic and meteorological conditions may affect contaminant distribution include the downward leaching of contaminants by means of the infiltration of precipitation, and the migration of contaminants via groundwater levels and/or flow, which may fluctuate seasonally. The fluctuation of the groundwater table and downward leaching may have affected contaminant distribution at the RSC Property.

Potential for Vapour Intrusion

Eight soil vapour samples were collected as part of the previous Phase II ESA work completed by others. Based on the results, there was the potential for vapour intrusion on the northern portion of the RSC Property prior to redevelopment, however there was no building on the northern portion of the RSC Property at the time those samples were collect as that portion of the RSC Property was vacant. The potential for vapour intrusion will be assessed in the Risk Assessment.

Contaminant Distribution Diagram

Refer to Figure 4: Human Health Conceptual Exposure Model and Figure 6: Ecological Conceptual Exposure Model.

Metals, selenium, mercury, PAHs, BTEX, PHC F1-F3, and n-hexane were identified as COCs in soil based on concentrations exceeding Table 3 SCS. Benzene in groundwater also exceeded Table 3 SCS. COCs are present in soil and groundwater as a result of historical contaminating activities.

The fate and transport of COCs in soil and groundwater at the RA Property is governed by various environmental transport mechanisms that may operate at the RSC Property, including:

- Suspension/entrainment of soil into outdoor air – Entrained particles may be inhaled or transported off-site and be deposited on soil or plant surfaces;
- Volatilization from shallow soil and groundwater into outdoor air – Vapours that volatilize are rapidly diluted but may be inhaled by human or animal receptors;
- Vapour intrusion of volatile COCs from soil and groundwater into indoor air in buildings constructed on the RSC Property;
- Accumulation of COCs from soil into garden produce;
- Leaching from soil to groundwater and subsurface transport with groundwater – Contaminants may discharge into a down-gradient surface water body and be taken up by aquatic plants and animals; and
- Transformation and degradation – Organic COCs exposed to air or soil microbes may undergo abiotic or biotic degradation; COCs may be metabolized by microorganisms or transformed into other chemical species.

Human receptors potentially exposed to COCs at the site include:

- Residents of all ages who live in a future building.
- Visitors to the residential units in a building.
- Adult indoor workers at commercial businesses inside a future building.
- Patrons of commercial businesses.
- Adult outdoor workers (e.g., landscapers).
- Adult construction workers.
- Trespassers.

Exposure pathways by which human receptors may be exposed to COCs include:

- Soil ingestion (all receptors);
- Soil dermal contact (all receptors).
- Inhalation of entrained soil particles (all receptors).
- Inhalation of vapours sourced from soil or groundwater in outdoor air (all receptors).
- Dermal contact with vapours of soil or groundwater COCs in outdoor air (all receptors).
- Groundwater dermal contact in a trench (construction workers).
- Incidental groundwater ingestion in a trench (construction workers).

- Inhalation of vapours from soil and groundwater COCs in trench air (construction workers).
- Dermal contact with vapours of soil or groundwater COCs in trench air (construction workers).
- Inhalation of vapours from soil and groundwater COCs in indoor air (indoor workers, residents, and visitors).
- Dermal contact with vapours of soil or groundwater COCs in indoor air (indoor workers, residents, and visitors).
- Ingestion of garden produce that has accumulated COCs from soil (residents).

Potential ecological receptors on and in the vicinity of the RSC Property include plants, soil invertebrates, mammals, and birds. Aquatic receptors are present in the Rideau River located off-site. The following terrestrial ecological receptors were identified as Valued Ecosystem Components (VECs):

- Terrestrial plants, including trees, shrubs, herbs, and grasses typically used in landscaping.
- Soil invertebrates, represented by earthworms.
- Mammals: herbivorous meadow vole, insectivorous short-tailed shrew, carnivorous red fox.
- Birds: herbivorous red-winged blackbird; insectivorous American woodcock, carnivorous red-tailed hawk.
- Aquatic plant community.
- Aquatic invertebrate community.
- Amphibian community.
- Fish community.

Given the distribution of contaminants and the conditions at the RSC Property, ecological receptors potentially may be exposed to contaminants via the following exposure pathways:

- Root uptake/contact – Terrestrial plants can potentially be exposed to contaminants in soil via root uptake/contact, either through active uptake or passive migration into root tissues, or via impacts from root contact with contaminated soil. Based on the depth to groundwater at the site, root uptake from groundwater was considered to be an incomplete exposure pathway.
- Direct/dermal contact – Soil invertebrates are potentially exposed to COCs in soil via direct contact.

- Ingestion of soil – Mammals and birds are exposed to COCs in soil via ingestion of soil during foraging.
- Ingestion of food/prey – Mammals and birds are exposed to COCs in soil that may accumulate in vegetation, soil invertebrates, and prey.
- Inhalation of soil – Mammals and birds may inhale soil that is entrained in the air.
- Inhalation of vapours – Mammals and birds may inhale volatile COCs in ambient air.
- Groundwater migration and discharge to surface water (GW3) – Off-site aquatic receptors may be exposed to COCs in groundwater via discharge of contaminated groundwater to a surface water body. Uptake pathways for aquatic receptors include root uptake (aquatic plants) and direct contact (aquatic invertebrates, amphibians, fish).

Soil Removed for Construction

Soil was removed to accommodate the one level of underground parking on the first phase (Phase 1) of development. A total of 75,555 mt (37,777 m^3) of excess soil was removed from the RSC Property and disposed of at Waste Management in Carp Ontario as part of Phase 1 of development.

Remedial Actions - Groundwater

After the foundation elevation for construction was excavated in the north central portion of the RSC Property, a pit for groundwater pumping was excavated into the bedrock. As the pit excavation started on the bedrock surface, no soil was removed as part of the pit excavation.

Approximately 380,292 L of groundwater was pumped out of the ground to a storage tank and removed by a licenced pumping contractor or discharged to the sanitary sewer in accordance with a Sanitary Sewer Discharge Agreement with the City of Ottawa. The area where the remedial action was implemented is shown as “Groundwater Pit” on drawing PE4546-15 – Analytical Testing Plan – Groundwater (BTEX). Additional groundwater was also removed for construction dewatering.

The last groundwater remedial action is considered to be groundwater removal from the Groundwater Pit on the RSC Property on December 7, 2022.

Nine groundwater monitoring wells (MW1-23 through MW9-23) were installed on the RSC Property. Groundwater Analytical Test Results are shown on the following drawings:

- Drawing PE4546 – 10 – Analytical Testing Plan – Groundwater (VOCs)
- Drawing PE4546 – 11 – Analytical Testing Plan – Groundwater (PHCs)
- Drawing PE4546 – 12 – Analytical Testing Plan – Groundwater (PAHs)
- Drawing PE4546 – 13 – Analytical Testing Plan – Groundwater (BTEX)
- Drawing PE4546 – 13A – Cross-Section A-A' – Groundwater (BTEX)
- Drawing PE4546 – 13C – Cross-Section C-C' – Groundwater (BTEX)
- Drawing PE4546 – 14 – Analytical Testing Plan – Groundwater (Cr VI, Hg, Metals including As, Sb and Se)

As per the regulation, four quarters of post-remediation groundwater sampling were required. As the groundwater monitoring wells were installed at different times, two sampling schedules were followed. Groundwater sampling was completed at the following times.

<u>Schedule 1 – northeastern monitoring wells</u>
Groundwater Sampling Event (day 0) - January 18, 2023
Post Remediation Groundwater Sampling Event 1 (First Quarter) – April 19, 2023 and April 21, 2023:
Post Remediation Groundwater Sampling Event 2 (Second Quarter) - July 20, 2023
Post Remediation Groundwater Sampling Event 3 (Third Quarter) - October 26,2023
Post Remediation Groundwater Sampling Event 4 (Fourth Quarter) - January 25, 2023

<u>Schedule 2 – north central monitoring wells</u>
Groundwater Sampling Event (day 0) – February 27,2023
Post Remediation Groundwater Sampling Event 1 (First Quarter) – May 30, 2023
Post Remediation Groundwater Sampling Event 2 (Second Quarter) August 30, 2023
Post Remediation Groundwater Sampling Event 3 (Third Quarter) -December 1, 2023 (with resampling on December 7, 2023 and December 15, 2023)
Post Remediation Groundwater Sampling Event 4 (Fourth Quarter) – March 1, 2023

Concentrations of benzene marginally exceeded the applicable site condition standards in some of the post remediation groundwater samples, thus the maximum benzene concentration for the RA will be based on the higher pre-remediation concentrations.

Statement of Limitations

This Phase II - Environmental Site Assessment Update report has been prepared in general accordance with Ontario Regulation 153/04, as amended by O.Reg. 269/11 under the Environmental Protection Act. The conclusions presented herein are based on information gathered from a limited historical review and field inspection program. The findings of the Phase II - ESA Update are based on a review of readily available geological, historical and regulatory information and a cursory review made at the time of the field assessment.

Should any conditions be encountered at the subject site and/or historical information that differ from our findings, we request that we be notified immediately in order to allow for a reassessment.

This report was prepared for the sole use of Selkirk and Main Holdings Inc. Permission and notification from the above noted party and this firm will be required to release this report to any other party.

We trust that this submission satisfies your current requirements. Should you have any questions please contact the undersigned.

Paterson Group Inc.

Michael Beaudoin, P.Eng., QP$_{ESA}$

Report Distribution

- ❑ Selkirk and Main Holdings Inc.
- ❑ Paterson Group (1 copy)

Attachments

- Drawing PE4546 – 1– Site Plan
- Drawing PE4546 – 2 – Surrounding Land Use Plan
- Drawing PE4546 – 3 – Groundwater Contour Plan
- Drawing PE4546 – 4 – Analytical Testing Plan – Soil (VOCs)
- Drawing PE4546 – 4A – Cross-Section A-A' – Soil (VOCs)
- Drawing PE4546 – 4C – Cross-Section C-C' – Soil (VOCs)
- Drawing PE4546 – 5 – Analytical Testing Plan – Soil (PHCs)
- Drawing PE4546 – 5A – Cross-Section A-A' – Soil (PHCs)
- Drawing PE4546 – 5C – Cross-Section C-C' – Soil (PHCs)
- Drawing PE4546 – 6 – Analytical Testing Plan – Soil (PAHs)
- Drawing PE4546 – 6A – Cross-Section A-A' – Soil (PAHs)
- Drawing PE4546 – 6C – Cross-Section C-C' – Soil (PAHs)
- Drawing PE4546 – 7 – Analytical Testing Plan – Soil (BTEX)
- Drawing PE4546 – 7A – Cross-Section A-A' – Soil (BTEX)
- Drawing PE4546 – 7C – Cross-Section C-C' – Soil (BTEX)
- Drawing PE4546 – 8 – Analytical Testing Plan – Soil (Cr VI, Metals including As, Sb and Se)
- Drawing PE4546 – 8A – Cross-Section A-A' – Soil (Cr VI, Metals including As, Sb and Se)
- Drawing PE4546 – 8C – Cross-Section C-C' – Soil (Cr VI, Metals including As, Sb and Se)
- Drawing PE4546 – 9 – Analytical Testing Plan – Soil (Mercury, Methyl Mercury)
- Drawing PE4546 – 9A – Cross-Section A-A' – Soil (Mercury & Methyl Mercury)
- Drawing PE4546 – 9C – Cross-Section C-C' – Soil (Mercury & Methyl Mercury)
- Drawing PE4546 – 9D – Cross-Section D-D' – Soil (Mercury & Methyl Mercury)
- Drawing PE4546 – 9F – Cross-Section F-F' – Soil (Mercury & Methyl Mercury)
- Drawing PE4546 – 9G – Cross-Section G-G' – Soil (Mercury & Methyl Mercury)
- Drawing PE4546 – 9H – Cross-Section H-H' – Soil (Mercury & Methyl Mercury)
- Drawing PE4546 – 9I – Cross-Section I-I' – Soil (Mercury & Methyl Mercury)
- Drawing PE4546 – 9J – Cross-Section J-J' – Soil (Mercury & Methyl Mercury)
- Drawing PE4546 – 9K – Cross-Section K-K' – Soil (Mercury & Methyl Mercury)
- Drawing PE4546 – 10 – Analytical Testing Plan – Soil (PCBs)
- Drawing PE4546 – 11 – Analytical Testing Plan – Soil (Chlorophenols &ABNs)
- Drawing PE4546 – 12 – Analytical Testing Plan – Groundwater (VOCs)
- Drawing PE4546 – 13 – Analytical Testing Plan – Groundwater (PHCs)
- Drawing PE4546 – 14 – Analytical Testing Plan – Groundwater (PAHs)
- Drawing PE4546 – 15 – Analytical Testing Plan – Groundwater (BTEX)
- Drawing PE4546 – 15A – Cross-Section A-A' – Groundwater (BTEX)
- Drawing PE4546 – 15C – Cross-Section C-C' – Groundwater (BTEX)
- Drawing PE4546 – 15E – Cross-Section E-E' – Groundwater (BTEX)
- Drawing PE4546 – 16 – Analytical Testing Plan – Groundwater (Cr VI, Hg, Metals including As, Sb and Se)
- Drawing PE4546 – 17 – Analytical Testing Plan – Groundwater (PCBs)
- Drawing PE4546 – 18 – Historical Results Exceeding 1997 Table B Industrial/Commercial Soil Remediation Criteria
- Drawing PE4546 – 19 – Historical BTEX Soil Results Compared to MECP Table 3 Residential
- Drawing PE4546 – 20 – Historical BTEX Groundwater Results Compared to MECP Table 3 Residential
- Drawing PE4546 – 21 – Historical Lead Results Compared to MECP Table 3 Residential
- Figure 4: Human Health Conceptual Exposure Model
- Figure 6: Ecological Conceptual Exposure Model

LEGEND:

- BOREHOLE WITH MONITORING WELL LOCATION
- BOREHOLE LOCATION, PATERSON GROUP 2020
- POST REMEDIATION MONITORING WELL 2023
- TEST PIT LOCATION, PATERSON GROUP
- BOREHOLE WITH MONITORING WELL LOCATION BY OTHERS (GOLDER)
- BOREHOLE WITH MONITORING WELL LOCATION BY OTHERS (EXP)
- BOREHOLE LOCATION BY OTHERS (EXP)
- 56.08 GROUND SURFACE ELEVATION (m)
- PHASE I, PHASE II AND RSC PROPERTY
- APPROX. LOCATION OF FORMER SEWER LINE
- APPROX. LOCATION OF FORMER ELECTRICAL LINE

GROUND SURFACE ELEVATIONS ARE REFERENCED TO A GEODETIC DATUM.

NOTE: HISTORICAL FEATURE DESCRIPTIONS SHOWN ON DRAWING PE4546-18

SCALE: 1:500

0 5 10 15 20 25 30 35 40m

AREAS OF POTENTIAL ENVIRONMENTAL CONCERN:

1. FORMER GASOLINE UNDERGROUND STORAGE TANKS
2. FORMER PUMP ISLANDS
3. FORMER PUMP ISLANDS
4. FORMER GASOLINE SERVICE STATION
5. FORMER AUTOMOTIVE SERVICE GARAGE
6. FILL MATERIAL OF UNKNOWN QUALITY

7A. FORMER LUMBER YARD (PRIOR TO 1930)

7B. FORMER LUMBER YARD (PRIOR TO AND POST 1930)

8. FORMER POTENTIAL DRY CLEANER
9. HYDRO VAULT
10. DE-ICING AGENTS USED FOR THE PURPOSE OF SAFETY
11. OFF SITE GASOLINE SERVICE STATION AND FORMER OFF-SITE AUTOMOTIVE SERVICE GARAGE
12. OFF-SITE FORMER UNDERGROUND STORAGE TANKS
13. OFF-SITE AUTOMOTIVE SERVICE GARAGE
14. OFF-SITE GASOLINE SERVICE STATION
15. OFF-SITE POTENTIAL FORMER CLEANERS AND OTHER OFF-SITE INDUSTRIES.

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NO.	REVISIONS	DATE	INITIAL

RIVERAIN DEVELOPMENTS INC.

PHASE I - ENVIRONMENTAL SITE ASSESSMENT
2 MONTREAL ROAD, 3 SELKIRK STREET, 280 MONTGOMERY STREET AND 300 MONTGOMERY STREET OTTAWA, ONTARIO

Title:

SITE PLAN

Scale:	1:500
Drawn by:	MPG
Checked by:	LK
Approved by:	LK
Date:	11/2021
Report No.:	PE4546
Drawing No.:	PE4546-1
Revision No.:	

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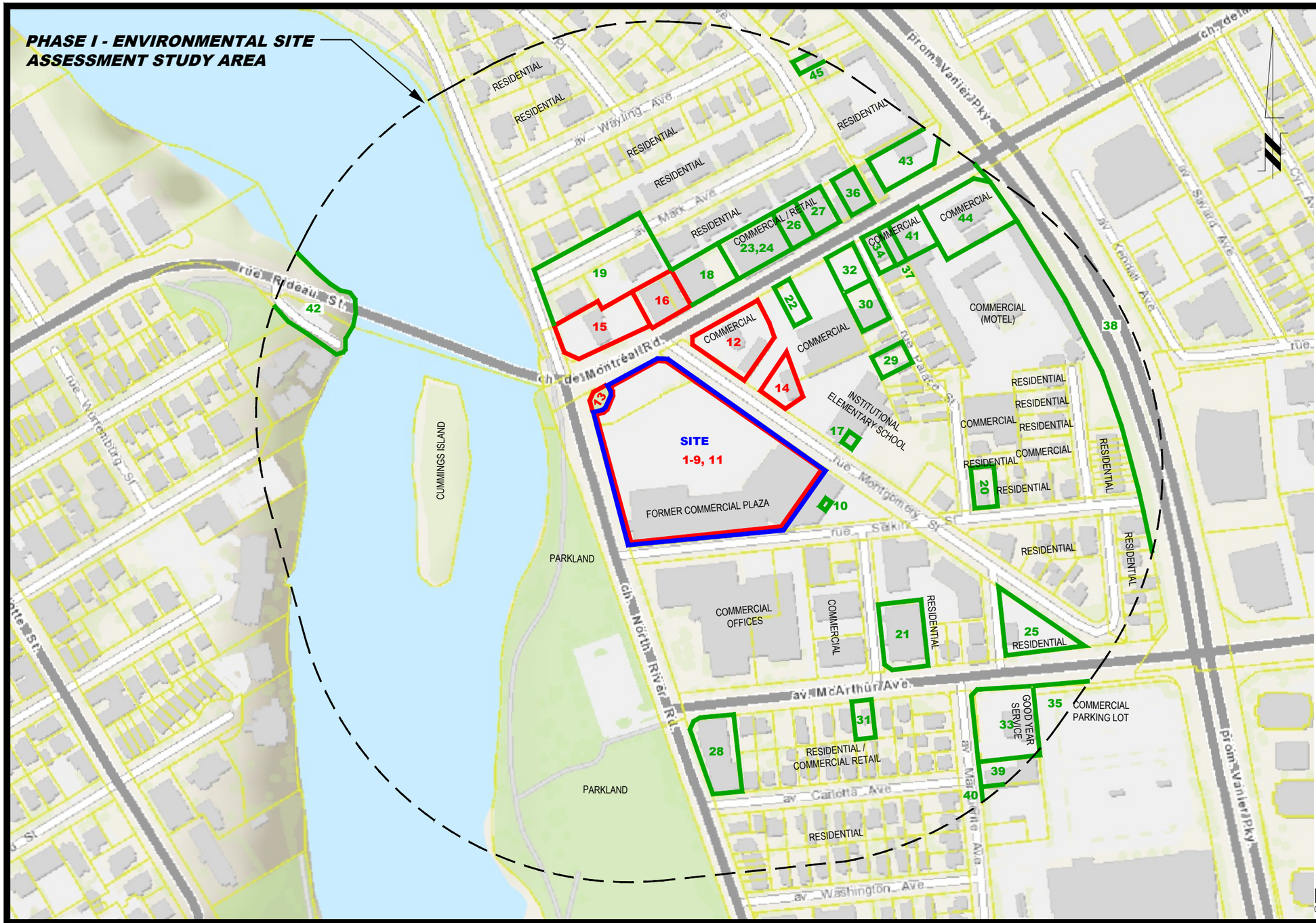

POTENTIALLY CONTAMINATING ACTIVITIES:

ID	ADDRESS	PCA ID	DESCRIPTION
1	ON-SITE	28	FORMER GASOLINE UNDERGROUND STORAGE TANKS
2	ON-SITE	28	FORMER PUMP ISLANDS
3	ON-SITE	28	FORMER PUMP ISLANDS
4	ON-SITE	28	FORMER GASOLINE SERVICE STATION
5	ON-SITE	52	FORMER AUTOMOTIVE SERVICE GARAGE
6	ON-SITE	30	FILL MATERIAL OF UNKNOWN QUALITY
7	ON-SITE	52	FORMER AUTOMOTIVE SERVICE GARAGE
8	ON-SITE	37	FORMER POTENTIAL DRY CLEANERS
9	ON-SITE	55	TRANSFORMERS IN HYDRO VAULT
10	OFF-SITE	55	TRANSFORMERS IN HYDRO VAULT
11	ON-SITE	N/A	DE-ICING AGENTS USED FOR THE PURPOSE OF SAFETY
12	42 MONTREAL ROAD	28/52	EXISTING OFF-SITE GASOLINE SERVICE STATION AND FORMER OFF-SITE AUTOMOTIVE SERVICE GARAGE
13	291 NORTH RIVER ROAD	28	OFF-SITE FORMER UNDERGROUND STORAGE TANKS
14	299 MONTGOMERY ST.	52	EXISTING OFF-SITE AUTOMOTIVE SERVICE GARAGE
15	1 MONTREAL ROAD	28	EXISTING OFF-SITE GASOLINE SERVICE STATION
16	23 MONTREAL ROAD	37/ N/A /32	OFF-SITE POTENTIAL FORMER CLEANERS AND OTHER OFF-SITE INDUSTRIES
17	307 MONTGOMERY ST.	28	FORMER ABOVEGROUND STORAGE TANK
18	45 MONTREAL ROAD	52	FORMER AUTOMOTIVE SERVICE GARAGE
19	2 & PART OF 20 MARK AVE.	12	FORMER CONCRETE PIPE MANUFACTURING
20	91 SELKIRK STREET	28	HISTORIC FUEL OIL LEAK
21	39 MCARTHUR AVENUE	N/A	FORMER PRINTERS
22	PART OF 70 MONTREAL RD.	N/A	FORMER PRINTERS
23	50-55 MONTREAL RD.	27	FORMER RAILWAY TRANSPORT AND RELATED SERVICE INDUSTRIES
24	59 MONTREAL RD.	37	FORMER LAUNDRY
25	350 MONTGOMERY ST.	52/28	FORMER AUTOMOTIVE SERVICE GARAGE AND RETAIL FUEL OUTLET
26	75 MONTREAL RD.	28/52	FORMER IMPERIAL OIL SERVICE STATION & AUTOMOTIVE SERVICE GARAGE
27	79 MONTREAL RD.	N/A	FORMER PRINTERS
28	361 RIVER ROAD	28	FORMER RETAIL FUEL OUTLET
29	297 PALACE ST.	28	HISTORIC OIL SPILL
30	80 & 82 MONTREAL RD.	28	FORMER RETAIL FUEL OUTLET
31	32 CARLOTTA AVE.	N/A	FORMER PRINTERS
32	70 MONTREAL RD.	28/52	FORMER PARFIELDS OILS, MCCOIL FRONTENAC OIL SERVICE STATION & RELIANCE MOTOR SERVICE
33	52 MCARTHUR AVE.	52/28	EXISTING AUTOMOTIVE SERVICE GARAGE WITH ASSOCIATED UNDERGROUND STORAGE TANK
34	90 MONTREAL RD.	28	HISTORIC FUEL AND FURNACE OIL LEAKS
35	100 MCARTHUR AVE.	37/28	FORMER DRY CLEANERS AND FORMER BRASS FOUNDRY WITH ASSOCIATED UNDERGROUND STORAGE TANKS
36	89 MONTREAL RD.	N/A	FORMER PRINTERS
37	94 MONTREAL RD.	37	FORMER VANIER CLEANERS
38	VANIER PARKWAY	46	FORMER RAIL LINE
39	373 MARGUERITE AVE.	10	FORMER COLLISION CENTRE AND BODY SHOP
40	381 MARGUERITE AVE.	37	FORMER DRY CLEANERS
41	112 MONTREAL RD.	10	FORMER AUTO SALES , RELIANCE MOTOR COURT
42	VARIOUS ADDRESSES	58	CLOSED WASTE DISPOSAL SITE
43	115 MONTREAL RD.	N/A/N/A	FORMER FEED MILL & ELEVATOR , COAL STORAGE
44	120 MONTREAL RD.	28/ N/A 45	FORMER & EXISTING RETAIL FUEL OUTLET , FORMER PRINTERS & POTENTIAL FORMER PULP AND PAPER MILL
45	259 GREENSWAY AVE.	28	HISTORIC FURNACE OIL LEAK

SCALE: 1:3000

0 25 50 75 100 125 150 200m

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NO.	REVISIONS	DATE	INITIAL

MAIN AND MAIN DEVELOPMENTS

PHASE I - ENVIRONMENTAL SITE ASSESSMENT
2 MONTREAL ROAD, 3 SELKIRK STREET, 280 MONTGOMERY STREET AND 300 MONTGOMERY STREET
OTTAWA, ONTARIO

Title:

SURROUNDING LAND USE PLAN

Scale: 1:3000	Date: 09/2022
Drawn by: YA	Report No.: PE4546-4
Checked by: JC	Dwg. No.: PE4546-2
Approved by: LK	Revision No.:

11x17

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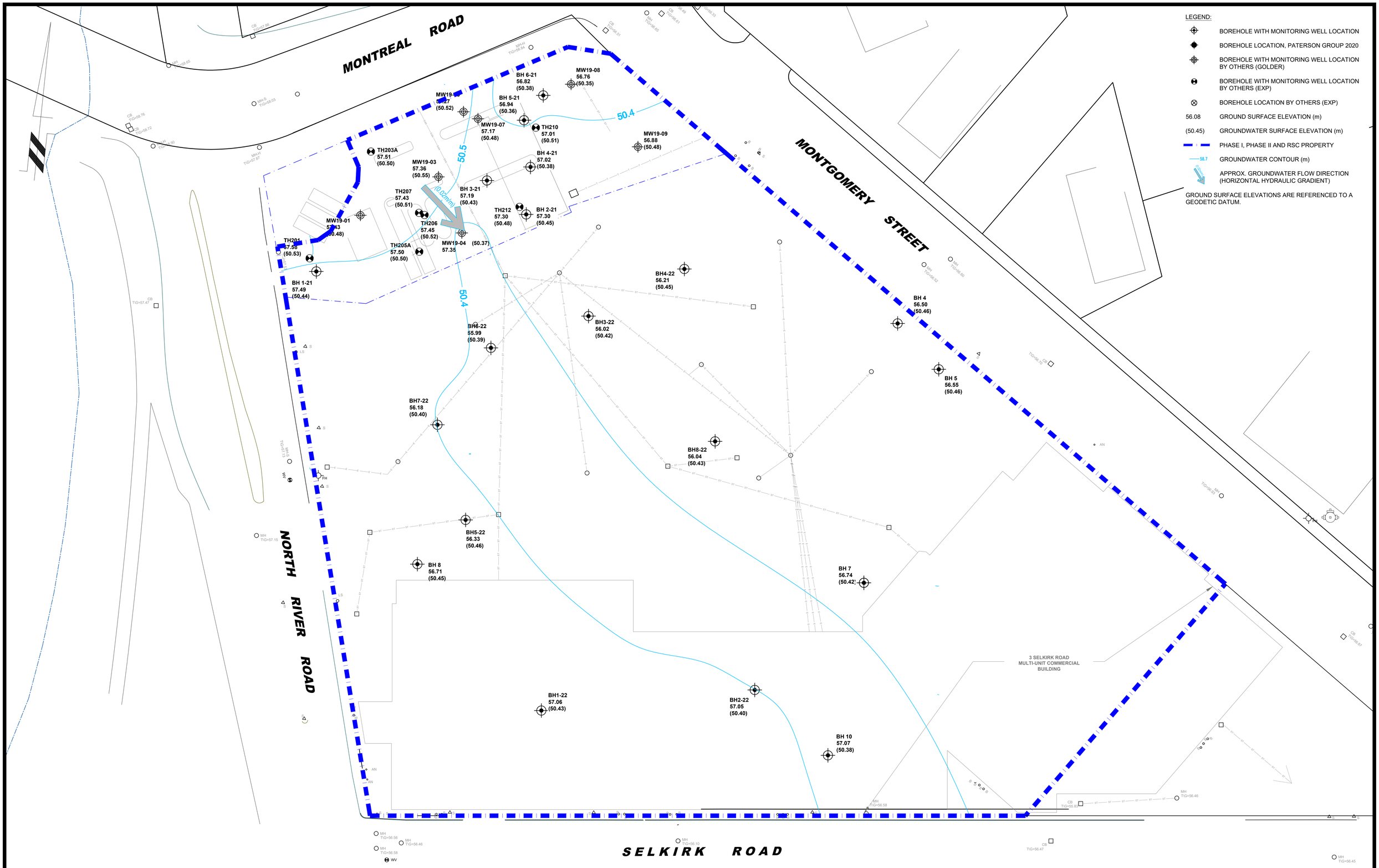

LEGEND:

- BOREHOLE WITH MONITORING WELL LOCATION
- BOREHOLE LOCATION, PATERSON GROUP 2020
- BOREHOLE WITH MONITORING WELL LOCATION BY OTHERS (GOLDER)
- BOREHOLE WITH MONITORING WELL LOCATION BY OTHERS (EXP)
- BOREHOLE LOCATION BY OTHERS (EXP)
- 56.08 GROUND SURFACE ELEVATION (m)
- (50.45) GROUNDWATER SURFACE ELEVATION (m)
- PHASE I, PHASE II AND RSC PROPERTY
- 58.7 GROUNDWATER CONTOUR (m)
- APPROX. GROUNDWATER FLOW DIRECTION (HORIZONTAL HYDRAULIC GRADIENT)

GROUND SURFACE ELEVATIONS ARE REFERENCED TO A GEODETIC DATUM.

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NO.	REVISIONS	DATE	INITIAL

RIVERAIN DEVELOPMENTS INC.

PHASE II - ENVIRONMENTAL SITE ASSESSMENT
2 MONTREAL ROAD, 3 SELKIRK STREET, 280 MONTGOMERY STREET AND 300 MONTGOMERY STREET
OTTAWA, ONTARIO

Title:

GROUNDWATER CONTOUR PLAN

Scale:	1:300
Drawn by:	MPG
Checked by:	LK
Approved by:	LK
Date:	11/2021
Report No.:	PE4546
Drawing No.:	PE4546-3
Revision No.:	

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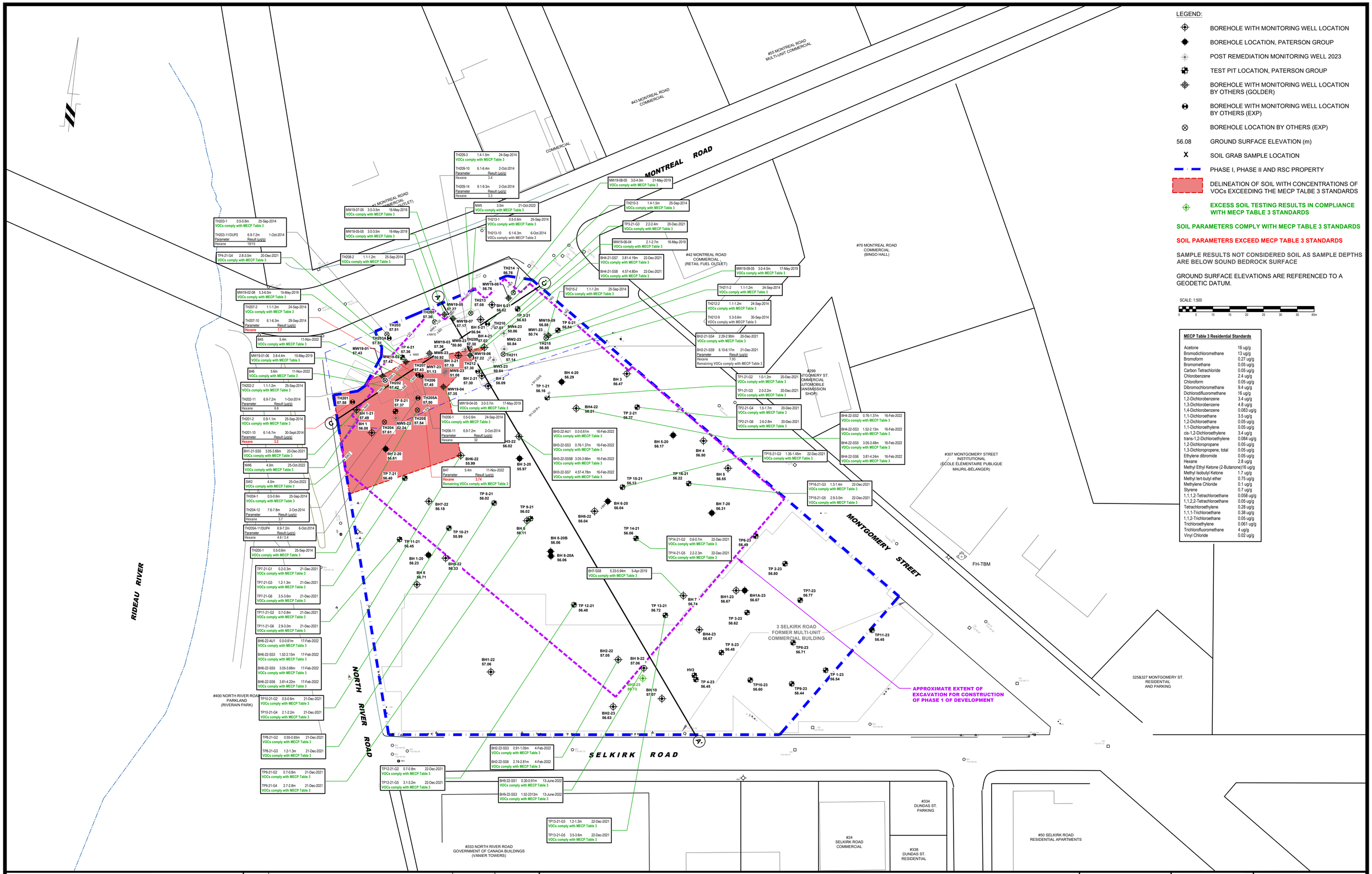
MONTREAL ROAD
#53 MONTREAL ROAD
MULTI-UNIT COMMERCIAL
#43 MONTREAL ROAD
COMMERCIAL
#41 MONTREAL ROAD
COMMERCIAL (OUTLET)
#42 MONTREAL ROAD
COMMERCIAL
(RETAIL FUEL OUTLET)
#70 MONTREAL ROAD
COMMERCIAL
(BINGO HALL)
#299
MONTGOMERY ST.
COMMERCIAL
(AUTOMOBILE
TRANSMISSION
SHOP)
#307 MONTGOMERY STREET
INSTITUTIONAL
(ÉCOLE ÉLÉMENTAIRE PUBLIQUE
MAURIL-BÉLANGER)
MONTGOMERY STREET
FH-TBM
RIDEAU RIVER
NORTH RIVER ROAD
SELKIRK ROAD
#400 NORTH RIVER ROAD
PARKLAND
(RIVERAIN PARK)
#333 NORTH RIVER ROAD
GOVERNMENT OF CANADA BUILDINGS
(VANIER TOWERS)
3 SELKIRK ROAD
FORMER MULTI-UNIT
COMMERCIAL BUILDING
#24
SELKIRK ROAD
COMMERCIAL
#334
DUNDAS ST.
PARKING
#338
DUNDAS ST.
RESIDENTIAL
#50 SELKIRK ROAD
RESIDENTIAL APARTMENTS
325&327 MONTGOMERY ST.
RESIDENTIAL
AND PARKING
APPROXIMATE EXTENT OF
EXCAVATION FOR CONSTRUCTION
OF PHASE 1 OF DEVELOPMENT
TH203-1 0.5-0.6m 25-Sep-2014
VOCs comply with MECP Table 3
TH203-11/DUP2 6.9-7.2m 1-Oct-2014
Parameter Result (ug/g)
Hexane 19/15
TP4-21-G4 2.8-3.0m 20-Dec-2021
VOCs comply with MECP Table 3
MW19-02-08 5.3-6.0m 15-May-2019
VOCs comply with MECP Table 3
TH207-2 1.1-1.2m 24-Sep-2014
VOCs comply with MECP Table 3
TH207-10 6.1-6.3m 29-Sep-2014
Parameter Result (ug/g)
Hexane 77
B45 5.4m 11-Nov-2022
VOCs comply with MECP Table 3
MW19-01-06 3.8-4.4m 15-May-2019
VOCs comply with MECP Table 3
B46 5.6m 11-Nov-2022
VOCs comply with MECP Table 3
TH202-2 1.1-1.2m 25-Sep-2014
VOCs comply with MECP Table 3
TH202-11 6.9-7.2m 1-Oct-2014
Parameter Result (ug/g)
Hexane 6.6
TH201-2 0.9-1.1m 25-Sep-2014
VOCs comply with MECP Table 3
TH201-10 6.1-6.7m 30-Sept-2014
Parameter Result (ug/g)
Hexane 3.2
BH1-21-SS5 3.05-3.66m 20-Dec-2021
VOCs comply with MECP Table 3
NW6 4.0m 25-Oct-2022
VOCs comply with MECP Table 3
SW2 4.0m 25-Oct-2022
VOCs comply with MECP Table 3
TH204-1 0.5-0.6m 25-Sep-2014
VOCs comply with MECP Table 3
TH204-12 7.6-7.8m 2-Oct-2014
Parameter Result (ug/g)
Hexane 3.7
TH205A-11/DUP4 6.9-7.2m 6-Oct-2014
Parameter Result (ug/g)
Hexane 4.6 / 3.4
TH205-1 0.5-0.6m 25-Sep-2014
VOCs comply with MECP Table 3
TP7-21-G1 0.2-0.3m 21-Dec-2021
VOCs comply with MECP Table 3
TP7-21-G3 1.2-1.3m 21-Dec-2021
VOCs comply with MECP Table 3
TP7-21-G6 3.5-3.6m 21-Dec-2021
VOCs comply with MECP Table 3
TP11-21-G2 0.7-0.8m 21-Dec-2021
VOCs comply with MECP Table 3
TP11-21-G6 2.9-3.0m 21-Dec-2021
VOCs comply with MECP Table 3
BH6-22-AU1 0.0-0.61m 17-Feb-2022
VOCs comply with MECP Table 3
BH6-22-SS3 1.52-2.13m 17-Feb-2022
VOCs comply with MECP Table 3
BH6-22-SS5 3.05-3.66m 17-Feb-2022
VOCs comply with MECP Table 3
BH6-22-SS6 3.81-4.22m 17-Feb-2022
VOCs comply with MECP Table 3
TP10-21-G2 0.5-0.6m 21-Dec-2021
VOCs comply with MECP Table 3
TP10-21-G4 2.1-2.2m 21-Dec-2021
VOCs comply with MECP Table 3
TP8-21-G2 0.55-0.65m 21-Dec-2021
VOCs comply with MECP Table 3
TP8-21-G3 1.2-1.3m 21-Dec-2021
VOCs comply with MECP Table 3
TP9-21-G2 0.7-0.8m 21-Dec-2021
VOCs comply with MECP Table 3
TP9-21-G4 2.7-2.8m 21-Dec-2021
VOCs comply with MECP Table 3
TH209-3 1.4-1.5m 24-Sep-2014
VOCs comply with MECP Table 3
TH209-10 6.1-6.4m 2-Oct-2014
Parameter Result (ug/g)
Hexane 3.4
TH209-14 9.1-9.3m 2-Oct-2014
Parameter Result (ug/g)
Hexane 3.3
NW6 3.0m 21-Oct-2022
VOCs comply with MECP Table 3
TH213-1 0.5-0.6m 25-Sep-2014
VOCs comply with MECP Table 3
TH213-10 6.1-6.3m 6-Oct-2014
VOCs comply with MECP Table 3
MW19-07-05 3.0-3.5m 16-May-2019
VOCs comply with MECP Table 3
MW19-05-05 3.0-3.5m 16-May-2019
VOCs comply with MECP Table 3
TH208-2 1.1-1.2m 25-Sep-2014
VOCs comply with MECP Table 3
TH208-1 0.5-0.6m 24-Sep-2014
VOCs comply with MECP Table 3
TH206-11 6.9-7.2m 2-Oct-2014
Parameter Result (ug/g)
Hexane 32
B47 5.4m 11-Nov-2022
Parameter Result (ug/g)
Hexane 3.74
Remaining VOCs comply with MECP Table 3
MW19-04-05 3.0-3.7m 17-May-2019
VOCs comply with MECP Table 3
MW19-08-05 3.0-4.0m 21-May-2019
VOCs comply with MECP Table 3
TH210-3 1.4-1.5m 25-Sep-2014
VOCs comply with MECP Table 3
TP3-21-G3 2.2-2.4m 20-Dec-2021
VOCs comply with MECP Table 3
MW19-06-04 2.1-2.7m 16-May-2019
VOCs comply with MECP Table 3
BH4-21-SS7 3.81-4.19m 22-Dec-2021
VOCs comply with MECP Table 3
BH4-21-SS8 4.57-4.80m 22-Dec-2021
VOCs comply with MECP Table 3
TH215-2 1.1-1.2m 25-Sep-2014
VOCs comply with MECP Table 3
MW19-09-05 3.0-4.0m 17-May-2019
VOCs comply with MECP Table 3
TH211-2 1.1-1.2m 24-Sep-2014
VOCs comply with MECP Table 3
TH212-2 1.1-1.2m 24-Sep-2014
VOCs comply with MECP Table 3
TH212-9 5.3-5.6m 30-Sep-2014
VOCs comply with MECP Table 3
BH2-21-SS4 2.29-2.90m 20-Dec-2021
VOCs comply with MECP Table 3
BH2-21-SS9 6.10-6.17m 21-Dec-2021
Parameter Result (ug/g)
Hexane 7.83
Remaining VOCs comply with MECP Table 3
TP1-21-G2 1.0-1.2m 20-Dec-2021
VOCs comply with MECP Table 3
TP1-21-G3 2.0-2.2m 20-Dec-2021
VOCs comply with MECP Table 3
TP2-21-G4 1.5-1.7m 20-Dec-2021
VOCs comply with MECP Table 3
TP3-21-G5 2.6-2.8m 20-Dec-2021
VOCs comply with MECP Table 3
TP15-21-G3 1.35-1.45m 22-Dec-2021
VOCs comply with MECP Table 3
TP16-21-G3 1.3-1.4m 22-Dec-2021
VOCs comply with MECP Table 3
TP16-21-G5 2.9-3.0m 22-Dec-2021
VOCs comply with MECP Table 3
BH4-22-SS2 0.76-1.37m 16-Feb-2022
VOCs comply with MECP Table 3
BH4-22-SS3 1.52-2.13m 16-Feb-2022
VOCs comply with MECP Table 3
BH4-22-SS5 3.05-3.48m 16-Feb-2022
VOCs comply with MECP Table 3
BH4-22-SS6 3.81-4.24m 16-Feb-2022
VOCs comply with MECP Table 3
BH3-22-AU1 0.0-0.61m 16-Feb-2022
VOCs comply with MECP Table 3
BH3-22-SS3 0.76-1.37m 16-Feb-2022
VOCs comply with MECP Table 3
BH3-22-SS5 3.05-3.66m 16-Feb-2022
VOCs comply with MECP Table 3
BH3-22-SS7 4.57-4.78m 16-Feb-2022
VOCs comply with MECP Table 3
TP14-21-G2 0.6-0.7m 22-Dec-2021
VOCs comply with MECP Table 3
TP14-21-G5 2.2-2.3m 22-Dec-2021
VOCs comply with MECP Table 3
BH7-SS8 5.33-5.94m 5-Apr-2019
VOCs comply with MECP Table 3
BH2-22-SS3 0.91-1.05m 4-Feb-2022
VOCs comply with MECP Table 3
BH2-22-SS6 2.74-2.81m 4-Feb-2022
VOCs comply with MECP Table 3
TP12-21-G2 0.7-0.8m 22-Dec-2021
VOCs comply with MECP Table 3
TP12-21-G5 3.1-3.2m 22-Dec-2021
VOCs comply with MECP Table 3
BH9-22-SS1 0.30-0.91m 13-June-2022
VOCs comply with MECP Table 3
BH9-22-SS3 1.52-2313m 13-June-2022
VOCs comply with MECP Table 3
TP13-21-G3 1.2-1.3m 22-Dec-2021
VOCs comply with MECP Table 3
TP13-21-G5 3.5-3.6m 22-Dec-2021
VOCs comply with MECP Table 3
TH214 56.76
MW19-08 56.76
TH213 57.08
BH 6-21 56.62
TH209 57.36
MW19-05 57.27
TH203 57.51
MW19-07 57.17
BH 5-21 56.94
TH210 57.07
MW4-23 50.86
MW19-09 56.88
MW1-23 50.74
TP 6-21 56.84
TH219 56.88
TP 3-21 56.63
TH203A 57.34
MW19-01 57.43
TP 4-21 57.36
MW19-02 57.42
MW19-03 57.36
MW9-23 *50.80
TH209a 57.30
BH 4-21 57.02
MW2-23 50.84
TH211 57.14
MW6-23 50.92
MW19-06 57.22
BH 3-21 57.19
TH212 57.30
MW3-23 50.84
TH207 57.43
MW7-23 51.13
MW8-23 51.08
BH 2-21 57.30
BH 2 56.09
TH202 57.42
TH206 57.45
MW19-04 57.35
TH201 57.58
TH205A 57.50
TP 5-21 57.37
BH 1-21 57.49
BH 1 56.08
MW5-23 *52.24
TH204 57.61
TH205 57.54
BH 2-20 56.61
TP 7-21 56.40
BH6-22 55.99
TP 8-21 56.02
BH7-22 56.18
TP 10-21 55.99
TP 11-21 56.45
BH 1-20 56.23
BH5-22 56.33
BH 8 55.71
TP 9-21 56.02
BH 9 56.11
BH 8-20B 56.06
BH 8-20A 56.06
TP 12-21 56.48
BH1-22 57.06
BH 1-21 56.76
TP 1-21 56.16
BH 4-20 56.29
BH 3 56.47
BH4-22 56.21
TP 2-21 56.27
BH 5-20 56.17
BH 4 56.50
TP 15-21 56.12
TP 16-21 56.22
BH 5 56.55
BH 6-20 56.04
BH8-22 56.04
BH 7-20 56.31
TP 14-21 56.06
TP8-23 56.49
TP 2-23 56.60
BH 7 56.74
BH1-23 56.67
BH1A-23 56.67
TP7-23 56.77
TP 3-23 56.62
BH4-23 56.67
TP11-23 56.45
TP 5-23 56.48
TP9-23 56.71
BH2-22 57.05
BH 9-22 57.06
HV2
TP 4-23 56.45
TP 1-23 56.54
BH3-23 56.73
BH 10 57.07
TP10-23 56.60
TP9-23 56.44
BH2-23 56.63
TP 13-21 56.72
TP 12-23 56.60
BH 6 56.11
TH 1-22 56.66
TH 2-22 56.69
TH 3-22 56.02
TH 4-22 56.27
TH 5-22 56.17
TH 6-22 56.50
TH 7-22 56.55
TH 8-22 56.22
TH 9-22 56.31
TH 10-22 56.23
TH 11-22 56.33
TH 12-22 56.18
TH 13-22 56.45
TH 14-22 56.23
TH 15-22 56.71
TH 16-22 56.44
TH 17-22 56.60
TH 18-22 56.54
TH 19-22 56.73
TH 20-22 56.63
TH 21-22 56.48
TH 22-22 56.72
TH 23-22 56.62
TH 24-22 56.67
TH 25-22 56.45
TH 26-22 56.71
TH 27-22 56.77
TH 28-22 56.60
TH 29-22 56.44
TH 30-22 56.54
TH 31-22 56.45
TH 32-22 56.63
TH 33-22 56.02
TH 34-22 56.09
TH 35-22 56.11
TH 36-22 56.06
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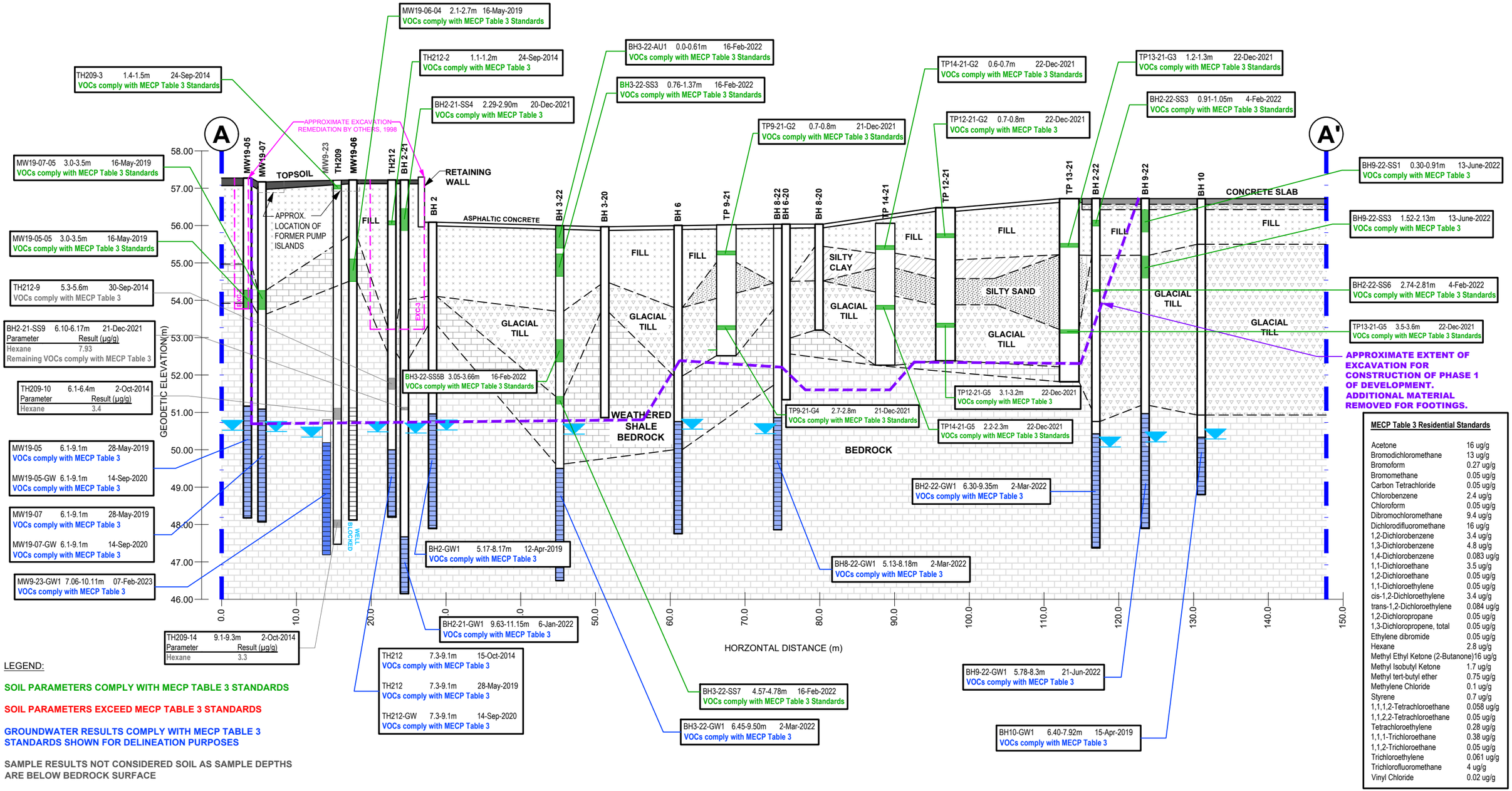
TH 51-22 56.06
TH



LEGEND:

SOIL PARAMETERS COMPLY WITH MECP TABLE 3 STANDARDS

SOIL PARAMETERS EXCEED MECP TABLE 3 STANDARDS

GROUNDWATER RESULTS COMPLY WITH MECP TABLE 3 STANDARDS SHOWN FOR DELINEATION PURPOSES

SAMPLE RESULTS NOT CONSIDERED SOIL AS SAMPLE DEPTHS ARE BELOW BEDROCK SURFACE

MECP Table 3 Residential Standards

Acetone	16 ug/g
Bromodichloromethane	13 ug/g
Bromoform	0.27 ug/g
Bromomethane	0.05 ug/g
Carbon Tetrachloride	0.05 ug/g
Chlorobenzene	2.4 ug/g
Chloroform	0.05 ug/g
Dibromochloromethane	9.4 ug/g
Dichlorodifluoromethane	16 ug/g
1,2-Dichlorobenzene	3.4 ug/g
1,3-Dichlorobenzene	4.8 ug/g
1,4-Dichlorobenzene	0.083 ug/g
1,1-Dichloroethane	3.5 ug/g
1,2-Dichloroethane	0.05 ug/g
1,1-Dichloroethylene	0.05 ug/g
cis-1,2-Dichloroethylene	3.4 ug/g
trans-1,2-Dichloroethylene	0.084 ug/g
1,2-Dichloropropane	0.05 ug/g
1,3-Dichloropropene, total	0.05 ug/g
Ethylene dibromide	0.05 ug/g
Hexane	2.8 ug/g
Methyl Ethyl Ketone (2-Butanone)	16 ug/g
Methyl Isobutyl Ketone	1.7 ug/g
Methyl tert-butyl ether	0.75 ug/g
Methylene Chloride	0.1 ug/g
Styrene	0.7 ug/g
1,1,1,2-Tetrachloroethane	0.058 ug/g
1,1,2,2-Tetrachloroethane	0.05 ug/g
Tetrachloroethylene	0.28 ug/g
1,1,1-Trichloroethane	0.38 ug/g
1,1,2-Trichloroethane	0.05 ug/g
Trichloroethylene	0.061 ug/g
Trichlorofluoromethane	4 ug/g
Vinyl Chloride	0.02 ug/g

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NO.	REVISIONS	DATE	INITIAL
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RIVERAIN DEVELOPMENTS INC.

PHASE II - ENVIRONMENTAL SITE ASSESSMENT
2 MONTREAL ROAD, 3 SELKIRK STREET, 280 MONTGOMERY STREET AND 300 MONTGOMERY STREET

OTTAWA, ONTARIO

Title:

CROSS SECTION A-A' SOIL - VOCs

Scale: AS SHOWN	Date: 02/2022
Drawn by: RCG	Report No.: PE4546
Checked by: DP	Dwg. No.: PE4546-4A
Approved by: LK	Revision No.: 0

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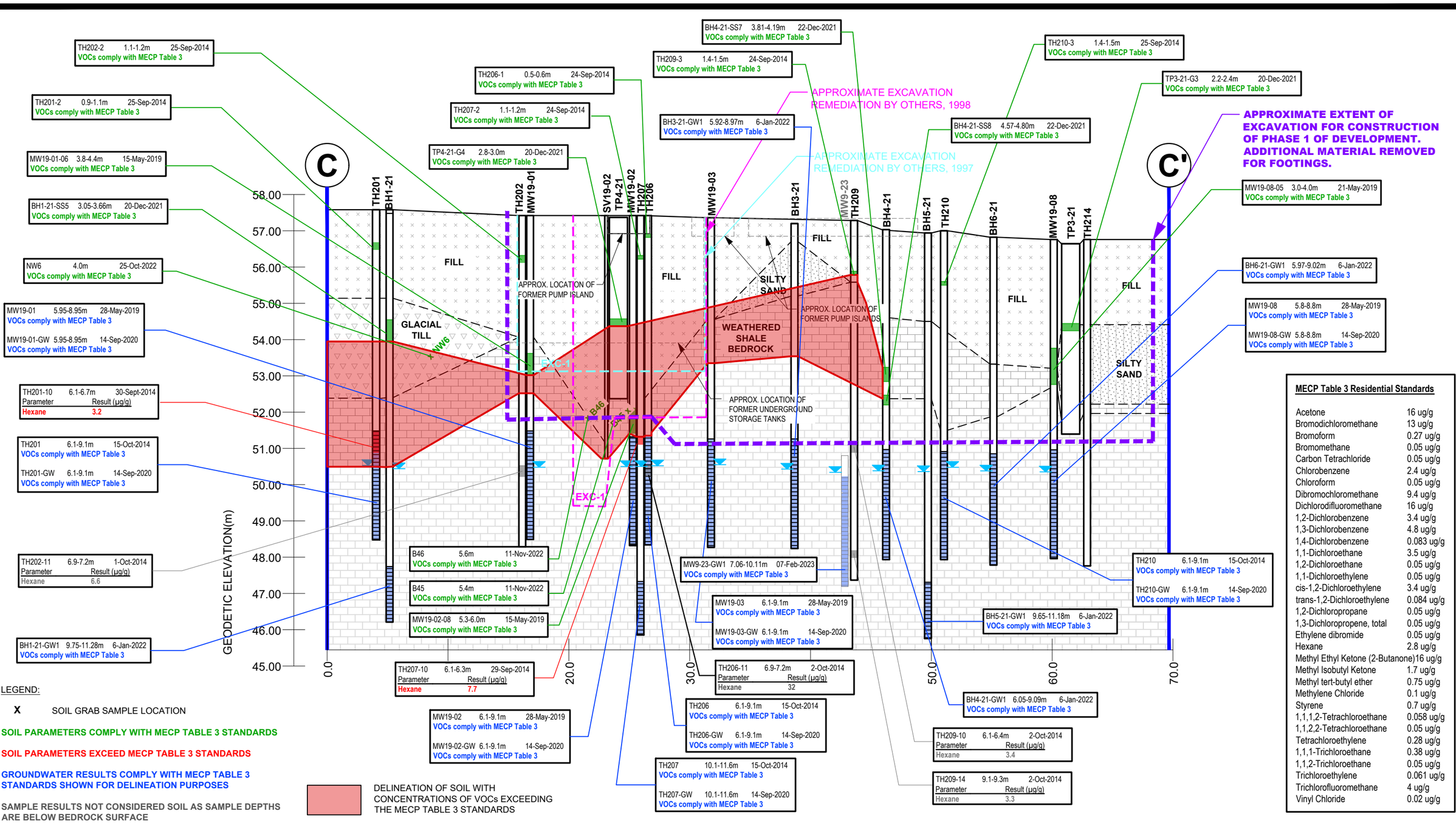

LEGEND:

X SOIL GRAB SAMPLE LOCATION

SOIL PARAMETERS COMPLY WITH MECP TABLE 3 STANDARDS

SOIL PARAMETERS EXCEED MECP TABLE 3 STANDARDS

GROUNDWATER RESULTS COMPLY WITH MECP TABLE 3 STANDARDS SHOWN FOR DELINEATION PURPOSES

SAMPLE RESULTS NOT CONSIDERED SOIL AS SAMPLE DEPTHS ARE BELOW BEDROCK SURFACE

DELINEATION OF SOIL WITH CONCENTRATIONS OF VOCs EXCEEDING THE MECP TABLE 3 STANDARDS

MECP Table 3 Residential Standards

Acetone	16 ug/g
Bromodichloromethane	13 ug/g
Bromoform	0.27 ug/g
Bromomethane	0.05 ug/g
Carbon Tetrachloride	0.05 ug/g
Chlorobenzene	2.4 ug/g
Chloroform	0.05 ug/g
Dibromochloromethane	9.4 ug/g
Dichlorodifluoromethane	16 ug/g
1,2-Dichlorobenzene	3.4 ug/g
1,3-Dichlorobenzene	4.8 ug/g
1,4-Dichlorobenzene	0.083 ug/g
1,1-Dichloroethane	3.5 ug/g
1,2-Dichloroethane	0.05 ug/g
1,1-Dichloroethylene	0.05 ug/g
cis-1,2-Dichloroethylene	3.4 ug/g
trans-1,2-Dichloroethylene	0.084 ug/g
1,2-Dichloropropane	0.05 ug/g
1,3-Dichloropropene, total	0.05 ug/g
Ethylene dibromide	0.05 ug/g
Hexane	2.8 ug/g
Methyl Ethyl Ketone (2-Butanone)	16 ug/g
Methyl Isobutyl Ketone	1.7 ug/g
Methyl tert-butyl ether	0.75 ug/g
Methylene Chloride	0.1 ug/g
Styrene	0.7 ug/g
1,1,1,2-Tetrachloroethane	0.058 ug/g
1,1,2,2-Tetrachloroethane	0.05 ug/g
Tetrachloroethylene	0.28 ug/g
1,1,1-Trichloroethane	0.38 ug/g
1,1,2-Trichloroethane	0.05 ug/g
Trichloroethylene	0.061 ug/g
Trichlorofluoromethane	4 ug/g
Vinyl Chloride	0.02 ug/g

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NO.	REVISIONS	DATE	INITIAL
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RIVERAIN DEVELOPMENTS INC.

PHASE II - ENVIRONMENTAL SITE ASSESSMENT
2 MONTREAL ROAD, 3 SELKIRK STREET, 280 MONTGOMERY STREET AND 300 MONTGOMERY STREET

OTTAWA, ONTARIO

Title:

CROSS SECTION C-C' SOIL - VOCs

Scale: AS SHOWN	Date: 02/2022
Drawn by: RCG	Report No.: PE4546
Checked by: DP	Dwg. No.: PE4546-4C
Approved by: LK	Revision No.: 0

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LEGEND:

- BOREHOLE WITH MONITORING WELL LOCATION
- BOREHOLE LOCATION, PATERSON GROUP
- POST REMEDIATION MONITORING WELL 2023
- TEST PIT LOCATION, PATERSON GROUP
- BOREHOLE WITH MONITORING WELL LOCATION BY OTHERS (GOLDER)
- SOIL VAPOUR PROBE LOCATION (GOLDER)
- BOREHOLE WITH MONITORING WELL LOCATION BY OTHERS (EXP)
- BOREHOLE LOCATION BY OTHERS (EXP)
- 56.08 GROUND SURFACE ELEVATION (m)
- X SOIL GRAB SAMPLE LOCATION
- PHASE I, PHASE II AND RSC PROPERTY
- DELINEATION OF SOIL WITH CONCENTRATIONS OF PHCs EXCEEDING THE MECP TABLE 3 STANDARDS
- **EXCESS SOIL TESTING RESULTS IN COMPLIANCE WITH MECP TABLE 3 STANDARDS**

SOIL PARAMETERS COMPLY WITH MECP TABLE 3 STANDARDS

SOIL PARAMETERS EXCEED MECP TABLE 3 STANDARDS

SAMPLE RESULTS NOT CONSIDERED SOIL AS SAMPLE DEPTHS ARE BELOW SOUND BEDROCK SURFACE.

GROUND SURFACE ELEVATIONS ARE REFERENCED TO A GEODETIC DATUM.

SCALE: 1:500

0 5 10 15 20 25 30 35 40m

MECP Table 3 Residential Standards

PHCs F1	55 ug/g
PHCs F2	98 ug/g
PHCs F3	300 ug/g
PHCs F4	2800 ug/g

MONTREAL ROAD

SELKIRK ROAD

NORTH RIVER ROAD

RIDEAU RIVER

MONTGOMERY STREET

#43 MONTREAL ROAD COMMERCIAL

#1 MONTREAL ROAD COMMERCIAL (RETAIL FUEL OUTLET)

#42 MONTREAL ROAD COMMERCIAL

#70 MONTREAL ROAD COMMERCIAL (BINGO HALL)

#400 NORTH RIVER ROAD PARKLAND (RIVERAIN PARK)

#333 NORTH RIVER ROAD GOVERNMENT OF CANADA BUILDINGS (VANIER TOWERS)

#307 MONTGOMERY STREET INSTITUTIONAL (ÉCOLE ÉLÉMENTAIRE PUBLIQUE MAURIL-BÉLANGER)

3 SELKIRK ROAD FORMER MULTI-UNIT COMMERCIAL BUILDING

#24 SELKIRK ROAD COMMERCIAL

#334 DUNDAS ST. PARKING

#338 DUNDAS ST. RESIDENTIAL

#50 SELKIRK ROAD RESIDENTIAL APARTMENTS

3258&327 MONTGOMERY ST. RESIDENTIAL AND PARKING

FH-TBM

APPROXIMATE EXTENT OF EXCAVATION FOR CONSTRUCTION OF PHASE 1 OF DEVELOPMENT

PATERSON GROUP
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NO.	REVISIONS	DATE	INITIAL

RIVERAIN DEVELOPMENTS INC.

PHASE II - ENVIRONMENTAL SITE ASSESSMENT
2 MONTREAL ROAD, 3 SELKIRK STREET, 280 MONTGOMERY STREET AND 300 MONTGOMERY STREET
OTTAWA, ONTARIO

Title:

ANALYTICAL TESTING PLAN - SOIL (PHCs)

Scale:	1:500
Drawn by:	MPG
Checked by:	LK
Approved by:	LK
Date:	11/2021
Report No.:	PE4546
Drawing No.:	PE4546-5
Revision No.:	

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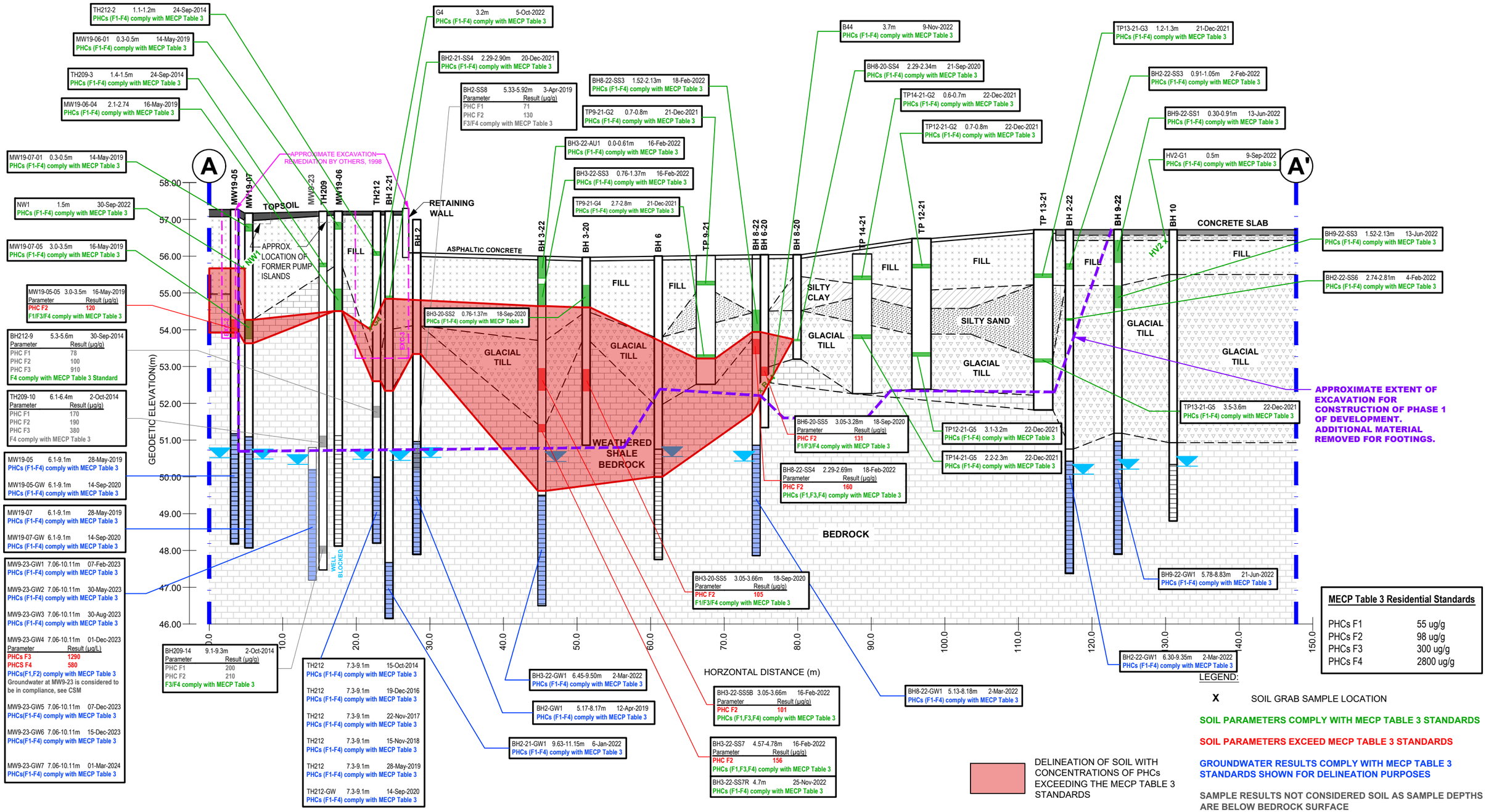

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NO.	REVISIONS	DATE	INITIAL
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RIVERAIN DEVELOPMENTS INC.

PHASE II - ENVIRONMENTAL SITE ASSESSMENT
2 MONTREAL ROAD, 3 SELKIRK STREET, 280 MONTGOMERY STREET AND 300 MONTGOMERY STREET

OTTAWA, ONTARIO

Title:

CROSS SECTION A-A' - SOIL (PHCs)

Scale: AS SHOWN	Date: 02/2022
Drawn by: RCG	Report No.: PE4546
Checked by: DP	Dwg. No.: PE4546-5A
Approved by: LK	Revision No.: 0

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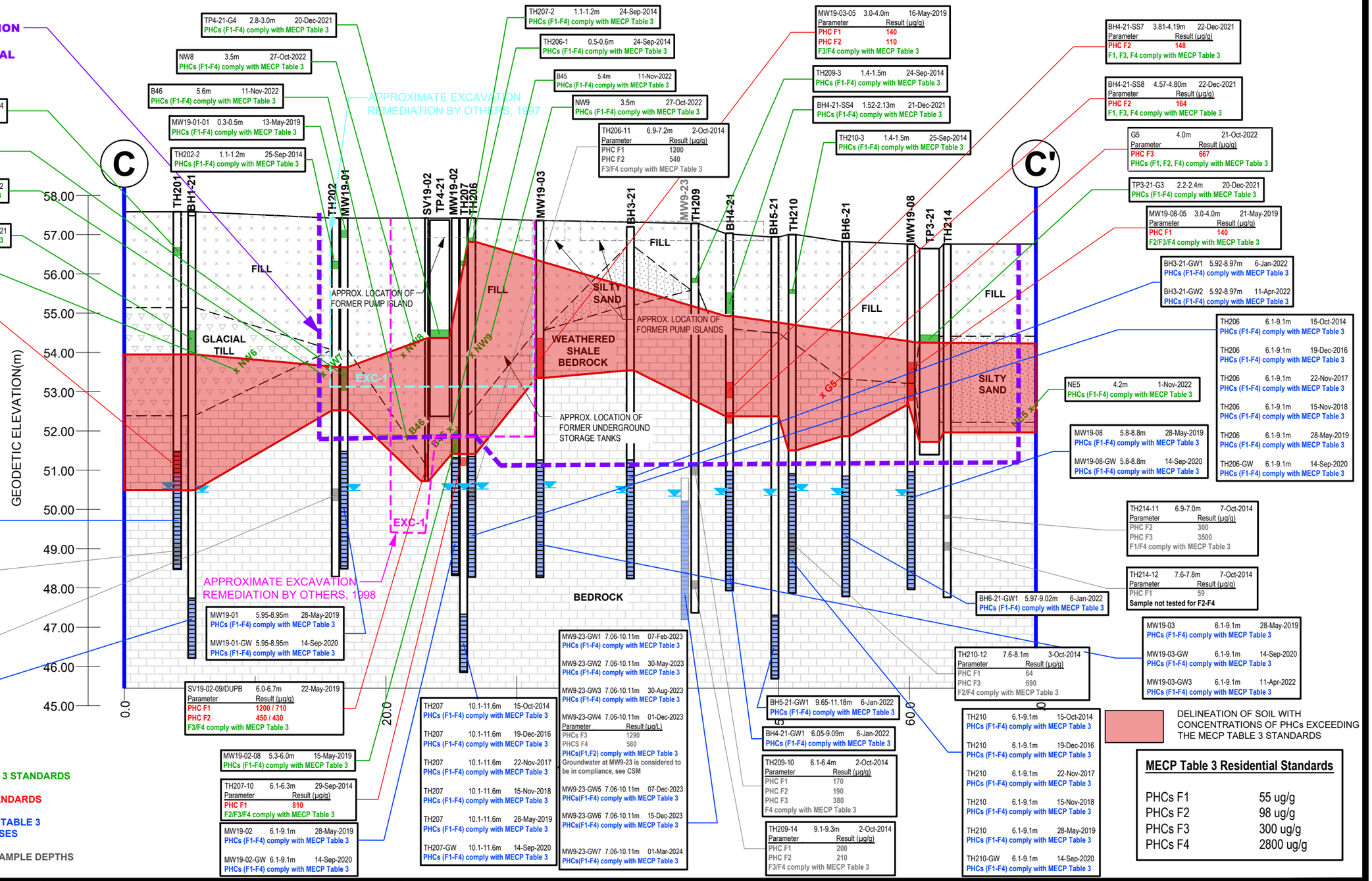
APPROXIMATE EXTENT OF EXCAVATION FOR CONSTRUCTION OF PHASE 1 OF DEVELOPMENT. ADDITIONAL MATERIAL REMOVED FOR FOOTINGS.



TP4-21-G4 2.8-3.0m 20-Dec-2021
PHCs (F1-F4) comply with MECP Table 3

NW8 3.5m 27-Oct-2022
PHCs (F1-F4) comply with MECP Table 3

B46 5.6m 11-Nov-2022
PHCs (F1-F4) comply with MECP Table 3

MW19-01-01 0.3-0.5m 13-May-2019
PHCs (F1-F4) comply with MECP Table 3

TH202-2 1.1-1.2m 25-Sep-2014
PHCs (F1-F4) comply with MECP Table 3

TH207-2 1.1-1.2m 24-Sep-2014
PHCs (F1-F4) comply with MECP Table 3

TH206-1 0.5-0.6m 24-Sep-2014
PHCs (F1-F4) comply with MECP Table 3

B45 5.4m 11-Nov-2022
PHCs (F1-F4) comply with MECP Table 3

NW9 3.5m 27-Oct-2022
PHCs (F1-F4) comply with MECP Table 3

TH206-11 6.9-7.2m 2-Oct-2014

Parameter	Result (µg/g)
PHC F1	1200
PHC F2	540

F3/F4 comply with MECP Table 3

MW19-03-05 3.0-4.0m 16-May-2019

Parameter	Result (µg/g)
PHC F1	140
PHC F2	110

F3/F4 comply with MECP Table 3

TH209-3 1.4-1.5m 24-Sep-2014
PHCs (F1-F4) comply with MECP Table 3

BH4-21-SS4 1.52-2.13m 21-Dec-2021
PHCs (F1-F4) comply with MECP Table 3

TH210-3 1.4-1.5m 25-Sep-2014
PHCs (F1-F4) comply with MECP Table 3

BH4-21-SS7 3.81-4.19m 22-Dec-2021

Parameter	Result (µg/g)
PHC F2	148

F1, F3, F4 comply with MECP Table 3

BH4-21-SS8 4.57-4.80m 22-Dec-2021

Parameter	Result (µg/g)
PHC F2	164

F1, F3, F4 comply with MECP Table 3

G5 4.0m 21-Oct-2022

Parameter	Result (µg/g)
PHC F3	667

PHCs (F1, F2, F4) comply with MECP Table 3

TP3-21-G3 2.2-2.4m 20-Dec-2021
PHCs (F1-F4) comply with MECP Table 3

MW19-08-05 3.0-4.0m 21-May-2019

Parameter	Result (µg/g)
PHC F1	140

F2/F3/F4 comply with MECP Table 3

BH3-21-GW1 5.92-8.97m 6-Jan-2022
PHCs (F1-F4) comply with MECP Table 3

BH3-21-GW2 5.92-8.97m 11-Apr-2022
PHCs (F1-F4) comply with MECP Table 3

TH201-2 0.9-1.1m 25-Sep-2014
PHCs (F1-F4) comply with MECP Table 3

MW19-01-06 3.8-4.4m 15-May-2019
PHCs (F1-F4) comply with MECP Table 3

NW7 4.0m 25-Oct-2022
PHCs (F1-F4) comply with MECP Table 3

BH1-21-SS5 3.05-3.66m 20-Dec-2021
PHCs (F1-F4) comply with MECP Table 3

NW6 4.0m 25-Oct-2022
PHCs (F1-F4) comply with MECP Table 3

TH201-10 6.1-6.7m 30-Sept-2014

Parameter	Result (µg/g)
PHC F1	820
PHC F2	190

F3/F4 comply with MECP Table 3

TH201 6.1-9.1m 15-Oct-2014

Parameter	Result (µg/L)
PHC F2	170

F1/F3/F4 comply with MECP Table 3

TH201 6.1-9.1m 19-Dec-2016
PHCs (F1-F4) comply with MECP Table 3

TH201 6.1-9.1m 22-Nov-2017
PHCs (F1-F4) comply with MECP Table 3

TH201 6.1-9.1m 15-Nov-2018
PHCs (F1-F4) comply with MECP Table 3

TH201 6.1-9.1m 28-May-2019
PHCs (F1-F4) comply with MECP Table 3

TH201-GW 6.1-9.1m 14-Sep-2020
PHCs (F1-F4) comply with MECP Table 3

TH201-13 8.4-9.0m 30-Sept-2014

Parameter	Result (µg/g)
PHC F1	310
PHC F2	190

F3/F4 comply with MECP Table 3

TH202-11 6.9-7.2m 1-Oct-2014

Parameter	Result (µg/g)
PHC F1	660
PHC F2	690

F3/F4 comply with MECP Table 3

BH1-21-GW1 9.75-11.28m 6-Jan-2022
PHCs (F1-F4) comply with MECP Table 3

MW19-01 5.95-8.95m 28-May-2019
PHCs (F1-F4) comply with MECP Table 3

MW19-01-GW 5.95-8.95m 14-Sep-2020
PHCs (F1-F4) comply with MECP Table 3

SV19-02-09/DUPB 6.0-6.7m 22-May-2019

Parameter	Result (µg/g)
PHC F1	1200 / 710
PHC F2	450 / 430

F3/F4 comply with MECP Table 3

MW19-02-08 5.3-6.0m 15-May-2019
PHCs (F1-F4) comply with MECP Table 3

TH207-10 6.1-6.3m 29-Sep-2014

Parameter	Result (µg/g)
PHC F1	810

F2/F3/F4 comply with MECP Table 3

MW19-02 6.1-9.1m 28-May-2019
PHCs (F1-F4) comply with MECP Table 3

MW19-02-GW 6.1-9.1m 14-Sep-2020
PHCs (F1-F4) comply with MECP Table 3

TH207 10.1-11.6m 15-Oct-2014
PHCs (F1-F4) comply with MECP Table 3

TH207 10.1-11.6m 19-Dec-2016
PHCs (F1-F4) comply with MECP Table 3

TH207 10.1-11.6m 22-Nov-2017
PHCs (F1-F4) comply with MECP Table 3

TH207 10.1-11.6m 15-Nov-2018
PHCs (F1-F4) comply with MECP Table 3

TH207 10.1-11.6m 28-May-2019
PHCs (F1-F4) comply with MECP Table 3

TH207-GW 10.1-11.6m 14-Sep-2020
PHCs (F1-F4) comply with MECP Table 3

MW9-23-GW1 7.06-10.11m 07-Feb-2023
PHCs (F1-F4) comply with MECP Table 3

MW9-23-GW2 7.06-10.11m 30-May-2023
PHCs (F1-F4) comply with MECP Table 3

MW9-23-GW3 7.06-10.11m 30-Aug-2023
PHCs (F1-F4) comply with MECP Table 3

MW9-23-GW4 7.06-10.11m 01-Dec-2023

Parameter	Result (µg/L)
PHCs F3	1290
PHCs F4	580

PHCs(F1,F2) comply with MECP Table 3
Groundwater at MW9-23 is considered to be in compliance, see CSM

MW9-23-GW5 7.06-10.11m 07-Dec-2023
PHCs(F1-F4) comply with MECP Table 3

MW9-23-GW6 7.06-10.11m 15-Dec-2023
PHCs(F1-F4) comply with MECP Table 3

MW9-23-GW7 7.06-10.11m 01-Mar-2024
PHCs(F1-F4) comply with MECP Table 3

BH6-21-GW1 5.97-9.02m 6-Jan-2022
PHCs (F1-F4) comply with MECP Table 3

TH210-12 7.6-8.1m 3-Oct-2014

Parameter	Result (µg/g)
PHC F1	64
PHC F3	690

F2/F4 comply with MECP Table 3

BH5-21-GW1 9.65-11.18m 6-Jan-2022
PHCs (F1-F4) comply with MECP Table 3

BH4-21-GW1 6.05-9.09m 6-Jan-2022
PHCs (F1-F4) comply with MECP Table 3

TH209-10 6.1-6.4m 2-Oct-2014

Parameter	Result (µg/g)
PHC F1	170
PHC F2	190
PHC F3	380

F4 comply with MECP Table 3

TH209-14 9.1-9.3m 2-Oct-2014

Parameter	Result (µg/g)
PHC F1	200
PHC F2	210

F3/F4 comply with MECP Table 3

NE5 4.2m 1-Nov-2022
PHCs (F1-F4) comply with MECP Table 3

MW19-08 5.8-8.8m 28-May-2019
PHCs (F1-F4) comply with MECP Table 3

MW19-08-GW 5.8-8.8m 14-Sep-2020
PHCs (F1-F4) comply with MECP Table 3

TH214-11 6.9-7.0m 7-Oct-2014

Parameter	Result (µg/g)
PHC F2	300
PHC F3	3500

F1/F4 comply with MECP Table 3

TH214-12 7.6-7.8m 7-Oct-2014

Parameter	Result (µg/g)
PHC F1	59

Sample not tested for F2-F4

MW19-03 6.1-9.1m 28-May-2019
PHCs (F1-F4) comply with MECP Table 3

MW19-03-GW 6.1-9.1m 14-Sep-2020
PHCs (F1-F4) comply with MECP Table 3

MW19-03-GW3 6.1-9.1m 11-Apr-2022
PHCs (F1-F4) comply with MECP Table 3

TH206 6.1-9.1m 15-Oct-2014
PHCs (F1-F4) comply with MECP Table 3

TH206 6.1-9.1m 19-Dec-2016
PHCs (F1-F4) comply with MECP Table 3

TH206 6.1-9.1m 22-Nov-2017
PHCs (F1-F4) comply with MECP Table 3

TH206 6.1-9.1m 15-Nov-2018
PHCs (F1-F4) comply with MECP Table 3

TH206 6.1-9.1m 28-May-2019
PHCs (F1-F4) comply with MECP Table 3

TH206-GW 6.1-9.1m 14-Sep-2020
PHCs (F1-F4) comply with MECP Table 3

TH210 6.1-9.1m 15-Oct-2014
PHCs (F1-F4) comply with MECP Table 3

TH210 6.1-9.1m 19-Dec-2016
PHCs (F1-F4) comply with MECP Table 3

TH210 6.1-9.1m 22-Nov-2017
PHCs (F1-F4) comply with MECP Table 3

TH210 6.1-9.1m 15-Nov-2018
PHCs (F1-F4) comply with MECP Table 3

TH210 6.1-9.1m 28-May-2019
PHCs (F1-F4) comply with MECP Table 3

TH210-GW 6.1-9.1m 14-Sep-2020
PHCs (F1-F4) comply with MECP Table 3

LEGEND:

X SOIL GRAB SAMPLE LOCATION

SOIL PARAMETERS COMPLY WITH MECP TABLE 3 STANDARDS

SOIL PARAMETERS EXCEED MECP TABLE 3 STANDARDS

GROUNDWATER RESULTS COMPLY WITH MECP TABLE 3 STANDARDS SHOWN FOR DELINEATION PURPOSES

SAMPLE RESULTS NOT CONSIDERED SOIL AS SAMPLE DEPTHS ARE BELOW BEDROCK SURFACE

DELINEATION OF SOIL WITH CONCENTRATIONS OF PHCs EXCEEDING THE MECP TABLE 3 STANDARDS

MECP Table 3 Residential Standards

PHCs F1	55 ug/g
PHCs F2	98 ug/g
PHCs F3	300 ug/g
PHCs F4	2800 ug/g

PATERSON GROUP
9 AURIGA DRIVE
OTTAWA, ON
K2E 7T9
TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL
0			

RIVERAIN DEVELOPMENTS INC.

PHASE II - ENVIRONMENTAL SITE ASSESSMENT
2 MONTREAL ROAD, 3 SELKIRK STREET, 280 MONTGOMERY STREET AND 300 MONTGOMERY STREET
OTTAWA, ONTARIO

Title:

CROSS SECTION C-C' SOIL - PHCs

Scale: AS SHOWN	Date: 02/2022
Drawn by: RCG	Report No.: PE4546
Checked by: DP	Dwg. No.: PE4546-5C
Approved by: LK	Revision No.: 0

p:\autocad drawings\environmental\pe45xx\pe4546\may 2024\pe4546 cross-sections.dwg

LEGEND:

- BOREHOLE WITH MONITORING WELL LOCATION
- BOREHOLE LOCATION, PATERSON GROUP
- TEST PIT LOCATION, PATERSON GROUP
- BOREHOLE WITH MONITORING WELL LOCATION BY OTHERS (GOLDER)
- BOREHOLE WITH MONITORING WELL LOCATION BY OTHERS (EXP)
- BOREHOLE LOCATION BY OTHERS (EXP)
- 56.08 GROUND SURFACE ELEVATION (m)
- X SOIL GRAB SAMPLE LOCATION
- PHASE I, PHASE II AND RSC PROPERTY
- DELINEATION OF SOIL WITH CONCENTRATIONS OF PAHs EXCEEDING THE MECP TABLE 3 STANDARDS
- EXCESS SOIL TESTING RESULTS IN COMPLIANCE WITH MECP TABLE 3 STANDARDS

SOIL PARAMETERS COMPLY WITH MECP TABLE 3 STANDARDS

SOIL PARAMETERS EXCEED MECP TABLE 3 STANDARDS

SAMPLE RESULTS NOT CONSIDERED SOIL AS SAMPLE DEPTHS ARE BELOW SOUND BEDROCK SURFACE.

GROUND SURFACE ELEVATIONS ARE REFERENCED TO A GEODETIC DATUM.

SCALE: 1:500

0 5 10 15 20 25 30 35 40m

MECP Table 3 Residential Standards	
Acenaphthene	7.9 ug/g
Acenaphthylene	0.15 ug/g
Anthracene	0.67 ug/g
Benzo[a]anthracene	0.5 ug/g
Benzo[a]pyrene	0.3 ug/g
Benzo[b]fluoranthene	0.78 ug/g
Benzo[g,h,i]perylene	6.6 ug/g
Benzo[k]fluoranthene	0.78 ug/g
Chrysene	7 ug/g
Dibenzo[a,h]anthracene	0.1 ug/g
Fluoranthene	0.69 ug/g
Fluorene	62 ug/g
Indeno[1,2,3-cd]pyrene	0.38 ug/g
1-Methylnaphthalene	0.99 ug/g
2-Methylnaphthalene	0.99 ug/g
Methylnaphthalene (1&2)	0.99 ug/g
Naphthalene	0.6 ug/g
Phenanthrene	6.2 ug/g
Pyrene	78 ug/g

MONTREAL ROAD

MONTGOMERY STREET

SELKIRK ROAD

NORTH RIVER ROAD

RIDEAU RIVER

#1 MONTREAL ROAD COMMERCIAL (RETAIL FUEL OUTLET)

#42 MONTREAL ROAD COMMERCIAL (RETAIL FUEL OUTLET)

#55 MONTREAL ROAD MULTI-UNIT COMMERCIAL

COMMERCIAL

#400 NORTH RIVER ROAD PARKLAND (RIVERAIN PARK)

#333 NORTH RIVER ROAD GOVERNMENT OF CANADA BUILDINGS (VANIER TOWERS)

#25 McARTHUR AVE. GOVERNMENT OF CANADA BUILDING (VANIER TOWER)

#307 MONTGOMERY STREET INSTITUTIONAL (ECOLE ÉLÉMENTAIRE PUBLIQUE MAURIL-BÉLANGER)

#50 SELKIRK ROAD RESIDENTIAL APARTMENTS

#334 DUNDAS ST. PARKING

#338 DUNDAS ST. RESIDENTIAL

325&327 MONTGOMERY ST. RESIDENTIAL AND PARKING

3 SELKIRK ROAD FORMER MULTI-UNIT COMMERCIAL BUILDING

APPROXIMATE EXTENT OF EXCAVATION FOR CONSTRUCTION OF PHASE 1 OF DEVELOPMENT

TH207-2 1.1-1.2m 24-Sep-2014
PAHs comply with MECP Table 3

TH207-10 6.1-6.3m 24-Sep-2014
PAHs comply with MECP Table 3

MW19-03-05 3.0-4.0m 16-May-2019
Parameter Result (ug/g)
Methylnaphthalene(1&2) 1.1
Naphthalene 0.65
Remaining PAHs comply with MECP Table 3

TP4-21-G4 2.8-3.0m 20-Dec-2021
PAHs comply with MECP Table 2

TH208-2 1.1-1.2m 25-Sep-2014
Parameter Result (ug/g)
Benzo[a]anthracene 0.57
Benzo[a]pyrene 0.48
Fluoranthene 1.2
Remaining PAHs comply with MECP Table 3

TH208-10 6.1-6.3m 1-Oct-2014
PAHs comply with MECP Table 2

TH214-11 6.9-7.0m 7-Oct-2014
Parameter Result (ug/g)
Acenaphthene 15
Acenaphthylene 0.34
Anthracene 24
Benzo[a]anthracene 47
Benzo[a]pyrene 41
Benzo[b]fluoranthene 52
Benzo[g,h,i]perylene 24
Benzo[k]fluoranthene 20
Chrysene 44
Dibenzo[a,h]anthracene 5.5
Fluoranthene 150
Indeno[1,2,3-cd]pyrene 26
1-Methylnaphthalene 2.3
2-Methylnaphthalene 3.6
Methylnaphthalene (1&2) 5.8
Naphthalene 8.4
Phenanthrene 130
Pyrene 110
Remaining PAHs comply with MECP Table 3

TH203-1 0.5-0.6m 25-Sep-2014
PAHs comply with MECP Table 3

TH203-11DUP2 6.9-7.2m 1-Oct-2014
Parameter Result (ug/g)
Methylnaphthalene (1&2) 0.92 / 1.1
Naphthalene 0.8 / 0.98
Remaining PAHs comply with MECP Table 3

G1 1m 16-Sep-2022
PAHs comply with MECP Table 3

NW9 3.5m 27-Oct-2022
PAHs comply with MECP Table 3

MW19-05-05 3.0-3.5m 16-May-2019
PAHs comply with MECP Table 3

NW1 1.5m 30-Sep-2022
PAHs comply with MECP Table 3

MW19-07-05 3.0-3.5m 16-May-2019
PAHs comply with MECP Table 3

NW5 3.0m 21-Oct-2022
PAHs comply with MECP Table 3

TH213-1 0.5-0.6m 25-Sep-2014
PAHs comply with MECP Table 3

TH213-10 6.1-6.3m 6-Oct-2014
PAHs comply with MECP Table 3

MW19-08-05 3.0-4.0m 21-May-2019
PAHs comply with MECP Table 3

MW19-02-08 5.3-6.0m 15-May-2019
PAHs comply with MECP Table 3

MW19-01-06 3.8-4.4m 15-May-2019
PAHs comply with MECP Table 3

TH202-2 1.1-1.2m 25-Sep-2014
PAHs comply with MECP Table 3

TH202-11 6.9-7.2m 1-Oct-2014
Parameter Result (ug/g)
1-Methylnaphthalene 3.8
2-Methylnaphthalene 5.8
Methylnaphthalene (1&2) 9.6
Naphthalene 8
Remaining PAHs comply with MECP Table 3

TH210-3 1.4-1.5m 25-Sep-2014
PAHs comply with MECP Table 3

TH210-12 7.6-8.1m 3-Oct-2014
PAHs comply with MECP Table 3

TP3-21-G1 0.3-0.5m 20-Dec-2021
Parameter Result (ug/g)
Acenaphthene 17.2
Anthracene 52.7
Benzo[a]anthracene 108
Benzo[a]pyrene 99.7
Benzo[b]fluoranthene 94.2
Benzo[g,h,i]perylene 46.2
Benzo[k]fluoranthene 48.7
Chrysene 108
Dibenzo[a,h]anthracene 12.1
Fluoranthene 297
Indeno[1,2,3-cd]pyrene 44.2
1-Methylnaphthalene 2.31
2-Methylnaphthalene 2.47
Methylnaphthalene (1&2) 4.79
Naphthalene 1.34
Phenanthrene 206
Pyrene 254

TP3-21-G3 2.2-2.4m 20-Dec-2021
PAHs comply with MECP Table 3

TH209-3 1.4-1.5m 24-Sep-2014
PAHs comply with MECP Table 3

TH209-10 6.1-6.4m 2-Oct-2014
PAHs comply with MECP Table 3

TH209-14 9.1-9.3m 2-Oct-2014
PAHs comply with MECP Table 3

TP6-21-G1 0.8-0.9m 21-Dec-2021
Parameter Result (ug/g)
Anthracene 0.80
Benzo[a]anthracene 1.15
Benzo[a]pyrene 1.59
Benzo[b]fluoranthene 1.79
Benzo[k]fluoranthene 0.80
Fluoranthene 4.71
Indeno[1,2,3-cd]pyrene 0.88

TP6-21-G5 3.4-3.5m 21-Dec-2021
PAHs comply with MECP Table 3

MW19-06-04 2.1-2.7m 16-May-2019
PAHs comply with MECP Table 3

BH4-21-SS7 3.81-4.19m 22-Dec-2021
PAHs comply with MECP Table 3

MW19-09-05 3.0-4.0m 17-May-2019
PAHs comply with MECP Table 3

TH215-2 1.1-1.2m 25-Sep-2014
Parameter Result (ug/g)
Benzo[a]anthracene 0.55
Benzo[a]pyrene 0.47
Fluoranthene 1.0
Remaining PAHs comply with MECP Table 3

TH215-11 6.9-7.5m 7-Oct-2014
PAHs comply with MECP Table 3

TH215-12 7.6-7.8m 7-Oct-2014
PAHs comply with MECP Table 3

TH211-2 1.1-1.2m 24-Sep-2014
PAHs comply with MECP Table 3

TH211-12 7.6-8.1m 6-Oct-2014
PAHs comply with MECP Table 3

TP1-21-G2 1.0-1.2m 20-Dec-2021
Parameter Result (ug/g)
Acenaphthene 3.73
Benzo[a]anthracene 4.92
Benzo[a]pyrene 5.48
Benzo[b]fluoranthene 5.74
Benzo[k]fluoranthene 2.90
Fluoranthene 13.5
Indeno[1,2,3-cd]pyrene 2.84
Naphthalene 1.20
Phenanthrene 15.2

TP1-21-G3 2.0-2.2m 20-Dec-2021
PAHs comply with MECP Table 3

TP2-21-G2 0.6-0.7m 20-Dec-2021
Parameter Result (ug/g)
Acenaphthylene 0.29
Benzo[a]anthracene 0.58
Benzo[a]pyrene 0.78
Benzo[b]fluoranthene 0.88
Dibenzo[a,h]anthracene 0.16
Fluoranthene 0.83
Indeno[1,2,3-cd]pyrene 0.53
Remaining PAHs comply with MECP Table 3

TP2-21-G4 1.5-1.7m 20-Dec-2021
PAHs comply with MECP Table 3

TP2-21-G6 2.6-2.8m 20-Dec-2021
PAHs comply with MECP Table 3

TH201-2 0.9-1.1m 25-Sep-2014
Parameter Result (ug/g)
Benzo[a]pyrene 0.31
Remaining PAHs comply with MECP Table 3

TH201-10 6.1-6.7m 30-Sep-2014
PAHs comply with MECP Table 3

TH201-13 8.4-9.0m 30-Sep-2014
PAHs comply with MECP Table 3

BH1-21-SS2 0.76-1.37m 20-Dec-2021
PAHs comply with MECP Table 3

BH1-21-SS5 3.05-3.66m 20-Dec-2021
PAHs comply with MECP Table 3

TH206-1 0.5-0.6m 24-Sep-2014
PAHs comply with MECP Table 3

TH206-11 6.9-7.2m 2-Oct-2014
Parameter Result (ug/g)
1-Methylnaphthalene 1.6
2-Methylnaphthalene 1.5
Methylnaphthalene (1&2) 3.1
Naphthalene 3.3
Remaining PAHs comply with MECP Table 3

TH204-1 0.5-0.6m 25-Sep-2014
PAHs comply with MECP Table 3

TH204-12 7.6-7.8m 2-Oct-2014
PAHs comply with MECP Table 3

TP5-21-G3 1.6-1.7m 21-Dec-2021
PAHs comply with MECP Table 3

BH2-20-SS3 1.52-2.13m 18-Sep-2020
PAHs comply with MECP Table 3

TH205A-11 6.9-7.2m 6-Oct-2014
PAHs comply with MECP Table 3

TH205-1 0.5-0.6m 25-Sep-2014
PAHs comply with MECP Table 3

TP7-21-G1 0.2-0.3m 21-Dec-2021
PAHs comply with MECP Table 3

TP7-21-G3 1.2-1.3m 21-Dec-2021
PAHs comply with MECP Table 3

TP7-21-G6 3.5-3.6m 21-Dec-2021
PAHs comply with MECP Table 3

MW19-04-05 3.0-3.7m 17-May-2019
PAHs comply with MECP Table 3

TP11-21-G2/ DUP2-DEC21 0.7-0.8m 21-Dec-2021
Parameter Result (ug/g)
Acenaphthene 0.60/12.7
Anthracene 1.56/22.3
Benzo[a]anthracene 4.30-39.3
Benzo[a]pyrene 4.34-31.9
Benzo[b]fluoranthene 4.56/29.1
Benzo[g,h,i]perylene 2.81/13.6
Benzo[k]fluoranthene 2.27/16.7
Chrysene 3.88/41.8
Dibenzo[a,h]anthracene 0.72/4.27
Fluoranthene 9.40/83.2
Indeno[1,2,3-cd]pyrene 2.52/14.5
1-Methylnaphthalene nd/2.35
2-Methylnaphthalene nd/3.52
Methylnaphthalene (1&2) nd/5.87
Naphthalene 0.27/1.01
Phenanthrene 6.65/104

TP11-21-G6 2.9-3.0m 21-Dec-2021
PAHs comply with MECP Table 3

BH7-22-AU1 0.0-0.61m 18-Feb-2022
Parameter Result (ug/g)
Benzo[a]anthracene 0.52
Benzo[a]pyrene 0.48
Fluoranthene 0.96
Remaining PAHs comply with MECP Table 3

BH7-22-SS2 0.76-1.37m 18-Feb-2022
PAHs comply with MECP Table 3

BH7-22-SS3 1.52-2.13m 18-Feb-2022
PAHs comply with MECP Table 3

BH1-20-SS4 2.29-2.90m 18-Sep-2020
PAHs comply with MECP Table 3

BH5-22-AU1 0.0-0.61m 17-Feb-2022
PAHs comply with MECP Table 3

BH5-22-SS2 0.76-1.37m 17-Feb-2022
PAHs comply with MECP Table 3

BH5-22-SS5 3.05-3.66m 17-Feb-2022
PAHs comply with MECP Table 3

BH6-22-AU1 0.0-0.61m 17-Feb-2022
PAHs comply with MECP Table 3

BH6-22-SS3 1.52-2.13m 17-Feb-2022
PAHs comply with MECP Table 3

TP8-21-G2 0.55-0.65m 21-Dec-2021
PAHs comply with MECP Table 3

TP8-21-G3 1.2-1.3m 21-Dec-2021
PAHs comply with MECP Table 3

TP10-21-G2 0.5-0.6m 21-Dec-2021
PAHs comply with MECP Table 3

TP10-21-G4 2.1-2.2m 21-Dec-2021
PAHs comply with MECP Table 3

BH1-22-SS1 0.30-0.91m 2-Feb-2022
PAHs comply with MECP Table 3

BH2-21-SS2 0.76-1.37m 20-Dec-2021
PAHs comply with MECP Table 3

BH2-21-SS4 2.29-2.90m 20-Dec-2021
PAHs comply with MECP Table 3

BH6-20-SS4B 2.29-2.90m 18-Sep-2020
PAHs comply with MECP Table 3

BH3-20-SS2 0.76-1.37m 18-Sep-2020
PAHs comply with MECP Table 3

TH212-2 1.1-1.2m 24-Sep-2014
PAHs comply with MECP Table 3

TH212-9 5.3-5.6m 30-Sep-2014
PAHs comply with MECP Table 3

BH5-20-SS2 0.76-1.37m 18-Sep-2020
Parameter Result (ug/g)
Acenaphthylene 0.16
Benzo[a]pyrene 0.39
Remaining PAHs comply with MECP Table 3

BH5-20-SS4 2.29-2.90m 18-Sep-2020
PAHs comply with MECP Table 3

TP16-21-G2 0.6-0.7m 22-Dec-2021
PAHs comply with MECP Table 3

TP16-21-G3 1.3-1.4m 22-Dec-2021
PAHs comply with MECP Table 3

TP16-21-G5 2.9-3.0m 22-Dec-2021
PAHs comply with MECP Table 3

TP3-23-G2 1.3-1.5m 11-May-2023
Parameter Result (ug/g)
Benzo[a]anthracene 0.52
Benzo[a]pyrene 0.35
Fluoranthene 1.04
Remaining PAHs comply with MECP Table 3

TP3-23-G3 2.3-2.5m 11-May-2023
PAHs comply with MECP Table 3 standards

TP3-23-G4 3.3-3.5m 11-May-2023
PAHs comply with MECP Table 3 standards

TP3-23-G5 4.3-4.5m 11-May-2023
PAHs comply with MECP Table 3 standards

TP3-23-G6 5.3-5.5m 11-May-2023
PAHs comply with MECP Table 3 standards

TP3-23-G7 6.3-6.5m 11-May-2023
PAHs comply with MECP Table 3 standards

BH7-20-SS2 0.76-1.37m 21-Sep-2020
PAHs comply with MECP Table 3

BH7-20-SS5 3.05-3.66m 21-Sep-2020
PAHs comply with MECP Table 3

BH8-20-SS4 2.29-2.34m 21-Sep-2020
PAHs comply with MECP Table 3

TP15-21-G3 1.35-1.45m 22-Dec-2021
PAHs comply with MECP Table 3

HV2-G1 0.5m 9-Sep-2022
PAHs comply with MECP Table 3

BH8-22-SS1 0.30-0.91m 13-Jun-2022
PAHs comply with MECP Table 3

BH8-22-SS3 1.52-2.13m 13-Jun-2022
PAHs comply with MECP Table 3

BH8-22-SS3 1.52-2.13m 18-Feb-2022
PAHs comply with MECP Table 3

BH8-22-SS4 2.29-2.69m 18-Feb-2022
PAHs comply with MECP Table 3

BH2-22-SS3 0.91-1.05m 4-Feb-2022
PAHs comply with MECP Table 3

BH3-22-AU1 0.0-0.61m 16-Feb-2022
PAHs comply with MECP Table 3

BH3-22-SS3 0.76-1.37m 16-Feb-2022
PAHs comply with MECP Table 3

BH3-22-SS5B 3.05-3.66m 16-Feb-2022
PAHs comply with MECP Table 3

TP12-21-G2 0.7-0.8m 22-Dec-2021
PAHs comply with MECP Table 3

TP12-21-GS/DUP1-Dec22 3.1-3.2m 22-Dec-2021
PAHs comply with MECP Table 3

TP9-21-G2 0.7-0.8m 21-Dec-2021
PAHs comply with MECP Table 3

TP9-21-G4 2.7-2.8m 21-Dec-2021
Parameter Result (ug/g)
Naphthalene 1.24
Remaining PAHs comply with MECP Table 3

TP9-21-G5 3.4-3.5m 21-Dec-2021
PAHs comply with MECP Table 3

TP14-21-G2 0.6-0.7m 22-Dec-2021
PAHs comply with MECP Table 3

TP14-21-G6 2.2-2.3m 22-Dec-2021
PAHs comply with MECP Table 3

BH4-23-SS4 1.52-2.13m 04-Jul-2023
Parameter Result (ug/g)
Benzo[a]anthracene 0.71
Benzo[a]pyrene 0.41
Benzo[b]fluoranthene 1.18
Benzo[k]fluoranthene 1.20
Fluoranthene 1.54

BH4-23-SS5 2.29-2.90m 04-Jul-20231
PAHs comply with MECP Table 3

TP13-21-G3 1.2-1.3m 22-Dec-2021
PAHs comply with MECP Table 3

TP13-21-G5 3.5-3.6m 22-Dec-2021
PAHs comply with MECP Table 3

BH1-22 57.06
BH2-22 57.05
BH3-22 56.73
BH4-22 56.21
BH5-22 56.02
BH6-22 55.99
BH7-22 56.18
BH8-22 56.04
BH1-23 56.67
BH1A-23 56.67
BH2-23 56.63
BH3-23 56.73
BH4-23 56.67
HV2 56.67

PATERSON GROUP
9 AURIGA DRIVE
OTTAWA, ON
K2E 7T9
TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL

RIVERAIN DEVELOPMENTS INC.

PHASE II - ENVIRONMENTAL SITE ASSESSMENT
2 MONTREAL ROAD, 3 SELKIRK STREET, 280 MONTGOMERY STREET AND 300 MONTGOMERY STREET
OTTAWA, ONTARIO

Title:

ANALYTICAL TESTING PLAN - SOIL (PAHs)

Scale:	1:500
Drawn by:	MPG
Checked by:	LK
Approved by:	LK
Date:	11/2021
Report No.:	PE4546
Drawing No.:	PE4546-6
Revision No.:	

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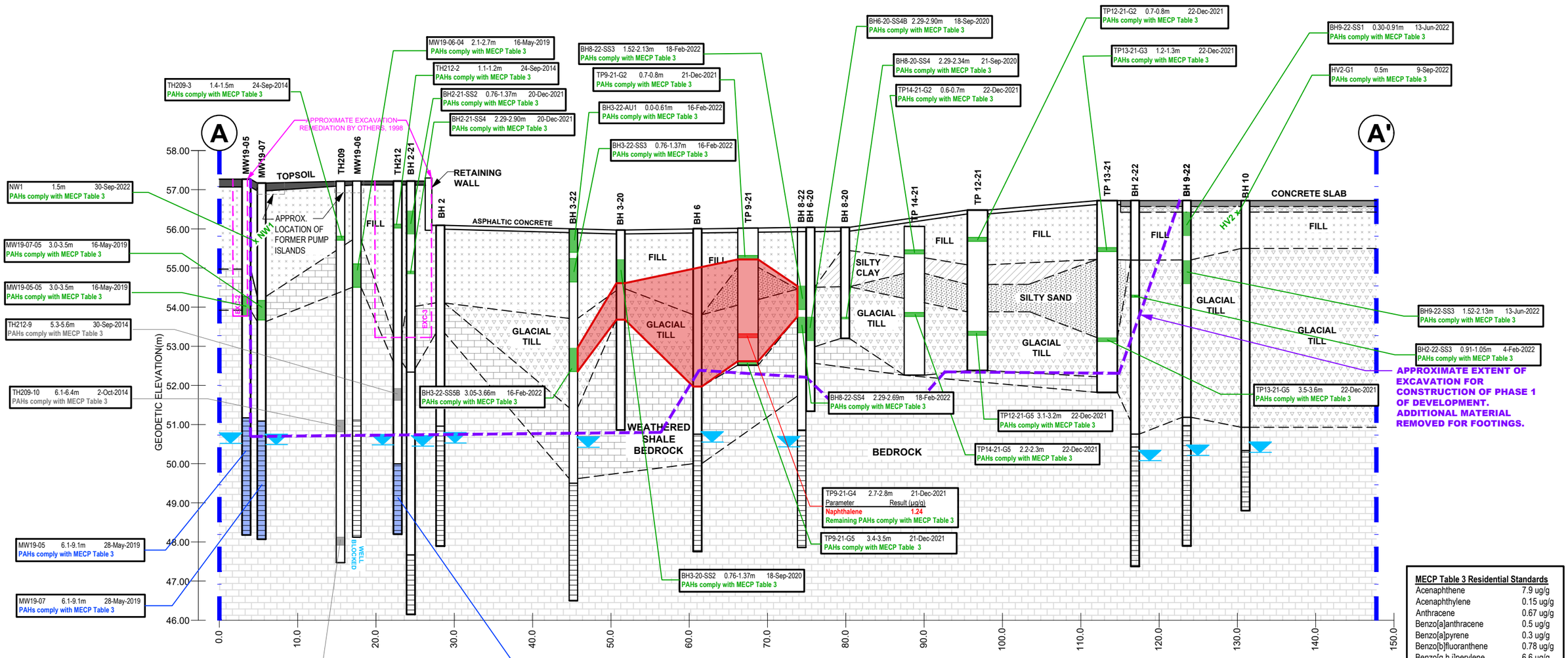

LEGEND:

X SOIL GRAB SAMPLE LOCATION

SOIL PARAMETERS COMPLY WITH MECP TABLE 3 STANDARDS

SOIL PARAMETERS EXCEED MECP TABLE 3 STANDARDS

GROUNDWATER RESULTS COMPLY WITH MECP TABLE 3 STANDARDS SHOWN FOR DELINEATION PURPOSES

SAMPLE RESULTS NOT CONSIDERED SOIL AS SAMPLE DEPTHS ARE BELOW BEDROCK SURFACE

DELINEATION OF SOIL WITH CONCENTRATIONS OF PAHs EXCEEDING THE MECP TABLE 3 STANDARDS

MECP Table 3 Residential Standards

Acenaphthene	7.9 ug/g
Acenaphthylene	0.15 ug/g
Anthracene	0.67 ug/g
Benzo[a]anthracene	0.5 ug/g
Benzo[a]pyrene	0.3 ug/g
Benzo[b]fluoranthene	0.78 ug/g
Benzo[g,h,i]perylene	6.6 ug/g
Benzo[k]fluoranthene	0.78 ug/g
Chrysene	7 ug/g
Dibenzo[a,h]anthracene	0.1 ug/g
Fluoranthene	0.69 ug/g
Fluorene	62 ug/g
Indeno[1,2,3-cd]pyrene	0.38 ug/g
1-Methylnaphthalene	0.99 ug/g
2-Methylnaphthalene	0.99 ug/g
Methylnaphthalene (1&2)	0.99 ug/g
Naphthalene	0.6 ug/g
Phenanthrene	6.2 ug/g
Pyrene	78 ug/g

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NO.	REVISIONS	DATE	INITIAL
0			

RIVERAIN DEVELOPMENTS INC.

PHASE II - ENVIRONMENTAL SITE ASSESSMENT
2 MONTREAL ROAD, 3 SELKIRK STREET, 280 MONTGOMERY STREET AND 300 MONTGOMERY STREET
OTTAWA, ONTARIO

Title:

CROSS SECTION A-A' SOIL - PAHs

Scale: AS SHOWN	Date: 02/2022
Drawn by: RCG	Report No.: PE4546
Checked by: DP	Dwg. No.: PE4546-6A
Approved by: LK	Revision No.: 0

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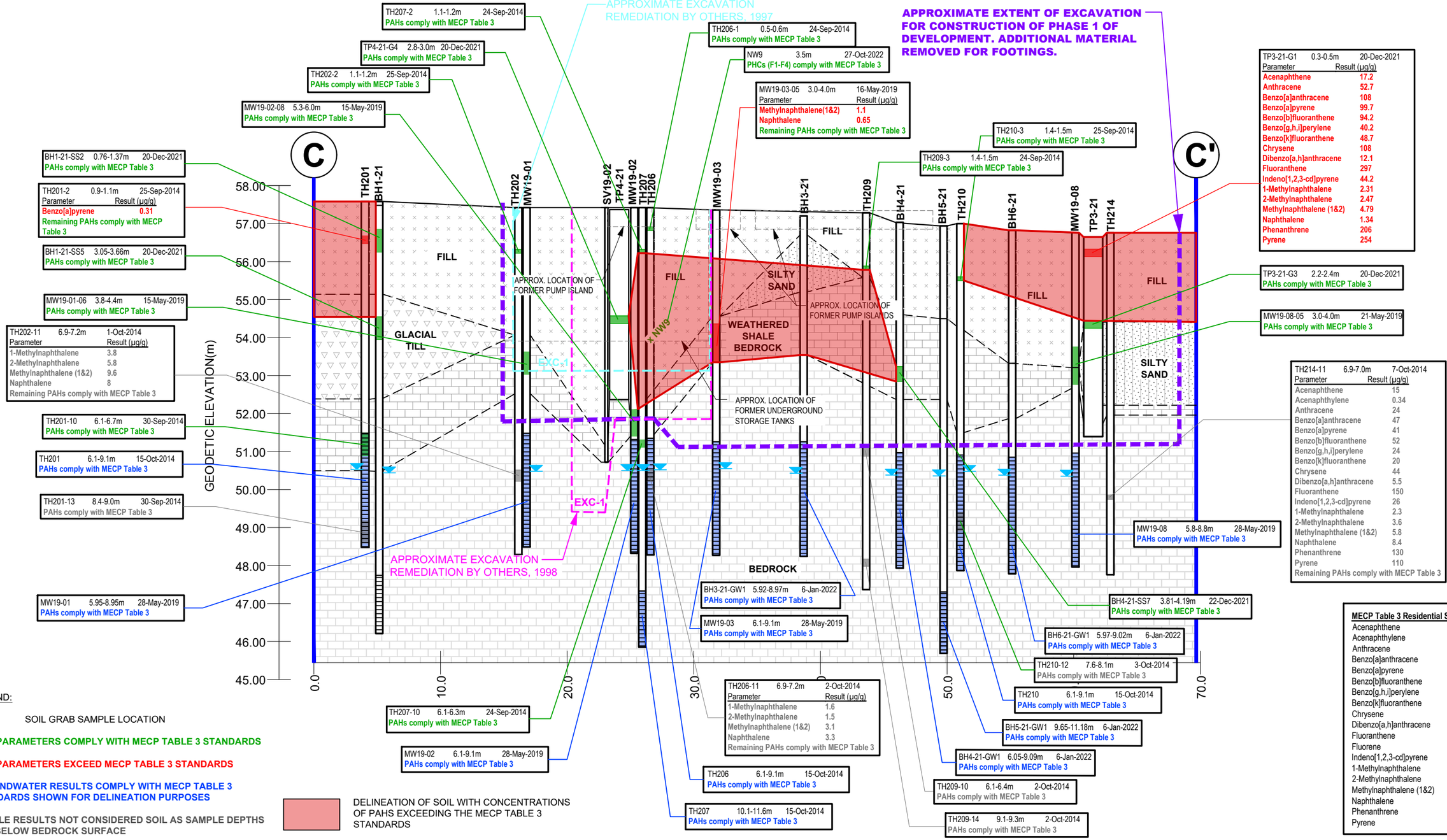

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9 AURIGA DRIVE
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NO.	REVISIONS	DATE	INITIAL
0			

RIVERAIN DEVELOPMENTS INC.

PHASE II - ENVIRONMENTAL SITE ASSESSMENT
2 MONTREAL ROAD, 3 SELKIRK STREET, 280 MONTGOMERY STREET AND 300 MONTGOMERY STREET
OTTAWA, ONTARIO

Title:

CROSS SECTION C-C' SOIL - PAHs

Scale: AS SHOWN	Date: 02/2022
Drawn by: RCG	Report No.: PE4546
Checked by: DP	Dwg. No.: PE4546-6C
Approved by: LK	Revision No.: 0

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LEGEND:

- BOREHOLE WITH MONITORING WELL LOCATION
- BOREHOLE LOCATION, PATERSON GROUP
- POST REMEDIATION MONITORING WELL 2023
- TEST PIT LOCATION, PATERSON GROUP
- BOREHOLE WITH MONITORING WELL LOCATION BY OTHERS (GOLDER)
- SOIL VAPOUR PROBE LOCATION (GOLDER)
- BOREHOLE WITH MONITORING WELL LOCATION BY OTHERS (EXP)
- BOREHOLE LOCATION BY OTHERS (EXP)
- 56.08 GROUND SURFACE ELEVATION (m)
- X SOIL GRAB SAMPLE LOCATION
- PHASE I, PHASE II AND RSC PROPERTY
- DELINEATION OF SOIL WITH CONCENTRATIONS OF BTEX EXCEEDING THE MECP TABLE 3 STANDARDS
- EXCESS SOIL TESTING RESULTS IN COMPLIANCE WITH MECP TABLE 3 STANDARDS

SOIL PARAMETERS COMPLY WITH MECP TABLE 3 STANDARDS

SOIL PARAMETERS EXCEED MECP TABLE 3 STANDARDS

SAMPLE RESULTS NOT CONSIDERED SOIL AS SAMPLE DEPTHS ARE BELOW SOUND BEDROCK SURFACE.

GROUND SURFACE ELEVATIONS ARE REFERENCED TO A GEODETIC DATUM.

SCALE: 1:500

0 5 10 15 20 25 30 35 40m

MECP Table 3 Residential Standards

Benzene	0.21 ug/g
Ethylbenzene	2 ug/g
Toluene	2.3 ug/g
Xylenes	3.1 ug/g

MONTREAL ROAD

MONTGOMERY STREET

SELKIRK ROAD

NORTH RIVER ROAD

RIDEAU RIVER

#2 MONTREAL ROAD COMMERCIAL (RETAIL FUEL OUTLET)

#70 MONTREAL ROAD COMMERCIAL (BINGO HALL)

#307 MONTGOMERY STREET INSTITUTIONAL (ÉCOLE ÉLEMENTAIRE PUBLIQUE MAURIL-BÉLANGER)

3 SELKIRK ROAD FORMER MULTI-UNIT COMMERCIAL BUILDING

#333 NORTH RIVER ROAD GOVERNMENT OF CANADA BUILDINGS (VANIER TOWERS)

#24 SELKIRK ROAD COMMERCIAL

#50 SELKIRK ROAD RESIDENTIAL APARTMENTS

325&327 MONTGOMERY ST. RESIDENTIAL AND PARKING

APPROXIMATE EXTENT OF EXCAVATION FOR CONSTRUCTION OF PHASE 1 OF DEVELOPMENT

TH208-2 1.1-1.2m 25-Sep-2014 BTEX comply with MECP Table 3
TH208-10 6.1-6.3m 1-Oct-2014
Parameter Result (ug/g)
Benzene 1.1
Xylene 4.5
Ethylbenzene and Toluene comply with MECP Table 3

B22 5.0m 9-Nov-2022
Parameter Result (ug/g)
Benzene 22.3
Ethylbenzene 14
Toluene 3.33
Xylene 21.5

SV19-03-06 3.75-4.3m 22-May-2019
Parameter Result (ug/g)
Benzene 3.3
Ethylbenzene, Toluene and Xylenes comply with MECP Table 3

MW19-05-05 3.0-3.5m 16-May-2019 BTEX comply with MECP Table 3

MW19-07-01 0.63-0.5m 14-May-2019 BTEX comply with MECP Table 3
MW19-07-05 3.0-3.5m 16-May-2019
Parameter Result (ug/g)
Benzene 6.24
Ethylbenzene, Toluene, and Xylene comply with MECP Table 3

MW19-08-05 3.0-4.0m 21-May-2019 BTEX comply with MECP Table 3

TH209-3 1.4-1.5m 24-Sep-2014 BTEX comply with MECP Table 3
TH209-10 6.1-6.4m 2-Oct-2014
Parameter Result (ug/g)
Benzene 0.71
Xylene 3.7
Ethylbenzene and Toluene comply with MECP Table 3
TH209-14 9.1-9.3m 2-Oct-2014
Parameter Result (ug/g)
Benzene 1.0
Ethylbenzene, Toluene and Xylenes comply with MECP Table 3

TH214-11 6.9-7.0m 7-Oct-2014 BTEX comply with MECP Table 3
TH214-12 7.6-7.8m 7-Oct-2014 BTEX comply with MECP Table 3

G5 4.0m 21-Oct-2022 BTEX comply with MECP Table 3

TP3-21-G3 2.2-2.4m 20-Dec-2021 BTEX comply with MECP Table 3

MW19-06-01 0.3-0.5m 14-May-2019 BTEX comply with MECP Table 3
MW19-06-04 2.1-2.7m 16-May-2019 BTEX comply with MECP Table 3

TH203-1 0.5-0.6m 25-Sep-2014 BTEX comply with MECP Table 3
TH203-11/ DUP2 6.9-7.2m 1-Oct-2014
Parameter Result (ug/g)
Benzene 7.1/4.6
Ethylbenzene 15 / 9.7
Toluene 23 /16
Xylene 68 /46

MW19-03-05 3.0-4.0m 16-May-2019
Parameter Result (ug/g)
Benzene 2.1
Ethylbenzene 6.9
Toluene 9.8
Xylene 28

G1 1.0m 16-Sep-2022 BTEX comply with MECP Table 3

TP4-21-G4 2.8-3.0m 20-Dec-2021 BTEX comply with MECP Table 3

SV19-01-07 4.6-5.5m 22-May-2019
Parameter Result (ug/g)
Benzene 3.4
Toluene 3.8
Xylene 3.3
Ethylbenzene complies with MECP Table 3

MW19-02-08 5.3-6.0m 15-May-2019 BTEX comply with MECP Table 3

TH207-2 1.1-1.2m 24-Sep-2014 BTEX comply with MECP Table 3
TH207-10 6.1-6.3m 29-Sep-2014
Parameter Result (ug/g)
Benzene 1.4
Ethylbenzene 2.5
Xylene 13
Toluene complies with MECP Table 3

NW9 3.5m 27-Oct-2022 BTEX comply with MECP Table 3

NW10 3.5m 27-Oct-2022 BTEX comply with MECP Table 3

TH213-1 0.5-0.6m 25-Sep-2014 BTEX complies with MECP Table 3
TH213-10 6.1-6.3m 6-Oct-2014 BTEX complies with MECP Table 3

TH210-3 1.4-1.5m 25-Sep-2014 BTEX comply with MECP Table 3
TH210-12 7.6-8.1m 3-Oct-2014
Parameter Result (ug/g)
Benzene 0.96
Ethylbenzene, Toluene, and Xylene comply with MECP Table 3

G3 1.0m 5-Oct-2022 BTEX comply with MECP Table 3

NW1 1.5m 30-Sep-2022 BTEX comply with MECP Table 3

NW5 3.0m 21-Oct-2022 BTEX comply with MECP Table 3

NE4 3.0m 21-Oct-2022 BTEX comply with MECP Table 3

NE5 4.2m 1-Nov-2022 BTEX comply with MECP Table 3

NE6 4.4m 1-Nov-2022 BTEX comply with MECP Table 3

MW19-09-05 3.0-4.0m 17-May-2019 BTEX comply with MECP Table 3

G4 3.2m 5-Oct-2022 BTEX comply with MECP Table 3

TH212-2 1.1-1.2m 24-Sep-2014 BTEX comply with MECP Table 3
TH212-9 5.3-5.6m 30-Sep-2014 BTEX comply with MECP Table 3

TH211-2 1.1-1.2m 24-Sep-2014 BTEX comply with MECP Table 3
TH211-12 7.6-8.1m 6-Oct-2014
Parameter Result (ug/g)
Benzene 1.1
Ethylbenzene, Toluene, and Xylene comply with MECP Table 3

BH4-21-SS4 1.52-2.13m 21-Dec-2021 BTEX comply with MECP Table 3
BH4-21-SS7 3.81-4.19m 22-Dec-2021 BTEX comply with MECP Table 3
BH4-21-SS8 4.57-4.80m 22-Dec-2021 BTEX comply with MECP Table 3

TH206-1 0.5-0.6m 24-Sep-2014 BTEX comply with MECP Table 3
TH206-11 6.9-7.2m 2-Oct-2014
Parameter Result (ug/g)
Benzene 9.8
Ethylbenzene 36
Toluene 24
Xylene 170

TH215-2 1.1-1.2m 25-Sep-2014 BTEX comply with MECP Table 3
TH215-11 6.9-7.5m 7-Oct-2014 BTEX comply with MECP Table 3
TH215-12 7.6-7.8m 7-Oct-2014 BTEX comply with MECP Table 3

BH2-21-SS4 2.29-2.90m 20-Dec-2021 BTEX comply with MECP Table 3
BH2-21-SS9 6.10-6.17m 21-Dec-2021
Parameter Result (ug/g)
Benzene 0.61
Ethylbenzene, Toluene and Xylene comply with MECP Table 3

BH0-SS8 5.33-5.92m 3-Apr-2019
Parameter Result (ug/g)
Benzene 0.33
Xylene 4.10
Ethylbenzene & Toluene comply with MECP Table 3

TP1-21-G3N 2.0m 11-Oct-2022 BTEX comply with MECP Table 3

BH4-20-SS5 3.05-3.66m 18-Sep-2020 BTEX comply with MECP Table 3

TP1-21-G2 1.0-1.2m 20-Dec-2021 BTEX comply with MECP Table 3
TP1-21-G3 2.0-2.2m 20-Dec-2021 BTEX comply with MECP Table 3

NE9 3.9m 1-Nov-2022 BTEX comply with MECP Table 3

TP2-21-G4 1.5-1.7m 20-Dec-2021 BTEX comply with MECP Table 3
TP2-21-G6 2.6-2.8m 20-Dec-2021 BTEX comply with MECP Table 3

SV19-02-09/DUP B 6.0-6.7m 22-May-2019
Parameter Result (ug/g)
Benzene 8.7 / 1.2
Ethylbenzene 6.8 / 1.4
Toluene 7.6 / 0.61
Xylene 27 / 3.6

B30 5.4m 9-Nov-2022 BTEX comply with MECP Table 3

BA5 5.4m 11-Nov-2022 BTEX comply with MECP Table 3

NW8 3.5m 27-Oct-2022 BTEX comply with MECP Table 3

MW19-01-01 0.3-0.5m 13-May-2019 BTEX comply with MECP Table 3
MW19-01-06 3.8-4.4m 15-May-2019 BTEX comply with MECP Table 3

TH202-2 1.1-1.2m 25-Sep-2014 BTEX comply with MECP Table 3
TH202-11 6.9-7.2m 1-Oct-2014
Parameter Result (ug/g)
Benzene 4.3
Ethylbenzene 25
Toluene 11
Xylene 189

TH201-2 0.9-1.1m 25-Sep-2014 BTEX comply with MECP Table 3
TH201-10 6.1-6.7m 30-Sep-2014
Parameter Result (ug/g)
Benzene 0.46
Xylene 6.7
Ethylbenzene, and Toluene comply with MECP Table 3
TH201-13 8.4-9.0m 30-Sep-2014
Parameter Result (ug/g)
Benzene 1.4
Ethylbenzene, Toluene, and Xylene comply with MECP Table 3

BH1-21-SS5 3.05-3.66m 20-Dec-2021 BTEX comply with MECP Table 3

BH1-SS7 4.57-5.18m 3-Apr-2019
Parameter Result (ug/g)
Benzene 0.88
Ethylbenzene 2.39
Xylene 7.58
Toluene complies with MECP Table 3

TH204-1 0.5-0.6m 25-Sep-2014 BTEX comply with MECP Table 3
TH204-12 7.6-7.8m 2-Oct-2014
Parameter Result (ug/g)
Benzene 1.8
Xylene 19
Ethylbenzene and Toluene comply with MECP Table 3

NW6 4.0m 25-Oct-2022 BTEX comply with MECP Table 3

NW7 4.0m 25-Oct-2022 BTEX comply with MECP Table 3

SW2 4.0m 25-Oct-2022 BTEX comply with MECP Table 3

B46 5.6m 11-Nov-2022
Parameter Result (ug/g)
Benzene 0.27
Xylene 4.72
Ethylbenzene and toluene comply with MECP Table 3

TP5-21-G5 3.5-3.6m 21-Dec-2021 BTEX comply with MECP Table 3

BH2-20-SS6 3.81-4.42m 18-Sep-2020 BTEX comply with MECP Table 3

TH205-1 0.5-0.6m 25-Sep-2014 BTEX comply with MECP Table 3

B47 5.4m 11-Nov-2022 BTEX comply with MECP Table 3

TP7-21-G1 0.2-0.3m 21-Dec-2021 BTEX comply with MECP Table 3
TP7-21-G3 1.2-1.3m 21-Dec-2021 BTEX comply with MECP Table 3
TP7-21-G6 3.5-.3.6m 21-Dec-2021 BTEX comply with MECP Table 3

TP11-21-G2 0.7-0.8m 21-Dec-2021 BTEX comply with MECP Table 3
TP11-21-G6 2.9-3.0m 21-Dec-2021 BTEX comply with MECP Table 3

BH7-22-SS2 0.76-1.37m 18-Feb-2022 BTEX comply with MECP Table 3
BH7-22-SS5 3.05-3.28m 18-Feb-2022 BTEX comply with MECP Table 3

BH6-22-AU1 0.0-0.61m 17-Feb-2022 BTEX comply with MECP Table 3
BH6-22-SS3 1.52-2.13m 17-Feb-2022 BTEX comply with MECP Table 3
BH6-22-SS5 3.05-3.66m 17-Feb-2022 BTEX comply with MECP Table 3
BH6-22-SS6 3.81-4.22m 17-Feb-2022 BTEX comply with MECP Table 3

BH1-20-SS4 2.29-2.90m 18-Sep-2020 BTEX comply with MECP Table 3
BH1-20-SS7 4.57-5.11m 18-Sep-2020 BTEX comply with MECP Table 3

TP10-21-G2 0.5-0.6m 21-Dec-2021 BTEX comply with MECP Table 3
TP10-21-G4 2.1-2.2m 21-Dec-2021 BTEX comply with MECP Table 3

TH205A-11/DUPA 6.9-7.2m 6-Oct-2014
Parameter Result (ug/g)
Benzene 0.49/0.78
Xylene 6.4/6.3
Ethylbenzene and Toluene comply with MECP Table 3

B1 3.0m 21-Oct-2022 BTEX comply with MECP Table 3

TP1-21-G3W 2.0m 11-Oct-2022 BTEX comply with MECP Table 3

BH6-20-SS5 3.05-3.28m 18-Sep-2020 BTEX comply with MECP Table 3

BH8-20-SS4 2.29-2.34m 21-Sep-2020 BTEX comply with MECP Table 3

TP15-21-G3 1.35-1.45m 22-Dec-2021 BTEX comply with MECP Table 3

BH8-22-SS3 1.52-2.13m 18-Feb-2022 BTEX comply with MECP Table 3
BH8-22-SS4 2.29-2.69m 18-Feb-2022 BTEX comply with MECP Table 3

BH6-20-SS4 2.29-2.90m 18-Sep-2020 BTEX comply with MECP Table 3
BH6-20-SS6 3.81-4.06m 18-Sep-2020 BTEX comply with MECP Table 3

TP16-21-G3 1.3-1.4m 22-Dec-2021 BTEX comply with MECP Table 3
TP16-21-G5 2.9-3.0m 22-Dec-2021 BTEX comply with MECP Table 3

BH7-SS8 5.33-5.94m 5-Apr-2019 BTEX comply with MECP Table 3

BH2-21-SS1 0.30-0.91m 13-Jun-2022 BTEX comply with MECP Table 3
BH2-22-SS3 1.52-2.13m 13-Jun-2022 BTEX comply with MECP Table 3

BH3-20-AU1 0.0-0.61m 16-Feb-2022 BTEX comply with MECP Table 3
BH3-22-SS3 0.76-1.37m 16-Feb-2022 BTEX comply with MECP Table 3
BH3-22-SSSB 3.05-3.66m 16-Feb-2022 BTEX comply with MECP Table 3
BH3-22-SS7 4.57-4.78m 16-Feb-2022
Parameter Result (ug/g)
Benzene 0.22
Ethylbenzene, Toluene and Xylene comply with MECP Table 3
BH3-22-SS7R 4.7m 25-Nov-2022 BTEX comply with MECP Table 3
Average of BH3-22-SS-7 & BH3-22-SS7R comply with MECP Table 3. See CSM.

BH2-22-SS3 0.91-1.05m 4-Feb-2022 BTEX comply with MECP Table 3
BH2-22-SS6 2.74-2.81m 4-Feb-2022 BTEX comply with MECP Table 3

BH3-20-SS2 0.76-1.37m 18-Sep-2020 BTEX comply with MECP Table 3
BH3-20-SS5 3.05-3.66m 18-Sep-2020 BTEX comply with MECP Table 3

TP9-21-G2 0.7-0.8m 22-Dec-2021 BTEX comply with MECP Table 3
TP9-21-G4 2.7-2.8m 21-Dec-2021 BTEX comply with MECP Table 3

TP12-21-G2 0.7-0.8m 22-Dec-2021 BTEX comply with MECP Table 3
TP12-21-G5 3.1-3.2m 22-Dec-2021 BTEX comply with MECP Table 3

TP8-21-G2 0.55-0.65m 21-Dec-2021 BTEX comply with MECP Table 3
TP8-21-G3 1.2-1.3m 21-Dec-2021 BTEX comply with MECP Table 3

BH1-22-HD 3.35-4.82m 2-Feb-2022 BTEX comply with MECP Table 3
BH1-22-SS1 0.30-0.91m 2-Feb-2022 BTEX comply with MECP Table 3
BH1-22-SS4 2.12-2.42m 2-Feb-2022 BTEX comply with MECP Table 3

TP14-21-G2 0.6-0.7m 22-Dec-2021 BTEX comply with MECP Table 3
TP14-21-G5 2.2-2.3m 22-Dec-2021 BTEX comply with MECP Table 3

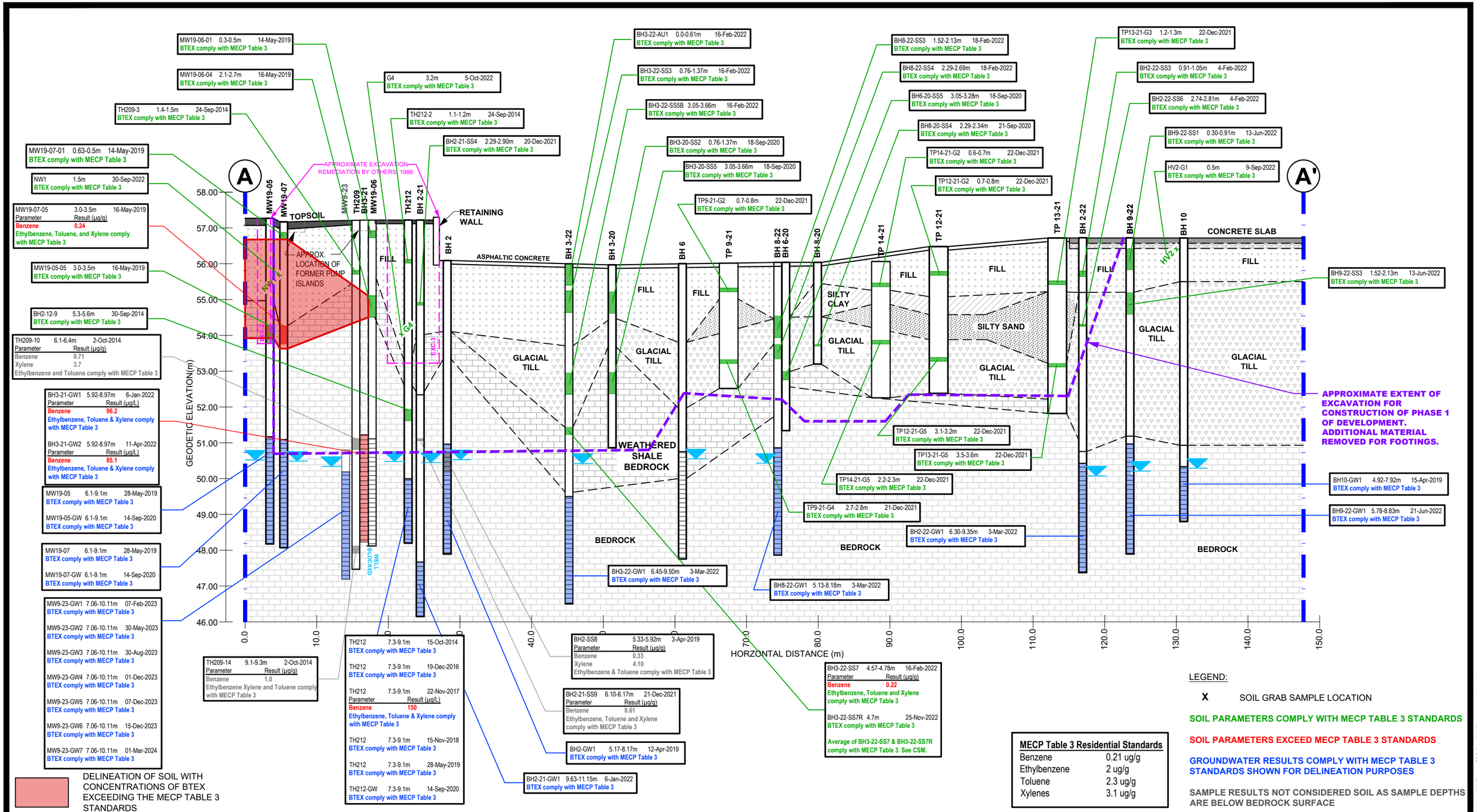
TP13-21-G3 1.2-1.3m 22-Dec-2021 BTEX comply with MECP Table 3
TP13-21-G5 3.5-3.6m 22-Dec-2021 BTEX comply with MECP Table 3

BH4-22-SS2 0.76-1.37m 16-Feb-2022 BTEX comply with MECP Table 3
BH4-22-SS3 1.52-2.13m 16-Feb-2022 BTEX comply with MECP Table 3
BH4-22-SS5 3.05-3.48m 16-Feb-2022 BTEX comply with MECP Table 3
BH4-22-SS6 3.81-4.24m 16-Feb-2022 BTEX comply with MECP Table 3

BH7-20-SS2 0.76-1.37m 21-Sep-2020 BTEX comply with MECP Table 3

HV-G1 0.5m 9-Sep-2022 BTEX comply with MECP Table 3

BH BH1-23 56.67; BH1A-23 56.67; BH2-23 56.63; BH3-23 56.73; BH4-23 56.67; BH5-22 56.33; BH6-20 56.04; BH7-20 56.31; BH7-22 56.18; BH8-20B 56.06; BH8-20A 56.06; BH8-22 56.04; BH9-22 57.06; BH10 57.07; BH11-23 56.45; BH12-23 56.48; BH13-23 56.72; BH14-23 56.77; BH15-23 56.54; BH16-23 56.62; BH17-23 56.71; BH18-23 56.44; BH19-23 56.60; BH20-23 56.64; BH21-23 56.45; BH22-23 56.54; BH23-23 56.80; BH24-23 56.72; BH25-23 56.77; BH26-23 56.49; BH27-23 56.66; BH28-23 56.55; BH29-23 56.56; BH30-23 56.55; BH31-23 56.55; BH32-23 56.55; BH33-23 56.55; BH34-23 56.55; BH35-23 56.55; BH36-23 56.55; BH37-23 56.55; BH38-23 56.55; BH39-23 56.55; BH40-23 56.55; BH41-23 56.55; BH42-23 56.55; BH43-23 56.55; BH44-23 56.55; BH45-23 56.55; BH46-23 56.55; BH47-23 56.55; BH48-23 56.55; BH49-23 56.55;



PATERSON GROUP
9 AURIGA DRIVE
OTTAWA, ON
K2E 7T9
TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL
0			

RIVERAIN DEVELOPMENTS INC.

PHASE II - ENVIRONMENTAL SITE ASSESSMENT
2 MONTREAL ROAD, 3 SELKIRK STREET, 280 MONTGOMERY STREET AND 300 MONTGOMERY STREET

OTTAWA, ONTARIO

Title:

CROSS SECTION A-A' SOIL - BTEX

Scale: AS SHOWN	Date: 02/2022
Drawn by: RCG	Report No.: PE4546
Checked by: DP	Dwg. No.: PE4546-7A
Approved by: LK	Revision No.: 0

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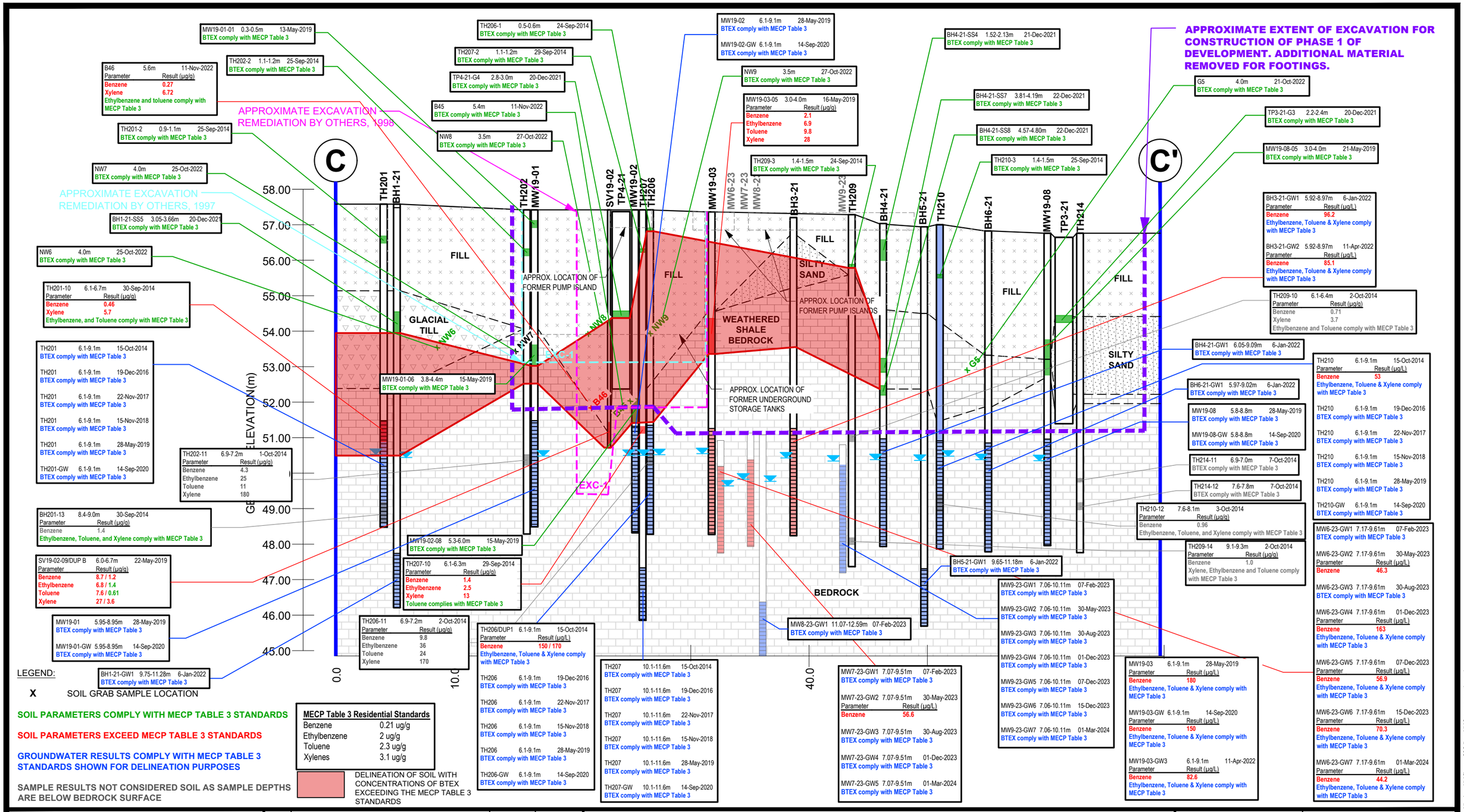

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RIVERAIN DEVELOPMENTS INC.

PHASE II - ENVIRONMENTAL SITE ASSESSMENT
2 MONTREAL ROAD, 3 SELKIRK STREET, 280 MONTGOMERY STREET AND 300 MONTGOMERY STREET

OTTAWA, ONTARIO

Title:

CROSS SECTION C-C' SOIL - BTEX

Scale: AS SHOWN	Date: 02/2022
Drawn by: RCG	Report No.: PE4546
Checked by: DP	Dwg. No.: PE4546-7C
Approved by: LK	Revision No.: 0

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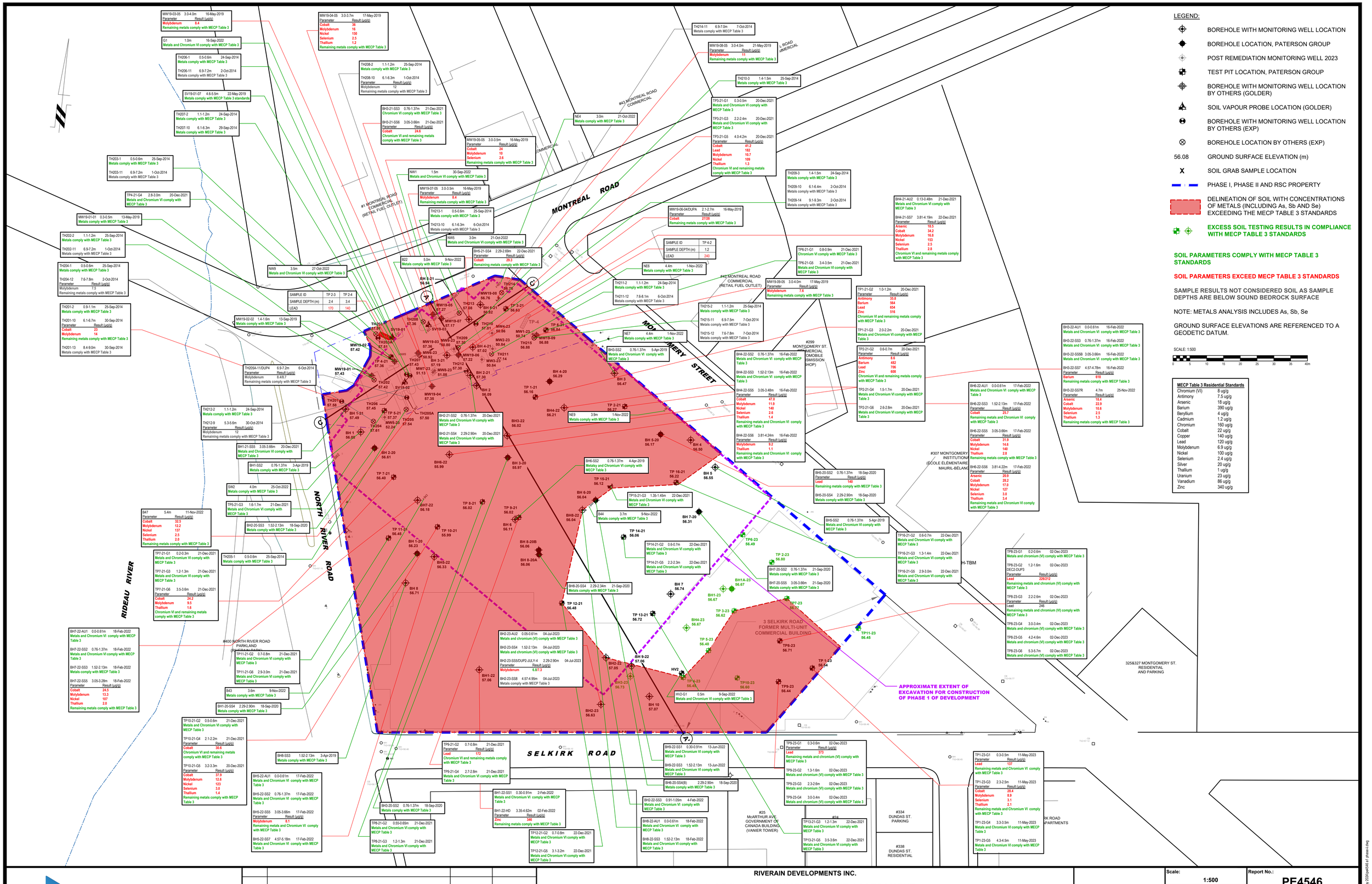

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NO.	REVISIONS	DATE	INITIAL

RIVERAIN DEVELOPMENTS INC.

PHASE II - ENVIRONMENTAL SITE ASSESSMENT
2 MONTREAL ROAD, 3 SELKIRK STREET, 280 MONTGOMERY STREET AND 300 MONTGOMERY STREET
OTTAWA, ONTARIO

Title:

ANALYTICAL TESTING PLAN - SOIL (CrVI, METALS INCLUDING As, Sb AND Se)

Scale:	1:500
Drawn by:	MPG
Checked by:	LK
Approved by:	LK
Date:	11/2021
Report No.:	PE4546
Drawing No.:	PE4546-8
Revision No.:	

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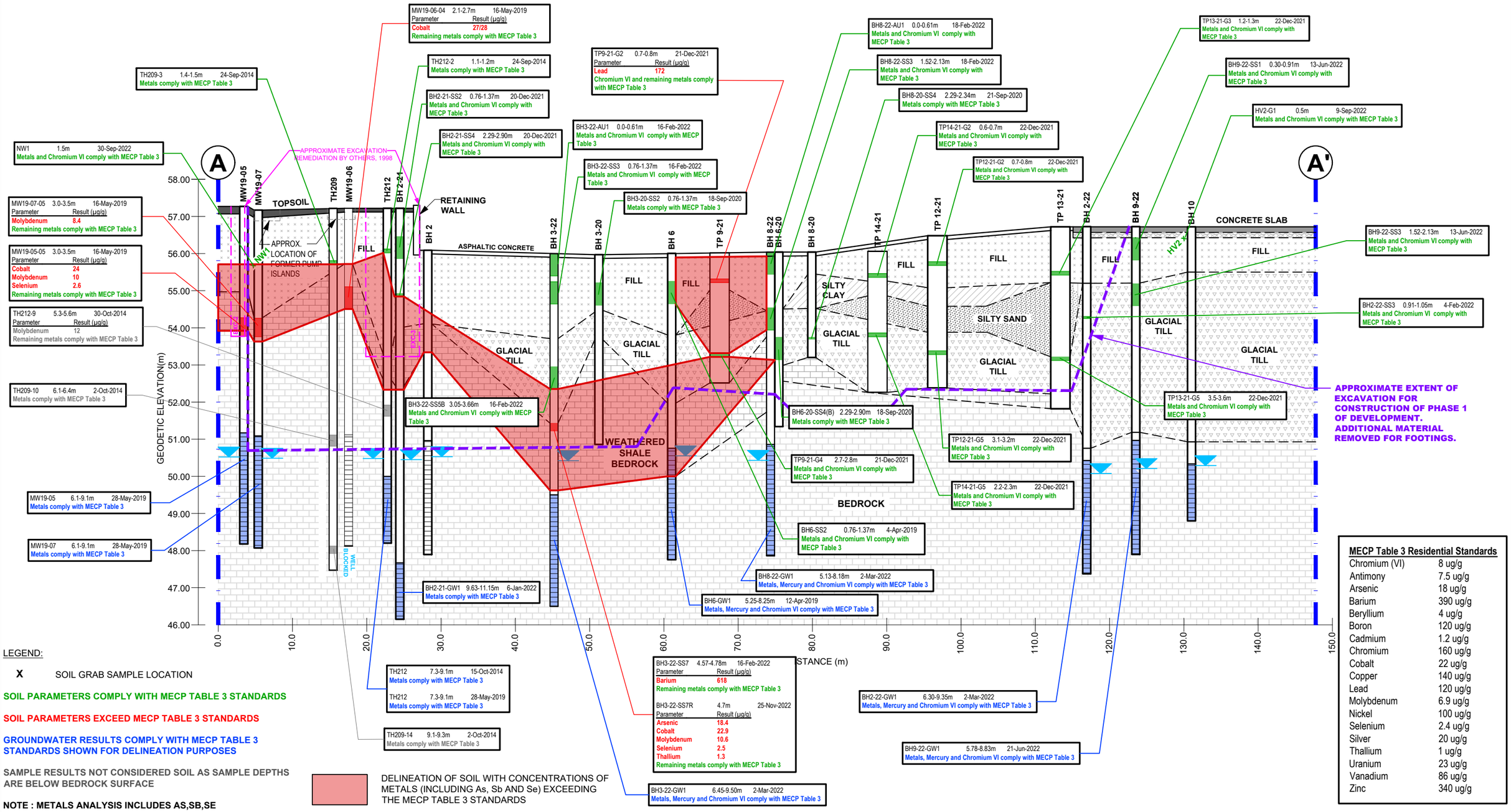

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RIVERAIN DEVELOPMENTS INC.

PHASE II - ENVIRONMENTAL SITE ASSESSMENT
2 MONTREAL ROAD, 3 SELKIRK STREET, 280 MONTGOMERY STREET AND 300 MONTGOMERY STREET

OTTAWA, ONTARIO

Title:

CROSS SECTION A-A' SOIL - (Cr VI, METALS INCLUDING As, Sb AND Se)

Scale: AS SHOWN	Date: 02/2022
Drawn by: RCG	Report No.: PE4546
Checked by: DP	Dwg. No.: PE4546-8A
Approved by: LK	Revision No.: 0

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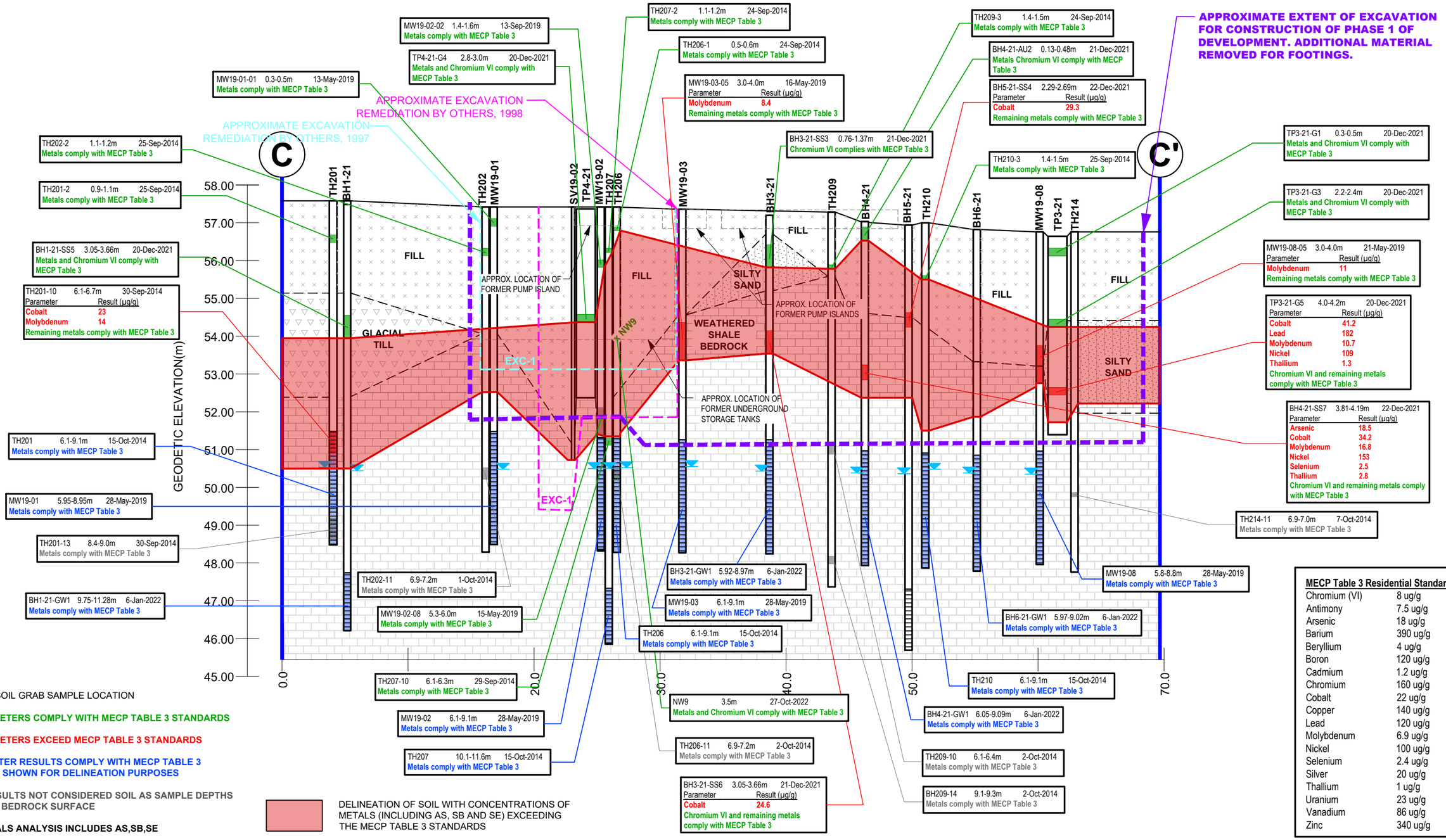

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NO.	REVISIONS	DATE	INITIAL
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RIVERAIN DEVELOPMENTS INC.

PHASE II - ENVIRONMENTAL SITE ASSESSMENT
2 MONTREAL ROAD, 3 SELKIRK STREET, 280 MONTGOMERY STREET AND 300 MONTGOMERY STREET

OTTAWA, ONTARIO

Title:
CROSS SECTION C-C' SOIL - (Cr VI, METALS INCLUDING As, Sb AND Se)

Scale: AS SHOWN	Date: 02/2022
Drawn by: RCG	Report No.: PE4546
Checked by: DP	Dwg. No.: PE4546-8C
Approved by: LK	Revision No.: 0

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LEGEND:

- BOREHOLE WITH MONITORING WELL LOCATION
- BOREHOLE LOCATION, PATERSON GROUP
- TEST PIT LOCATION, PATERSON GROUP
- BOREHOLE WITH MONITORING WELL LOCATION BY OTHERS (GOLDER)
- SOIL VAPOUR PROBE LOCATION (GOLDER)
- BOREHOLE WITH MONITORING WELL LOCATION BY OTHERS (EXP)
- BOREHOLE LOCATION BY OTHERS (EXP)
- 56.08 GROUND SURFACE ELEVATION (m)
- X SOIL GRAB SAMPLE LOCATION
- PHASE I, PHASE II AND RSC PROPERTY
- DELINEATION OF SOIL WITH CONCENTRATIONS OF MERCURY EXCEEDING THE MECP TABLE 3 STANDARD
- **MERCURY EXCESS SOIL TESTING RESULTS IN COMPLIANCE WITH MECP TABLE 3 STANDARDS**

SOIL PARAMETERS COMPLY WITH MECP TABLE 3 STANDARDS

SOIL PARAMETERS EXCEED MECP TABLE 3 STANDARDS

GROUND SURFACE ELEVATIONS ARE REFERENCED TO A GEODETIC DATUM.

SCALE: 1:500

0 5 10 15 20 25 30 35 40m

MECP Table 3 Residential Standards	
Mercury	0.27 ug/g
Methyl Mercury	0.0084 ug/g

MONTREAL ROAD

MONTGOMERY STREET

NORTH RIVER ROAD

SELKIRK ROAD

RIDEAU RIVER

#55 MONTREAL ROAD MULTI-UNIT COMMERCIAL

#1 MONTREAL ROAD COMMERCIAL (RETAIL FUEL OUTLET)

3 SELKIRK ROAD FORMER MULTI-UNIT COMMERCIAL BUILDING

APPROXIMATE EXTENT OF EXCAVATION FOR CONSTRUCTION OF PHASE 1 OF DEVELOPMENT

#307 MONTGOMERY STREET INSTITUTIONAL (ÉCOLE ÉLÉMENTAIRE PUBLIQUE MAURIL-BÉLANGER)

325&327 MONTGOMERY ST. RESIDENTIAL AND PARKING

#333 NORTH RIVER ROAD GOVERNMENT OF CANADA BUILDINGS (VANIER TOWERS)

#25 McARTHUR AVE. GOVERNMENT OF CANADA BUILDING (VANIER TOWER)

#24 SELKIRK ROAD COMMERCIAL

#334 DUNDAS ST. PARKING

#338 DUNDAS ST. RESIDENTIAL

#50 SELKIRK ROAD RESIDENTIAL APARTMENTS

BH3-21-SS3 0.76-1.37m 21-Dec-2021
Mercury complies with MECP Table 3
BH3-21-SS6 3.05-3.66m 21-Dec-2021
Mercury complies with MECP Table 3

MW19-04-05 3.0-3.7m 17-May-2019
Mercury complies with MECP Table 3

G1 1.0m 16-Sep-2022
Mercury complies with MECP Table 3

SV19-01-07 4.6-5.5m 22-May-2019
Mercury complies with MECP Table 3

TP4-21-G4 2.8-3.0m 20-Dec-2021
Mercury complies with MECP Table 3

NW1 1.5m 30-Sep-2022
Mercury complies with MECP Table 3

BH2-21-SS2 0.76-1.37m 20-Dec-2021
Mercury complies with MECP Table 3
BH2-21-SS4 2.29-2.90m 20-Dec-2021
Mercury complies with MECP Table 3

MW19-08-05 3.0-4.0m 21-May-2019
Mercury complies with MECP Table 3

NW5 3.0m 21-Oct-2022
Mercury complies with MECP Table 3

TP3-21-G1 0.3-0.5m 20-Dec-2021
Mercury complies with MECP Table 3
TP3-21-G3 2.2-2.4m 20-Dec-2021
Mercury complies with MECP Table 3
TP3-21-G5 4.0-4.2m 20-Dec-2021
Mercury complies with MECP Table 3

BH4-21-AU2 0.13-0.48m 21-Dec-2021
Mercury complies with MECP Table 3
BH4-21-SS7 3.81-4.19m 22-Dec-2021
Mercury complies with MECP Table 3

MW19-09-05 3.0-4.0m 17-May-2019
Mercury complies with MECP Table 3

TP6-21-G1 0.8-0.9m 21-Dec-2021
Mercury complies with MECP Table 3
TP6-21-G5 3.4-3.5m 21-Dec-2021
Mercury complies with MECP Table 3

TP1-21-G2 1.0-1.2m 20-Dec-2021
Parameter Result (µg/g)
Mercury 0.3
Methyl mercury complies with MECP Table 3
TP1-21-G3 2.0-2.2m 20-Dec-2021
Mercury complies with MECP Table 3

BH3-SS2 0.76-1.37m 5-Apr-2019
Mercury complies with MECP Table 3

BH4-22-SS2 0.76-1.37m 16-Feb-2022
Mercury complies with MECP Table 3
BH4-22-SS3 1.52-2.13m 16-Feb-2022
Mercury complies with MECP Table 3
BH4-22-SS5 3.05-3.48m 16-Feb-2022
Mercury complies with MECP Table 3
BH4-22-SS6 3.81-4.24m 16-Feb-2022
Mercury complies with MECP Table 3

TP2-21-G2 0.6-0.7m 20-Dec-2021
Parameter Result (µg/g)
Mercury 1.8
Methyl mercury complies with MECP Table 3
TP2-21-G4 1.5-1.7m 20-Dec-2021
Mercury complies with MECP Table 3
TP2-21-G6 2.6-2.8m 20-Dec-2021
Mercury complies with MECP Table

BH3-22-AU1 0.0-0.61m 16-Feb-2022
Mercury complies with MECP Table 3
BH3-22-SS3 0.76-1.37m 16-Feb-2022
Mercury complies with MECP Table 3
BH3-22-SS5B 3.05-3.66m 16-Feb-2022
Mercury complies with MECP Table 3

NW9 3.5m 27-Oct-2022
Mercury complies with MECP Table 3

BH1-21-SS5 3.05-3.66m 20-Dec-2021
Mercury complies with MECP Table 3

TP5-21-G3 1.6-1.7m 21-Dec-2021
Mercury complies with MECP Table 3

TP7-21-G1 0.2-0.3m 21-Dec-2021
Parameter Result (µg/g)
Mercury 0.4
Methyl mercury complies with MECP Table 3
TP7-21-G3 1.2-1.3m 21-Dec-2021
Mercury complies with MECP Table 3
TP7-21-G6 3.5-3.6m 21-Dec-2021
Mercury complies with MECP Table 3

BH6-22-AU1 0.0-0.61m 17-Feb-2022
Mercury complies with MECP Table 3
BH6-22-SS3 1.52-2.13m 17-Feb-2022
Mercury complies with MECP Table 3
BH6-22-SS6 3.81-4.22m 17-Feb-2022
Mercury complies with MECP Table 3

BH7-22-AU1 0.0-0.61m 18-Feb-2022
Mercury complies with MECP Table 3
BH7-22-SS2 0.76-1.37m 18-Feb-2022
Mercury complies with MECP Table 3

TP11-21-G2 0.7-0.8m 21-Dec-2021
Mercury complies with MECP Table 3
TP11-21-G6 2.9-3.0m 21-Dec-2021
Mercury complies with MECP Table 3

TP10-21-G2 0.5-0.6m 21-Dec-2021
Mercury complies with MECP Table 3
TP10-21-G4 2.1-2.2m 21-Dec-2021
Mercury complies with MECP Table 3

BH5-22-AU1 0.0-0.61m 17-Feb-2022
Mercury complies with MECP Table 3
BH5-22-SS2 0.76-1.37m 17-Feb-2022
Mercury complies with MECP Table 3
BH5-22-SS5 3.05-3.66m 17-Feb-2022
Mercury complies with MECP Table 3
BH5-22-SS7 4.57-5.18m 17-Feb-2022
Mercury complies with MECP Table 3

TP9-21-G2 0.7-0.8m 21-Dec-2021
Parameter Result (µg/g)
Mercury 18.3
Methyl mercury complies with MECP Table 3
TP9-21-G4 2.7-2.8m 21-Dec-2021
Mercury complies with MECP Table 3

BH1-22-SS1 0.30-0.91m 2-Feb-2022
Mercury complies with MECP Table 3

TP8-21-G2 0.55-0.65m 21-Dec-2021
Mercury complies with MECP Table 3
TP8-21-G3 1.2-1.3m 21-Dec-2021
Mercury complies with MECP Table 3

TP12-21-G2 0.7-0.8m 22-Dec-2021
Mercury complies with MECP Table 3
TP12-21-G5 3.1-3.2m 22-Dec-2021
Mercury complies with MECP Table 3

BH8-22-AU1 0.0-0.61m 18-Feb-2022
Mercury complies with MECP Table 3
BH8-22-SS3 1.52-2.13m 18-Feb-2022
Mercury complies with MECP Table 3

BH9-22-SS1 0.30-0.91m 13-Jun-2022
Mercury complies with MECP Table 3
BH9-22-SS3 1.52-2.13m 13-Jun-2022
Mercury complies with MECP Table 3

BH2-22-SS3 0.91-1.05m 4-Feb-2022
Mercury complies with MECP Table 3

BH6-SS2 0.76-1.37m 4-Apr-2019
Mercury complies with MECP Table 3

TP15-21-G3 1.35-1.45m 22-Dec-2021
Mercury complies with MECP Table 3

TP14-21-G2 0.6-0.7m 22-Dec-2021
Mercury complies with MECP Table 3
TP14-21-G5 2.2-2.3m 22-Dec-2021
Mercury complies with MECP Table 3

TP13-21-G3 1.2-1.3m 22-Dec-2021
Mercury complies with MECP Table 3
TP13-21-G5 3.5-3.6m 22-Dec-2021
Mercury complies with MECP Table 3

HV2-G1 0.5m 9-Sep-2022
Mercury complies with MECP Table 3

BH5-SS2 0.76-1.37m 5-Apr-2019
Mercury complies with MECP Table 3

TP16-21-G2 0.6-0.7m 22-Dec-2021
Mercury complies with MECP Table 3
TP16-21-G3 1.3-1.4m 22-Dec-2021
Mercury complies with MECP Table 3
TP16-21-G5 2.9-3.0m 22-Dec-2021
Mercury complies with MECP Table 3

TP6-23-G1 0.2-0.6m 02-Dec-2023
Mercury complies with MECP Table 3
TP6-23-G2 1.3-1.7m 02-Dec-2023
DEC2-DUP1
Parameter Result (µg/g)
Mercury 0.2/0.5
Methylmercury complies with MECP Table 3
TP6-23-G3 2.1-2.4m 02-Dec-2023
Parameter Result (µg/g)
Mercury 0.3
Methylmercury complies with MECP Table 3
TP6-23-G4 3.0-3.4m 02-Dec-2023
Mercury complies with MECP Table 3
TP6-23-G5 4.1-4.5m 02-Dec-2023
Mercury complies with MECP Table 3

TP9-23-G1 0.3-0.6m 02-Dec-2023
Parameter Result (µg/g)
Mercury 1.0
Methylmercury complies with MECP Table 3
TP9-23-G2 1.3-1.6m 02-Dec-2023
Mercury complies with MECP Table 3
TP9-23-G3 2.3-2.6m 02-Dec-2023
Mercury complies with MECP Table 3
TP9-23-G4 3.0-3.4m 02-Dec-2023
Mercury complies with MECP Table 3

BH1-23 56.67 [50.52]
BH1A-23 56.67
BH4-23 56.67 [51.97]
BH2-23 56.63 [52.21]
BH3-23 56.73 [51.17]
TP1-23 56.54
TP2-23 56.80
TP3-23 56.62
TP4-23 56.45
TP5-23 56.48
TP6-23 56.71
TP7-23 56.77
TP8-23 56.60
TP9-23 56.44
TP10-23 56.60
TP11-23 56.45

PATERSON GROUP
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TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL

RIVERAIN DEVELOPMENTS INC.

PHASE II - ENVIRONMENTAL SITE ASSESSMENT
2 MONTREAL ROAD, 3 SELKIRK STREET, 280 MONTGOMERY STREET AND 300 MONTGOMERY STREET
OTTAWA, ONTARIO

Title:

ANALYTICAL TESTING PLAN - SOIL (MERCURY, METHYL MERCURY)

Scale:	1:500
Drawn by:	MPG
Checked by:	LK
Approved by:	LK
Date:	11/2021
Report No.:	PE4546
Drawing No.:	PE4546-9
Revision No.:	

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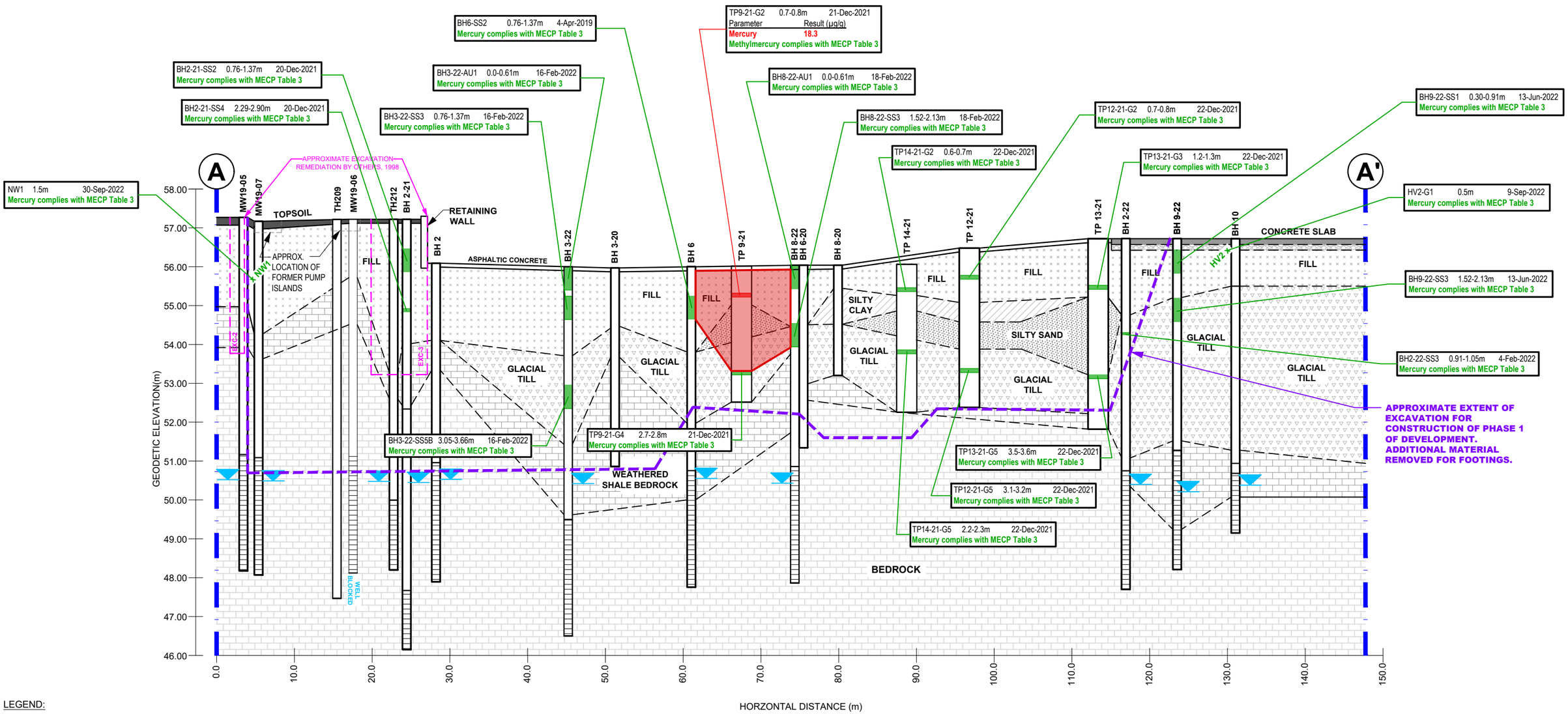

LEGEND:

X SOIL GRAB SAMPLE LOCATION

SOIL PARAMETERS COMPLY WITH MECP TABLE 3 STANDARDS

SOIL PARAMETERS EXCEED MECP TABLE 3 STANDARDS

DELINEATION OF SOIL WITH CONCENTRATIONS OF MERCURY EXCEEDING THE MECP TABLE 3 STANDARD

MECP Table 3 Residential Standards	
Mercury	0.27 ug/g
Methyl Mercury	0.0084 ug/g

PATERSON GROUP
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NO.	REVISIONS	DATE	INITIAL
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RIVERAIN DEVELOPMENTS INC.

PHASE II - ENVIRONMENTAL SITE ASSESSMENT
2 MONTREAL ROAD, 3 SELKIRK STREET, 280 MONTGOMERY STREET AND 300 MONTGOMERY STREET
OTTAWA, ONTARIO

Title:
CROSS SECTION A-A' SOIL - (MERCURY & METHYL MERCURY)

Scale: AS SHOWN	Date: 02/2022
Drawn by: RCG	Report No.: PE4546
Checked by: DP	Dwg. No.: PE4546-9A
Approved by: LK	Revision No.: 0

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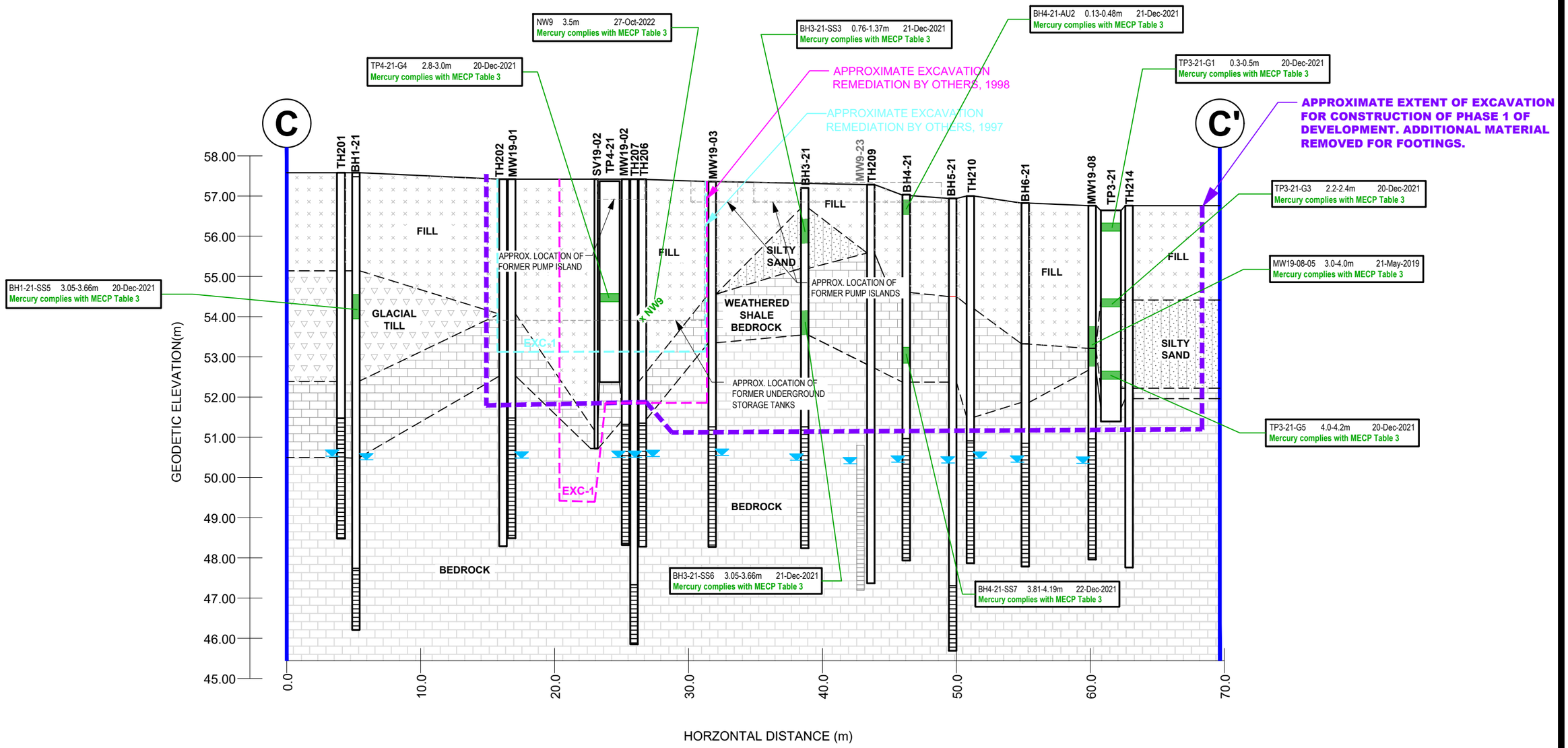

LEGEND:

X SOIL GRAB SAMPLE LOCATION

SOIL PARAMETERS COMPLY WITH MECP TABLE 3 STANDARDS

MECP Table 3 Residential Standards	
Mercury	0.27 ug/g
Methyl Mercury	0.0084 ug/g

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NO.	REVISIONS	DATE	INITIAL
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RIVERAIN DEVELOPMENTS INC.

PHASE II - ENVIRONMENTAL SITE ASSESSMENT
2 MONTREAL ROAD, 3 SELKIRK STREET, 280 MONTGOMERY STREET AND 300 MONTGOMERY STREET
OTTAWA, ONTARIO

Title:
CROSS SECTION C-C' SOIL - (MERCURY & METHYL MERCURY)

Scale: AS SHOWN	Date: 02/2022
Drawn by: RCG	Report No.: PE4546
Checked by: DP	Dwg. No.: PE4546-9C
Approved by: LK	Revision No.: 0

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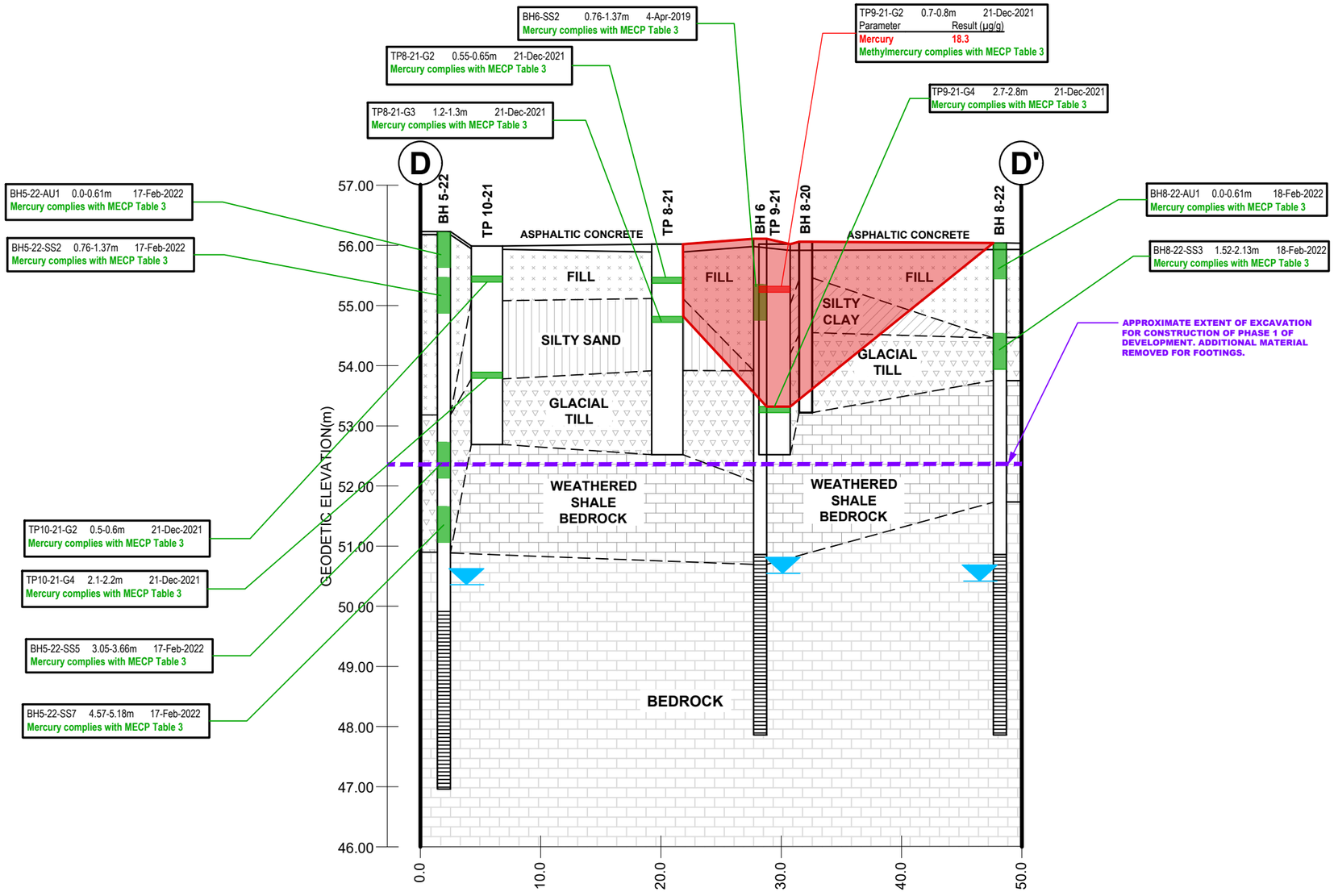

LEGEND:

SOIL PARAMETERS COMPLY WITH MECP TABLE 3 STANDARDS

SOIL PARAMETERS EXCEED MECP TABLE 3 STANDARDS

DELINEATION OF SOIL WITH CONCENTRATIONS OF MERCURY EXCEEDING THE MECP TABLE 3 STANDARD

MECP Table 3 Residential Standards	
Mercury	0.27 ug/g
Methyl Mercury	0.0084 ug/g

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NO.	REVISIONS	DATE	INITIAL
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MAIN AND MAIN DEVELOPMENTS

PHASE II - ENVIRONMENTAL SITE ASSESSMENT
2 MONTREAL ROAD, 3 SELKIRK STREET, 280 MONTGOMERY STREET AND 300 MONTGOMERY STREET

OTTAWA, ONTARIO

Title:

CROSS SECTION D-D' SOIL - (MERCURY & METHYL MERCURY)

Scale: AS SHOWN	Date: 02/2024
Drawn by: GK	Report No.: PE4546
Checked by: LK	Dwg. No.: PE4546-9D
Approved by: LK	Revision No.: 0

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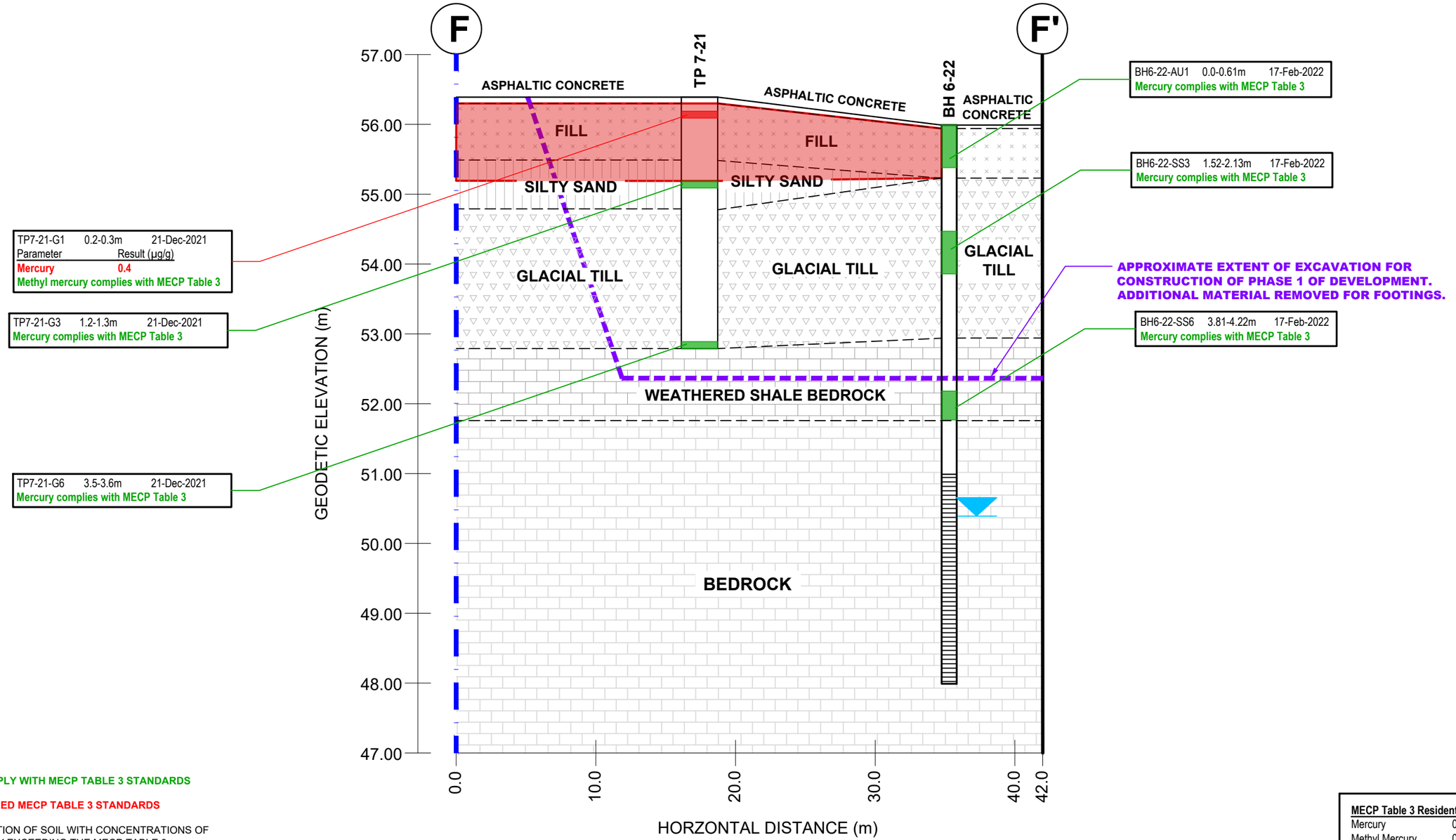

LEGEND:

SOIL PARAMETERS COMPLY WITH MECP TABLE 3 STANDARDS

SOIL PARAMETERS EXCEED MECP TABLE 3 STANDARDS

DELINEATION OF SOIL WITH CONCENTRATIONS OF MERCURY EXCEEDING THE MECP TABLE 3 STANDARD

MECP Table 3 Residential Standards	
Mercury	0.27 ug/g
Methyl Mercury	0.0084 ug/g

PATERSON GROUP
9 AURIGA DRIVE
OTTAWA, ON
K2E 7T9
TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL
0			

RIVERAIN DEVELOPMENTS INC.

PHASE II - ENVIRONMENTAL SITE ASSESSMENT
2 MONTREAL ROAD, 3 SELKIRK STREET, 280 MONTGOMERY STREET AND 300 MONTGOMERY STREET
OTTAWA, ONTARIO

Title:
CROSS SECTION F-F' SOIL - (MERCURY & METHYL MERCURY)

Scale: AS SHOWN	Date: 12/2024
Drawn by: GK	Report No.: PE4546
Checked by: LK	Dwg. No.: PE4546-9F
Approved by: LK	Revision No.: 0

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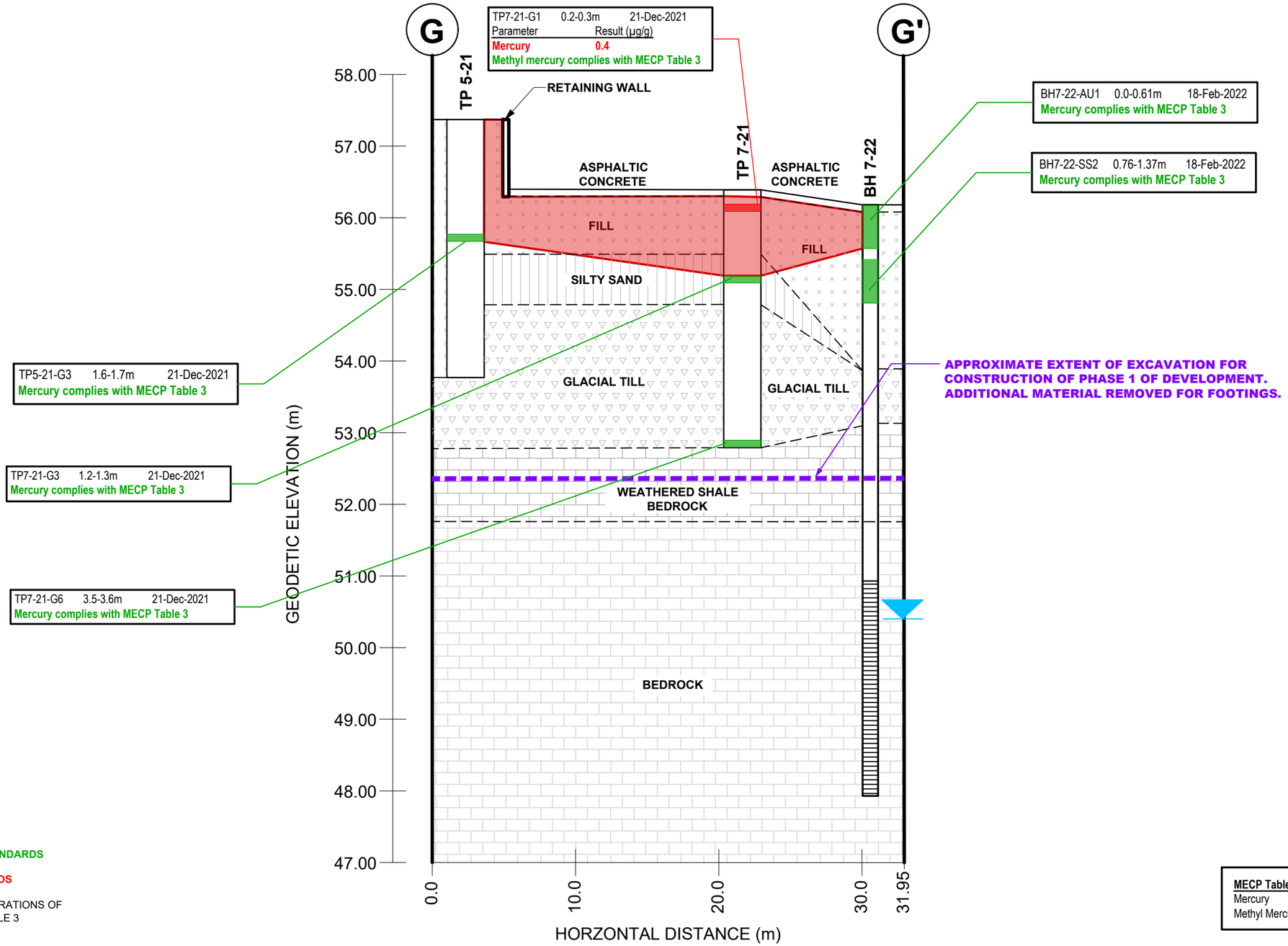

LEGEND:

SOIL PARAMETERS COMPLY WITH MECP TABLE 3 STANDARDS

SOIL PARAMETERS EXCEED MECP TABLE 3 STANDARDS

DELINEATION OF SOIL WITH CONCENTRATIONS OF MERCURY EXCEEDING THE MECP TABLE 3 STANDARD

MECP Table 3 Residential Standards	
Mercury	0.27 ug/g
Methyl Mercury	0.0084 ug/g

PATERSON GROUP
9 AURIGA DRIVE
OTTAWA, ON
K2E 7T9
TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL
0			

RIVERAIN DEVELOPMENTS INC.

PHASE II - ENVIRONMENTAL SITE ASSESSMENT
2 MONTREAL ROAD, 3 SELKIRK STREET, 280 MONTGOMERY STREET AND 300 MONTGOMERY STREET
OTTAWA, ONTARIO

Title:
CROSS SECTION G-G' SOIL - (MERCURY & METHYL MERCURY)

Scale: AS SHOWN	Date: 12/2024
Drawn by: GK	Report No.: PE4546
Checked by: LK	Dwg. No.: PE4546-9G
Approved by: LK	Revision No.: 0

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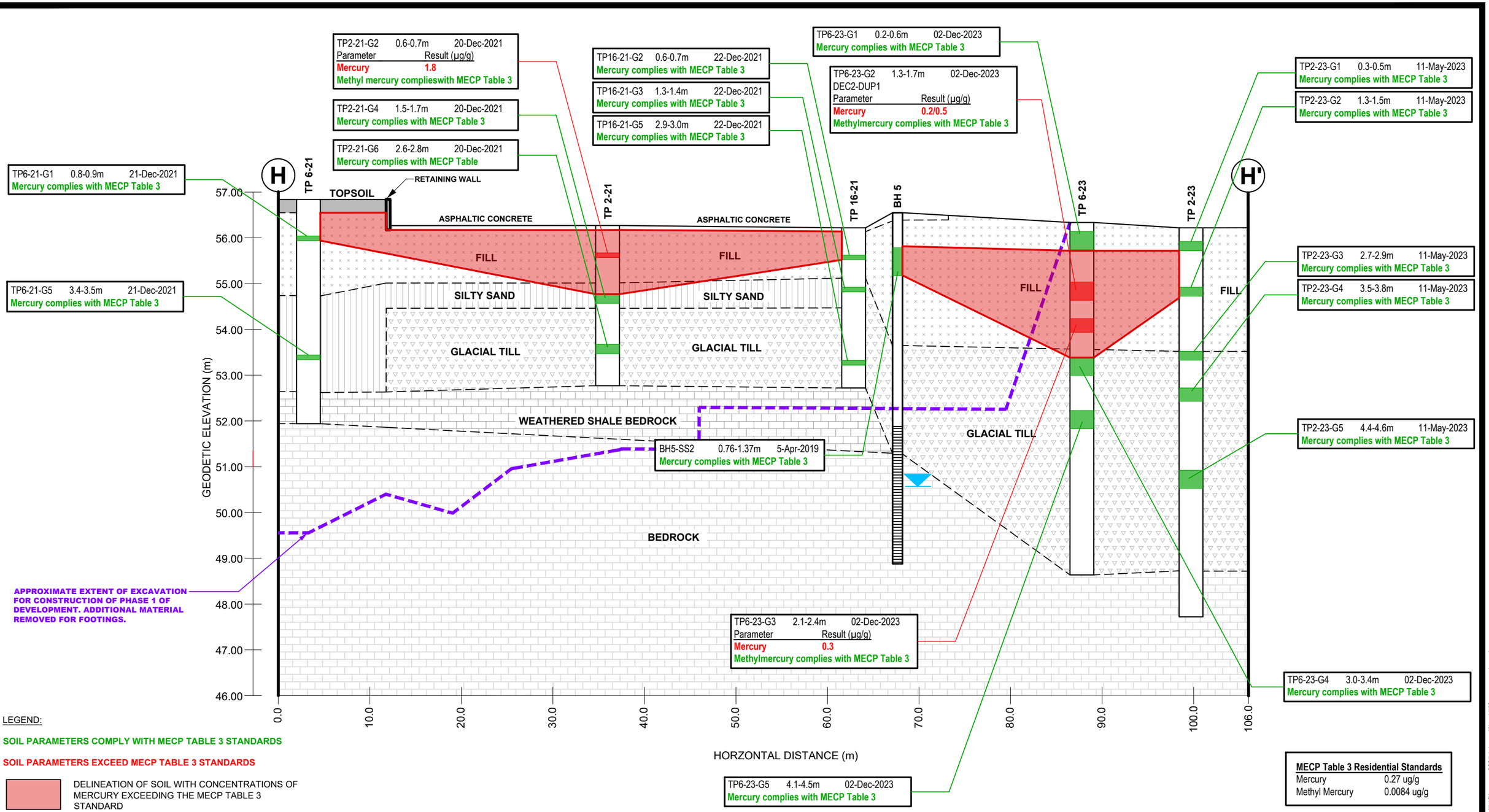

LEGEND:

SOIL PARAMETERS COMPLY WITH MECP TABLE 3 STANDARDS

SOIL PARAMETERS EXCEED MECP TABLE 3 STANDARDS

DELINEATION OF SOIL WITH CONCENTRATIONS OF MERCURY EXCEEDING THE MECP TABLE 3 STANDARD

PATERSON GROUP
9 AURIGA DRIVE
OTTAWA, ON
K2E 7T9
TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL
0			

RIVERAIN DEVELOPMENTS INC.

PHASE II - ENVIRONMENTAL SITE ASSESSMENT
2 MONTREAL ROAD, 3 SELKIRK STREET, 280 MONTGOMERY STREET AND 300 MONTGOMERY STREET
OTTAWA, ONTARIO

Title:
CROSS SECTION H-H' SOIL - (MERCURY & METHYL MERCURY)

Scale: AS SHOWN	Date: 12/2024
Drawn by: GK	Report No.: PE4546
Checked by: LK	Dwg. No.: PE4546-9H
Approved by: LK	Revision No.: 0

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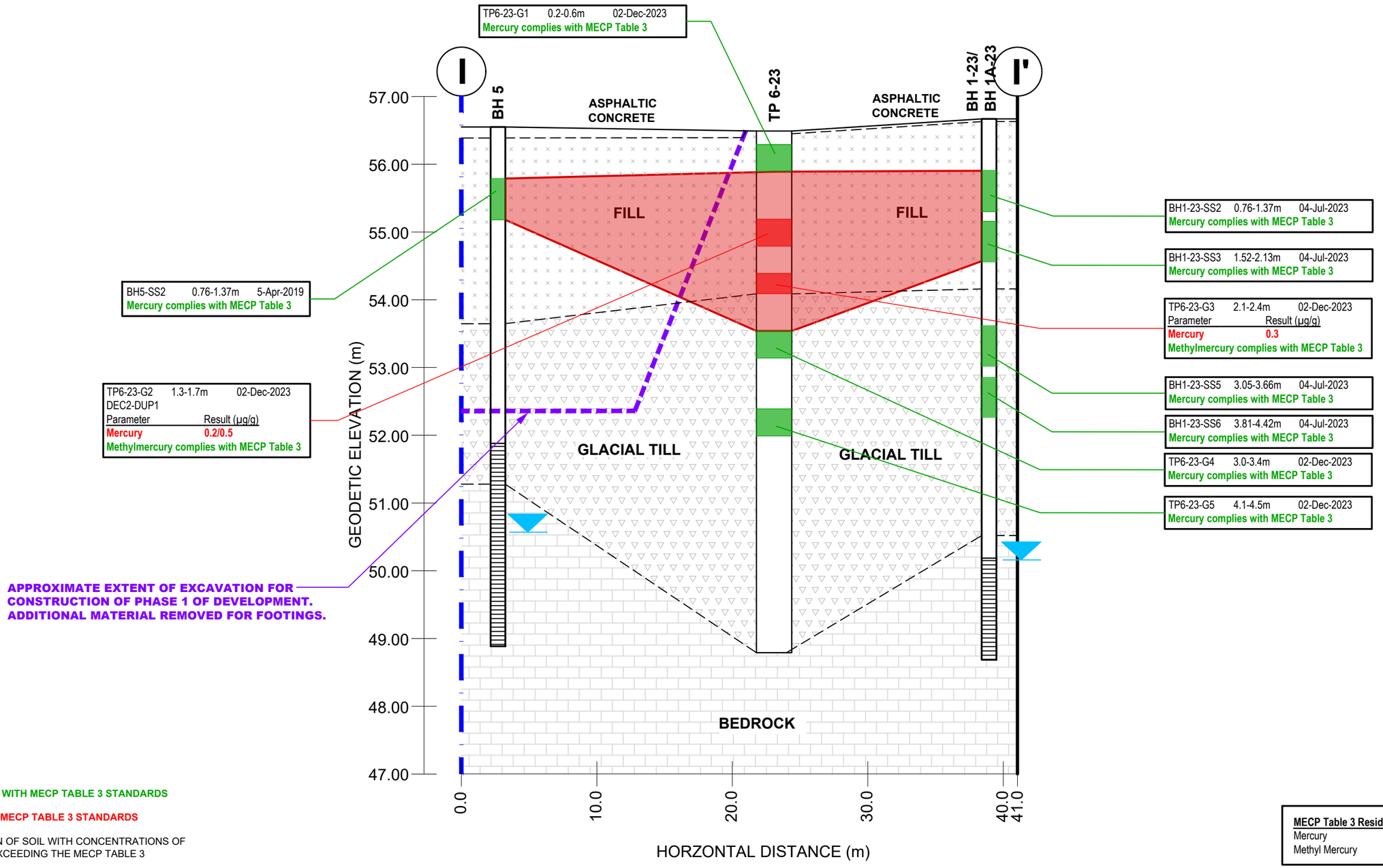

LEGEND:

SOIL PARAMETERS COMPLY WITH MECP TABLE 3 STANDARDS

SOIL PARAMETERS EXCEED MECP TABLE 3 STANDARDS

DELINEATION OF SOIL WITH CONCENTRATIONS OF MERCURY EXCEEDING THE MECP TABLE 3 STANDARD

MECP Table 3 Residential Standards	
Mercury	0.27 ug/g
Methyl Mercury	0.0084 ug/g

PATERSON GROUP
9 AURIGA DRIVE
OTTAWA, ON
K2E 7T9
TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL
0			

RIVERAIN DEVELOPMENTS INC.

PHASE II - ENVIRONMENTAL SITE ASSESSMENT
2 MONTREAL ROAD, 3 SELKIRK STREET, 280 MONTGOMERY STREET AND 300 MONTGOMERY STREET
OTTAWA, ONTARIO

Title:
CROSS SECTION I-I' SOIL - (MERCURY & METHYL MERCURY)

Scale: AS SHOWN	Date: 12/2024
Drawn by: GK	Report No.: PE4546
Checked by: LK	Dwg. No.: PE4546-9I
Approved by: LK	Revision No.: 0

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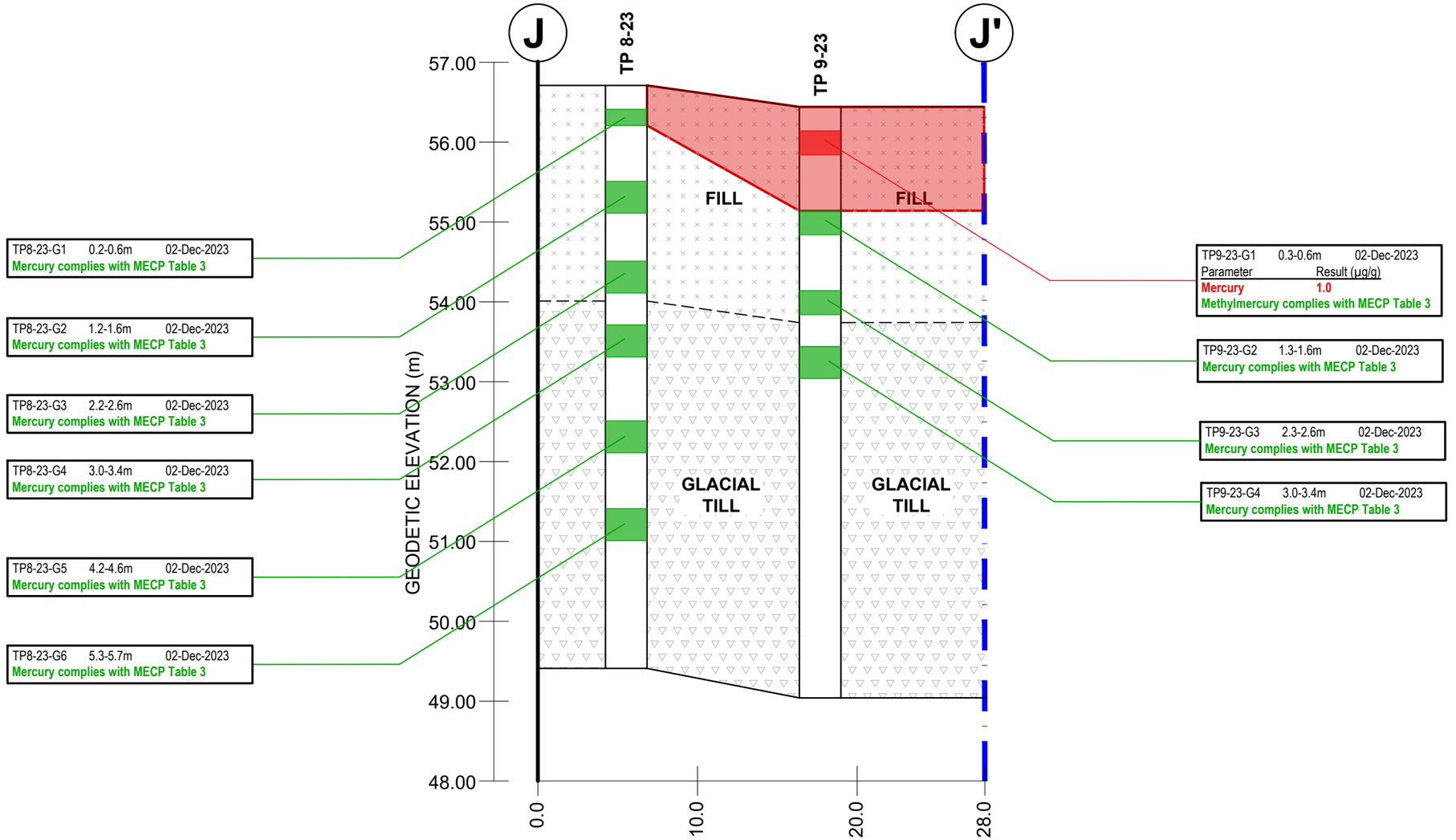

LEGEND:

SOIL PARAMETERS COMPLY WITH MECP TABLE 3 STANDARDS

SOIL PARAMETERS EXCEED MECP TABLE 3 STANDARDS

DELINEATION OF SOIL WITH CONCENTRATIONS OF MERCURY EXCEEDING THE MECP TABLE 3 STANDARD

MECP Table 3 Residential Standards	
Mercury	0.27 ug/g
Methyl Mercury	0.0084 ug/g

PATERSON GROUP
9 AURIGA DRIVE
OTTAWA, ON
K2E 7T9
TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL
0			

RIVERAIN DEVELOPMENTS INC.

PHASE II - ENVIRONMENTAL SITE ASSESSMENT
2 MONTREAL ROAD, 3 SELKIRK STREET, 280 MONTGOMERY STREET AND 300 MONTGOMERY STREET
OTTAWA, ONTARIO

Title:
CROSS SECTION J-J' SOIL - (MERCURY & METHYL MERCURY)

Scale: AS SHOWN	Date: 12/2024
Drawn by: GK	Report No.: PE4546
Checked by: LK	Dwg. No.: PE4546-9J
Approved by: LK	Revision No.: 0

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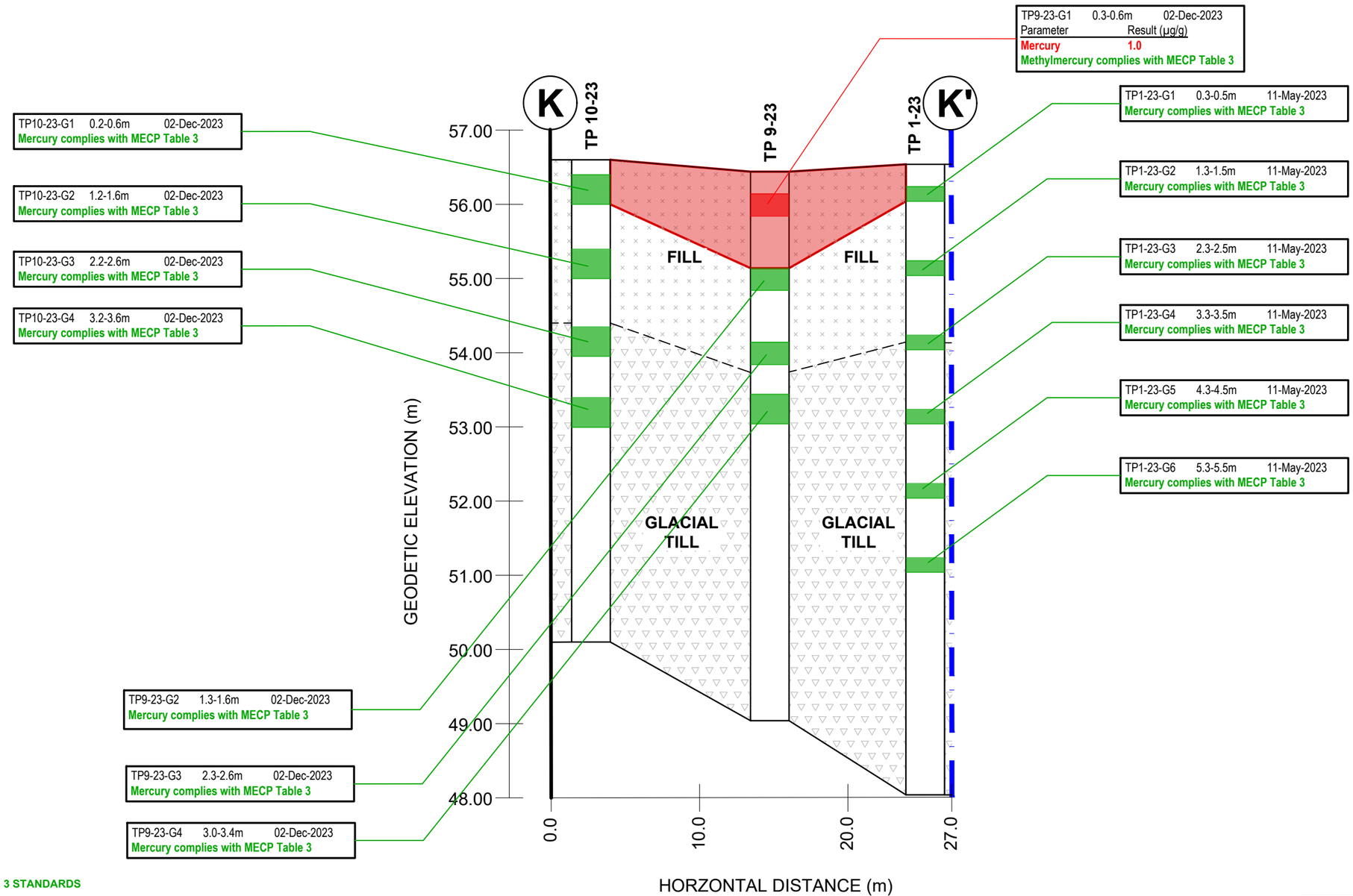

LEGEND:

SOIL PARAMETERS COMPLY WITH MECP TABLE 3 STANDARDS

SOIL PARAMETERS EXCEED MECP TABLE 3 STANDARDS

DELINEATION OF SOIL WITH CONCENTRATIONS OF MERCURY EXCEEDING THE MECP TABLE 3 STANDARD

MECP Table 3 Residential Standards	
Mercury	0.27 ug/g
Methyl Mercury	0.0084 ug/g

PATERSON GROUP
9 AURIGA DRIVE
OTTAWA, ON
K2E 7T9
TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL
0			

RIVERAIN DEVELOPMENTS INC.

PHASE II - ENVIRONMENTAL SITE ASSESSMENT
2 MONTREAL ROAD, 3 SELKIRK STREET, 280 MONTGOMERY STREET AND 300 MONTGOMERY STREET
OTTAWA, ONTARIO

Title:
CROSS SECTION K-K' SOIL - (MERCURY & METHYL MERCURY)

Scale: AS SHOWN	Date: 12/2024
Drawn by: GK	Report No.: PE4546
Checked by: LK	Dwg. No.: PE4546-9K
Approved by: LK	Revision No.: 0

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LEGEND:

- BOREHOLE WITH MONITORING WELL LOCATION
- BOREHOLE LOCATION, PATERSON GROUP 2020
- TEST PIT LOCATION, PATERSON GROUP
- BOREHOLE WITH MONITORING WELL LOCATION BY OTHERS (GOLDER)
- BOREHOLE WITH MONITORING WELL LOCATION BY OTHERS (EXP)
- BOREHOLE LOCATION BY OTHERS (EXP)
- 56.08 GROUND SURFACE ELEVATION (m)
- X SOIL GRAB SAMPLE LOCATION
- PHASE I, PHASE II AND RSC PROPERTY
- **EXCESS SOIL TESTING RESULTS IN COMPLIANCE WITH MECP TABLE 3 STANDARDS**

SOIL PARAMETERS COMPLY WITH MECP TABLE 3 STANDARDS

GROUND SURFACE ELEVATIONS ARE REFERENCED TO A GEODETIC DATUM.

SCALE: 1:500

0 5 10 15 20 25 30 35 40m

MONTREAL ROAD

#55 MONTREAL ROAD
MULTI-UNIT COMMERCIAL

#43 MONTREAL ROAD
COMMERCIAL

#1 MONTREAL ROAD
COMMERCIAL
(RETAIL FUEL OUTLET)

#70 MONTREAL ROAD
COMMERCIAL
(BINGO HALL)

#299
MONTGOMERY ST.
COMMERCIAL
(AUTOMOBILE
TRANSMISSION
SHOP)

#307 MONTGOMERY STREET
INSTITUTIONAL
(ÉCOLE ÉLÉMENTAIRE PUBLIQUE
MAURIL-BÉLANGER)

MONTGOMERY STREET

FH-TBM

3258;327 MONTGOMERY ST.
RESIDENTIAL
AND PARKING

3 SELKIRK ROAD
FORMER MULTI-UNIT
COMMERCIAL BUILDING

APPROXIMATE EXTENT OF
EXCAVATION FOR CONSTRUCTION
OF PHASE 1 OF DEVELOPMENT

RIDEAU RIVER

#400 NORTH RIVER ROAD
PARKLAND
(RIVERAIN PARK)

NORTH RIVER ROAD

SELKIRK ROAD

#333 NORTH RIVER ROAD
GOVERNMENT OF CANADA BUILDINGS
(VANIER TOWERS)

#24
SELKIRK ROAD
COMMERCIAL

#334
DUNDAS ST.
PARKING

#338
DUNDAS ST.
RESIDENTIAL

#50 SELKIRK ROAD
RESIDENTIAL APARTMENTS

TH206-1 0.5-0.6m 24-Sep-2014
PCBs comply with MECP Table 3

TH208-2 1.1-1.2m 25-Sep-2014
PCBs comply with MECP Table 3

MW19-07-05 3.0-3.5m 16-May-2019
PCBs comply with MECP Table 3

TH209-3 1.4-1.5m 24-Sep-2014
PCBs comply with MECP Table 3

TH213-1 0.5-0.6m 25-Sep-2014
PCBs comply with MECP Table 3

TH207-2 1.1-1.2m 24-Sep-2014
PCBs comply with MECP Table 3

TH203-1 0.5-0.6m 25-Sep-2014
PCBs comply with MECP Table 3

TH202-2 1.1-1.2m 25-Sep-2014
PCBs comply with MECP Table 3

TH201-2 0.9-1.1m 25-Sep-2014
PCBs comply with MECP Table 3

TH210-3 1.4-1.5m 25-Sep-2014
PCBs comply with MECP Table 3

MW19-06-04 2.1-2.7m 16-May-2019
PCBs comply with MECP Table 3

TH211-2 1.1-1.2m 24-Sep-2014
PCBs comply with MECP Table 3

TH215-2 1.1-1.2m 25-Sep-2014
PCBs comply with MECP Table 3

TH204-1 0.5-0.6m 25-Sep-2014
PCBs comply with MECP Table 3

TH212-2 1.1-1.2m 24-Sep-2014
PCBs comply with MECP Table 3

MW19-04-05 3.0-3.7m 17-May-2019
PCBs comply with MECP Table 3

TH205-1 0.5-0.6m 25-Sep-2014
PCBs comply with MECP Table 3

HV2-G1 0.5m 9-Sep-2022
PCBs comply with MECP Table 3

TH214 56.76
MW19-08 56.76
TH213 57.08
BH 6-21 56.82
MW19-05 57.27
TH208 57.36
MW19-07 57.17
BH 5-21 56.94
TH210 57.01
MW4-23 50.86
TP 3-21 56.63
MW19-09 56.88
TP 5-21 56.84
MW1-23 50.74
BH 4-21 57.02
MW19-06 57.22
TH211 57.14
MW2-23 50.84
TH215 56.88
TH203 57.51
TH203A 57.51
MW19-01 57.43
TP 4-21 57.36
MW19-02 57.42
MW19-03 57.35
MW9-23 50.92
MW9-23 50.80
TH207 57.43
MW7-23 51.13
MW8-23 51.08
BH 3-21 57.19
TH212 57.30
MW3-23 50.84
TH206 57.45
TH202 57.42
BH 2-21 57.30
BH 2 56.09
MW19-04 57.35
TH201 57.58
TH205A 57.50
TP 5-21 57.37
BH 1-21 57.49
TH205 57.54
BH 1 56.08
TH204 57.61
MW5-23 52.24
TP 1-21 56.16
BH 4-20 56.29
BH 3 56.47
BH4-22 56.21
TP 2-21 56.27
BH 5-20 56.17
BH 4 56.50
BH 5 56.55
TP 16-21 56.22
TP 15-21 56.12
BH 6-20 56.04
BH8-22 56.04
BH 7-20 56.31
TP 14-21 56.06
TP6-23 56.49
TP 2-23 56.80
BH 2-20 56.61
TP 7-21 56.40
BH7-22 56.16
TP 8-21 56.02
TP 9-21 56.02
BH 6 56.11
TP 10-21 55.99
TP 11-21 56.45
BH 1-20 56.23
BH5-22 56.33
BH 8-20B 56.06
BH 8-20A 56.06
BH 8 56.71
BH 3-20 55.97
TP 12-21 56.48
TP 13-21 56.72
BH 7 56.74
BH1-23 56.67
BH1A-23 56.67
TP7-23 56.77
TP 3-23 56.62
BH4-23 56.67
TP 5-23 56.48
TP8-23 56.71
TP11-23 56.45
BH1-22 57.06
BH2-22 57.05
BH 9-22 57.06
BH3-23 56.73
BH 10 57.07
BH2-23 56.63
HV2
TP 4-23 56.45
TP10-23 56.60
TP9-23 56.44
TP 1-23 56.54

PATERSON GROUP
9 AURIGA DRIVE
OTTAWA, ON
K2E 7T9
TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL

RIVERAIN DEVELOPMENTS INC.

PHASE II - ENVIRONMENTAL SITE ASSESSMENT
2 MONTREAL ROAD, 3 SELKIRK STREET, 280 MONTGOMERY STREET AND 300 MONTGOMERY STREET
OTTAWA, ONTARIO

Title:

ANALYTICAL TESTING PLAN - SOIL (PCBs)

Scale:	1:500
Drawn by:	MPG
Checked by:	LK
Approved by:	LK
Date:	11/2021
Report No.:	PE4546
Drawing No.:	PE4546-10
Revision No.:	

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LEGEND:

- BOREHOLE WITH MONITORING WELL LOCATION
- BOREHOLE LOCATION, PATERSON GROUP
- TEST PIT LOCATION, PATERSON GROUP
- BOREHOLE WITH MONITORING WELL LOCATION BY OTHERS (GOLDER)
- BOREHOLE WITH MONITORING WELL LOCATION BY OTHERS (EXP)
- BOREHOLE LOCATION BY OTHERS (EXP)
- 56.08 GROUND SURFACE ELEVATION (m)
- X SOIL GRAB SAMPLE LOCATION
- PHASE I, PHASE II AND RSC PROPERTY
- **EXCESS SOIL TESTING RESULTS IN COMPLIANCE WITH MECP TABLE 3 STANDARDS**

SOIL PARAMETERS COMPLY WITH MECP TABLE 3 STANDARDS

GROUND SURFACE ELEVATIONS ARE REFERENCED TO A GEODETIC DATUM.

SCALE: 1:500

0 5 10 15 20 25 30 35 40m

MONTREAL ROAD

MONTGOMERY STREET

NORTH RIVER ROAD

SELKIRK ROAD

RIDEAU RIVER

#1 MONTREAL ROAD COMMERCIAL (RETAIL FUEL OUTLET)

#43 MONTREAL ROAD COMMERCIAL

COMMERCIAL

#42 MONTREAL ROAD COMMERCIAL (RETAIL FUEL OUTLET)

#299 MONTGOMERY ST. COMMERCIAL (AUTOMOBILE TRANSMISSION SHOP)

#307 MONTGOMERY STREET INSTITUTIONAL (ÉCOLE ÉLÉMENTAIRE PUBLIQUE MAURIL-BÉLANGER)

FH-TBM

#400 NORTH RIVER ROAD PARKLAND (RIVERAIN PARK)

3 SELKIRK ROAD FORMER MULTI-UNIT COMMERCIAL BUILDING

325&327 MONTGOMERY ST. RESIDENTIAL AND PARKING

APPROXIMATE EXTENT OF EXCAVATION FOR CONSTRUCTION OF PHASE 1 OF DEVELOPMENT

#333 NORTH RIVER ROAD GOVERNMENT OF CANADA BUILDINGS (VANIER TOWERS)

#25 McARTHUR AVE. GOVERNMENT OF CANADA BUILDING (VANIER TOWER)

#24 SELKIRK ROAD COMMERCIAL

#334 DUNDAS ST. PARKING

#338 DUNDAS ST. RESIDENTIAL

#50 SELKIRK ROAD RESIDENTIAL APARTMENTS

344 DUNDAS ST. RESIDENTIAL

PATERSON GROUP
9 AURIGA DRIVE
OTTAWA, ON
K2E 7T9
TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL

RIVERAIN DEVELOPMENTS INC.

PHASE II - ENVIRONMENTAL SITE ASSESSMENT
2 MONTREAL ROAD, 3 SELKIRK STREET, 280 MONTGOMERY STREET AND 300 MONTGOMERY STREET
OTTAWA, ONTARIO

Title:

ANALYTICAL TESTING PLAN - SOIL (CHLOROPENOLS & ABNs)

Scale:	1:500
Drawn by:	MPG
Checked by:	LK
Approved by:	LK
Date:	11/2021
Report No.:	PE4546
Drawing No.:	PE4546-11
Revision No.:	

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LEGEND:

- BOREHOLE WITH MONITORING WELL LOCATION
- BOREHOLE LOCATION, PATERSON GROUP 2020
- POST REMEDIATION MONITORING WELL 2023
- TEST PIT LOCATION, PATERSON GROUP 2021
- BOREHOLE WITH MONITORING WELL LOCATION BY OTHERS (GOLDER)
- BOREHOLE WITH MONITORING WELL LOCATION BY OTHERS (EXP)
- BOREHOLE LOCATION BY OTHERS (EXP)
- 56.08 GROUND SURFACE ELEVATION (m)
- X SOIL GRAB SAMPLE LOCATION
- PHASE I, PHASE II AND RSC PROPERTY

GROUNDWATER PARAMETERS COMPLY WITH MECP TABLE 3 STANDARDS

GROUND SURFACE ELEVATIONS ARE REFERENCED TO A GEODETIC DATUM.

SCALE: 1:500

0 5 10 15 20 25 30 35 40m

MECP Table 3 Residential Standards

Acetone	130000 ug/L
Bromodichloromethane	85000 ug/L
Bromoform	380 ug/L
Bromomethane	5.6 ug/L
Carbon Tetrachloride	0.79 ug/L
Chlorobenzene	630 ug/L
Chloroform	2.4 ug/L
Dibromochloromethane	82000 ug/L
Dichlorodifluoromethane	4400 ug/L
1,2-Dichlorobenzene	4600 ug/L
1,3-Dichlorobenzene	9600 ug/L
1,4-Dichlorobenzene	8 ug/L
1,1-Dichloroethane	320 ug/L
1,2-Dichloroethane	1.6 ug/L
1,1-Dichloroethylene	1.6 ug/L
cis-1,2-Dichloroethylene	1.6 ug/L
trans-1,2-Dichloroethylene	1.6 ug/L
1,2-Dichloropropane	16 ug/L
1,3-Dichloropropene	5.2 ug/L
Ethylene dibromide	0.25 ug/L
Hexane	51 ug/L
Methyl Ethyl Ketone (2-Butanone)	470000 ug/L
Methyl Isobutyl Ketone	140000 ug/L
Methyl tert-butyl ether	190 ug/L
Methylene Chloride	610 ug/L
Styrene	1300 ug/L
1,1,1,2-Tetrachloroethane	3.3 ug/L
1,1,2,2-Tetrachloroethane	3.2 ug/L
Tetrachloroethylene	1.6 ug/L
1,1,1-Trichloroethane	640 ug/L
1,1,2-Trichloroethane	4.7 ug/L
Trichloroethylene	1.6 ug/L
Trichlorofluoromethane	2500 ug/L
Vinyl Chloride	0.5 ug/L

MW19-04 6.1-9.1m 28-May-2019 VOCs comply with MECP Table 3
MW19-04-GW 6.1-9.1m 14-Sep-2020 VOCs comply with MECP Table 3

MW19-05 6.1-9.1m 28-May-2019 VOCs comply with MECP Table 3
MW19-05-GW 6.1-9.1m 14-Sep-2020 VOCs comply with MECP Table 3

BH3-21-GW1 5.92-8.97m 6-Jan-2022 VOCs comply with MECP Table 3

MW19-03 6.1-9.1m 28-May-2019 VOCs comply with MECP Table 3
MW19-03-GW 6.1-9.1m 14-Sep-2020 VOCs comply with MECP Table 3

MW19-07 6.1-9.1m 28-May-2019 VOCs comply with MECP Table 3
MW19-07-GW 6.1-9.1m 14-Sep-2020 VOCs comply with MECP Table 3

BH5-21-GW1 9.65-11.18m 6-Jan-2022 VOCs comply with MECP Table 3

BH6-21-GW1 5.97-9.02m 6-Jan-2022 VOCs comply with MECP Table 3

TH206 6.1-9.1m 15-Oct-2014 VOCs comply with MECP Table 3
TH206-GW 6.1-9.1m 14-Sep-2020 VOCs comply with MECP Table 3

TH207 10.1-11.6m 15-Oct-2014 VOCs comply with MECP Table 3
TH207-GW 10.1-11.6m 14-Sep-2020 VOCs comply with MECP Table 3

MW9-23-GW1 7.06-10.11m 07-Feb-2023 VOCs comply with MECP Table 3

MW19-08 5.8-8.8m 28-May-2019 VOCs comply with MECP Table 3
MW19-08-GW 5.8-8.8m 14-Sep-2020 VOCs comply with MECP Table 3

TH210 6.1-9.1m 15-Oct-2014 VOCs comply with MECP Table 3
TH210-GW 6.1-9.1m 14-Sep-2020 VOCs comply with MECP Table 3

MW4-23-GW1 6.85-9.90m 18-Jan-2023 VOCs comply with MECP Table 3

BH4-21-GW1 6.05-9.09m 6-Jan-2022 VOCs comply with MECP Table 3

TH203A 6.1-9.1m 15-Oct-2014 VOCs comply with MECP Table 3
TH203A-GW 6.1-9.1m 14-Sep-2020 VOCs comply with MECP Table 3

MW19-02 6.1-9.1m 28-May-2019 VOCs comply with MECP Table 3
MW19-02-GW 6.1-9.1m 14-Sep-2020 VOCs comply with MECP Table 3

MW1-23-GW1 6.75-9.80m 18-Jan-2023 VOCs comply with MECP Table 3

MW19-09 5.5-8.5m 28-May-2019 VOCs comply with MECP Table 3
MW19-09-GW 5.5-8.5m 14-Sep-2020 VOCs comply with MECP Table 3

MW2-23-GW1 7.00-10.05m 18-Jan-2023 VOCs comply with MECP Table 3

MW3-23-GW1 6.91-9.04m 18-Jan-2023 VOCs comply with MECP Table 3

MW19-01 5.95-8.95m 28-May-2019 VOCs comply with MECP Table 3
MW19-01-GW 5.95-8.95m 14-Sep-2020 VOCs comply with MECP Table 3

TH201 6.1-9.1m 15-Oct-2014 VOCs comply with MECP Table 3
TH201-GW 6.1-9.1m 14-Sep-2020 VOCs comply with MECP Table 3

BH1-21-GW1 9.75-11.28m 6-Jan-2022 VOCs comply with MECP Table 3

BH1-GW1 5.22-8.22m 12-Apr-2019 VOCs comply with MECP Table 3

MW5-23-GW1 6.17-9.22m 07-Feb-2023 VOCs comply with MECP Table 3

TH205A 6.1-9.1m 15-Oct-2014 VOCs comply with MECP Table 3
TH205-GW 6.1-9.1m 14-Sep-2020 VOCs comply with MECP Table 3

BH6-22-GW1 4.95-8.00m 3-Mar-2022 VOCs comply with MECP Table 3

BH7-22-GW1 5.21-8.26m 2-Mar-2022 VOCs comply with MECP Table 3

BH8-GW2 4.62-7.62m 18-Apr-2019 VOCs comply with MECP Table 3

BH5-22-GW1 6.12-9.17m 2-Mar-2022 VOCs comply with MECP Table 3

BH2-GW1 5.17-8.17m 12-Apr-2019 VOCs comply with MECP Table 3

BH3-22-GW1 6.45-9.50m 2-Mar-2022 VOCs comply with MECP Table 3

BH2-21-GW1 9.63-11.15m 6-Jan-2022 VOCs comply with MECP Table 3

BH4-22-GW2 5.87-8.92m 3-Mar-2022 VOCs comply with MECP Table 3

BH4-GW1 5.13-8.13m 21-Jun-2022 VOCs comply with MECP Table 3

BH5-GW1 4.67-7.67m 12-Apr-2019 VOCs comply with MECP Table 3

BH5-GW2 4.67-7.67m 21-Jun-2022 VOCs comply with MECP Table 3

BH7-GW1 4.97-7.97m 12-Apr-2019 VOCs comply with MECP Table 3

TH212 7.3-9.1m 15-Oct-2014 VOCs comply with MECP Table 3
TH212 7.3-9.1m 28-May-2019 VOCs comply with MECP Table 3
TH212-GW 7.3-9.1m 14-Sep-2020 VOCs comply with MECP Table 3

BH2-22-GW1 6.30-9.35m 2-Mar-2022 VOCs comply with MECP Table 3

BH1-22-GW1 6.09-9.14m 2-Mar-2022 VOCs comply with MECP Table 3

BH8-22-GW1 5.13-8.18m 2-Mar-2022 VOCs comply with MECP Table 3

BH10-GW1 6.40-7.92m 15-Apr-2019 VOCs comply with MECP Table 3

BH3-23-GW1 6.40-7.92m 17-Jul-2023 VOCs comply with MECP Table 3

BH9-22-GW1 5.78-8.3m 21-Jun-2022 VOCs comply with MECP Table 3

APPROXIMATE EXTENT OF EXCAVATION FOR CONSTRUCTION OF PHASE 1 OF DEVELOPMENT

RIDEAU RIVER

NORTH RIVER ROAD

MONTGOMERY STREET

SELKIRK STREET

#55 MONTREAL ROAD MULTI-UNIT COMMERCIAL

#43 MONTREAL ROAD COMMERCIAL

#1 MONTREAL ROAD COMMERCIAL (RETAIL FUEL OUTLET)

#70 MONTREAL ROAD COMMERCIAL (BINGO HALL)

#299 MONTGOMERY ST. COMMERCIAL (AUTOMOBILE TRANSMISSION SHOP)

3 SELKIRK ROAD FORMER MULTI-UNIT COMMERCIAL BUILDING

#307 MONTGOMERY STREET INSTITUTIONAL (ÉCOLE ÉLÉMENTAIRE PUBLIQUE MAURIL-BÉLANGER)

#400 NORTH RIVER ROAD PARKLAND (RIVERAIN PARK)

#333 NORTH RIVER ROAD GOVERNMENT OF CANADA BUILDINGS (VANIER TOWERS)

#24 SELKIRK ROAD COMMERCIAL

#334 DUNDAS ST. PARKING

#338 DUNDAS ST. RESIDENTIAL

#50 SELKIRK ROAD RESIDENTIAL APARTMENTS

325&327 MONTGOMERY ST. RESIDENTIAL AND PARKING

FH-TBM

PATERSON GROUP
9 AURIGA DRIVE
OTTAWA, ON
K2E 7T9
TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL

RIVERAIN DEVELOPMENTS INC.

PHASE II - ENVIRONMENTAL SITE ASSESSMENT
2 MONTREAL ROAD, 3 SELKIRK STREET, 280 MONTGOMERY STREET AND 300 MONTGOMERY STREET
OTTAWA, ONTARIO

Title:

ANALYTICAL TESTING PLAN - GROUNDWATER (VOCs)

Scale:	1:500
Drawn by:	MPG
Checked by:	LK
Approved by:	LK
Date:	11/2021
Report No.:	PE4546
Drawing No.:	PE4546-12
Revision No.:	

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LEGEND:

- BOREHOLE WITH MONITORING WELL LOCATION
- BOREHOLE LOCATION, PATERSON GROUP 2020
- POST REMEDIATION MONITORING WELL 2023
- TEST PIT LOCATION, PATERSON GROUP 2021
- BOREHOLE WITH MONITORING WELL LOCATION BY OTHERS (GOLDER)
- BOREHOLE WITH MONITORING WELL LOCATION BY OTHERS (EXP)
- BOREHOLE LOCATION BY OTHERS (EXP)
- 56.08 GROUND SURFACE ELEVATION (m)
- X SOIL GRAB SAMPLE LOCATION
- PHASE I, PHASE II AND RSC PROPERTY

GROUNDWATER PARAMETERS COMPLY WITH MECP TABLE 3 STANDARDS

GROUND SURFACE ELEVATIONS ARE REFERENCED TO A GEODETIC DATUM.

SCALE: 1:500

0 5 10 15 20 25 30 35 40m

MECP Table 3 Residential Standards	
PHCs F1	750 ug/L
PHCs F2	150 ug/L
PHCs F3	500 ug/L
PHCs F4	500 ug/L

TH207 10.1-11.6m 15-Oct-2014 PHCs (F1-F4) comply with MECP Table 3
TH207 10.1-11.6m 19-Dec-2016 PHCs (F1-F4) comply with MECP Table 3
TH207 10.1-11.6m 22-Nov-2017 PHCs (F1-F4) comply with MECP Table 3
TH207 10.1-11.6m 15-Nov-2018 PHCs (F1-F4) comply with MECP Table 3
TH207 10.1-11.6m 28-May-2019 PHCs (F1-F4) comply with MECP Table 3
TH207-GW 10.1-11.6m 14-Sep-2020 PHCs (F1-F4) comply with MECP Table 3

TH206 6.1-9.1m 15-Oct-2014 PHCs (F1-F4) comply with MECP Table 3
TH206 6.1-9.1m 19-Dec-2016 PHCs (F1-F4) comply with MECP Table 3
TH206 6.1-9.1m 22-Nov-2017 PHCs (F1-F4) comply with MECP Table 3
TH206 6.1-9.1m 15-Nov-2018 PHCs (F1-F4) comply with MECP Table 3
TH206 6.1-9.1m 28-May-2019 PHCs (F1-F4) comply with MECP Table 3
TH206-GW 6.1-9.1m 14-Sep-2020 PHCs (F1-F4) comply with MECP Table 3

MW19-03 6.1-9.1m 28-May-2019 PHCs (F1-F4) comply with MECP Table 3
MW19-03-GW 6.1-9.1m 14-Sep-2020 PHCs (F1-F4) comply with MECP Table 3
MW19-03-GW3 6.1-9.1m 11-Apr-2022 PHCs (F1-F4) comply with MECP Table 3

MW19-08 5.8-8.8m 28-May-2019 PHCs (F1-F4) comply with MECP Table 3
MW19-08-GW 5.8-8.8m 14-Sep-2020 PHCs (F1-F4) comply with MECP Table 3

TH210 6.1-9.1m 15-Oct-2014 PHCs (F1-F4) comply with MECP Table 3
TH210 6.1-9.1m 19-Dec-2016 PHCs (F1-F4) comply with MECP Table 3
TH210 6.1-9.1m 22-Nov-2017 PHCs (F1-F4) comply with MECP Table 3
TH210 6.1-9.1m 15-Nov-2018 PHCs (F1-F4) comply with MECP Table 3
TH210 6.1-9.1m 28-May-2019 PHCs (F1-F4) comply with MECP Table 3
TH210-GW 6.1-9.1m 14-Sep-2020 PHCs (F1-F4) comply with MECP Table 3

MW6-23-GW1 7.17-9.61m 07-Feb-2023 PHCs (F1-F4) comply with MECP Table 3
MW6-23-GW2 7.17-9.61m 30-May-2023 PHCs (F1-F4) comply with MECP Table 3
MW6-23-GW3 7.17-9.61m 30-Aug-2023 PHCs (F1-F4) comply with MECP Table 3
MW6-23-GW4 7.17-9.61m 01-Dec-2023
Parameter Result (µg/L)
PHCs F3 1010
PHCS F4 1980
PHCs(F1,F2) comply with MECP Table 3
Groundwater at MW6-23 is considered to be in compliance, see CSM
MW6-23-GW5 7.17-9.61m 07-Dec-2023 PHCs(F1-F4) comply with MECP Table 3
MW6-23-GW6 7.17-9.61m 15-Dec-2023 PHCs(F1-F4) comply with MECP Table 3
MW6-23-GW7 7.17-9.61m 01-Mar-2024 PHCs(F1-F4) comply with MECP Table 3

BH3-21-GW1 5.92-8.97m 6-Jan-2022 PHCs (F1-F4) comply with MECP Table 3
BH3-21-GW2 5.92-8.97m 11-Apr-2022 PHCs (F1-F4) comply with MECP Table 3

MW19-05 6.1-9.1m 28-May-2019 PHCs (F1-F4) comply with MECP Table 3
MW19-05-GW 6.1-9.1m 14-Sep-2020 PHCs (F1-F4) comply with MECP Table 3

MW19-07 6.1-9.1m 28-May-2019 PHCs (F1-F4) comply with MECP Table 3
MW19-07-GW 6.1-9.1m 14-Sep-2020 PHCs (F1-F4) comply with MECP Table 3

BH4-21-GW1 6.05-9.09m 6-Jan-2022 PHCs (F1-F4) comply with MECP Table 3

MW4-23-GW1 6.85-9.90m 18-Jan-2023 PHCs (F1-F4) comply with MECP Table 3
MW4-23-GW2 6.85-9.90m 19-Apr-2023 PHCs (F1-F4) comply with MECP Table 3
MW4-23-GW3 6.85-9.90m 20-Jul-2023 PHCs (F1-F4) comply with MECP Table 3
MW4-23-GW4 6.85-9.90m 26-Oct-2023 PHCs (F1-F4) comply with MECP Table 3
MW4-23-GW5 6.85-9.90m 25-Jan-2024 PHCs (F1-F4) comply with MECP Table 3

MW2-23-GW1 7.00-10.05m 18-Jan-2023 PHCs (F1-F4) comply with MECP Table 3
MW2-23-GW2 7.00-10.05m 21-Apr-2023 PHCs (F1-F4) comply with MECP Table 3
MW2-23-GW3 7.00-10.05m 20-Jul-2023 PHCs (F1-F4) comply with MECP Table 3
MW2-23-GW4 7.00-10.05m 26-Oct-2023 PHCs (F1-F4) comply with MECP Table 3
MW2-23-GW5 7.00-10.05m 25-Jan-2024 PHCs (F1-F4) comply with MECP Table 3

BH5-21-GW1 9.65-11.18m 6-Jan-2022 PHCs (F1-F4) comply with MECP Table 3

BH6-21-GW1 5.97-9.02m 6-Jan-2022 PHCs (F1-F4) comply with MECP Table 3

MW1-23-GW1 6.75-9.80m 18-Jan-2023 PHCs (F1-F4) comply with MECP Table 3

MW19-09 5.5-8.5m 28-May-2019 PHCs (F1-F4) comply with MECP Table 3
MW19-09-GW 5.5-8.5m 14-Sep-2020 PHCs (F1-F4) comply with MECP Table 3

MW3-23-GW1 6.91-9.04m 18-Jan-2023 PHCs (F1-F4) comply with MECP Table 3
MW3-23-GW2 6.91-9.04m 19-Apr-2023 PHCs (F1-F4) comply with MECP Table 3
MW3-23-GW3 6.91-9.04m 20-Jul-2023 PHCs (F1-F4) comply with MECP Table 3
MW3-23-GW4 6.91-9.04m 26-Oct-2023 PHCs (F1-F4) comply with MECP Table 3
MW3-23-GW5 6.91-9.04m 25-Jan-2024 PHCs (F1-F4) comply with MECP Table 3

TH212 7.3-9.1m 15-Oct-2014 PHCs (F1-F4) comply with MECP Table 3
TH212 7.3-9.1m 19-Dec-2016 PHCs (F1-F4) comply with MECP Table 3
TH212 7.3-9.1m 22-Nov-2017 PHCs (F1-F4) comply with MECP Table 3
TH212 7.3-9.1m 15-Nov-2018 PHCs (F1-F4) comply with MECP Table 3
TH212 7.3-9.1m 28-May-2019 PHCs (F1-F4) comply with MECP Table 3
TH212-GW 7.3-9.1m 14-Sep-2020 PHCs (F1-F4) comply with MECP Table 3

BH3-GW1 3.45-6.45m 12-Apr-2019 PHCs (F1-F4) comply with MECP Table 3

BH4-22-GW1 5.87-8.92m 3-Mar-2022 PHCs (F1-F4) comply with MECP Table 3

BH4-GW2 5.13-8.13m 21-Jun-2022 PHCs (F1-F4) comply with MECP Table 3

BH5-GW1 4.67-7.67m 12-Apr-2019 PHCs (F1-F4) comply with MECP Table 3
BH5-GW2 4.67-7.67m 21-Jun-2022 PHCs (F1-F4) comply with MECP Table 3

MW19-02 6.1-9.1m 28-May-2019 PHCs (F1-F4) comply with MECP Table 3
MW19-02-GW 6.1-9.1m 14-Sep-2020 PHCs (F1-F4) comply with MECP Table 3

MW19-01 5.95-8.95m 28-May-2019 PHCs (F1-F4) comply with MECP Table 3
MW19-01-GW 5.95-8.95m 14-Sep-2020 PHCs (F1-F4) comply with MECP Table 3

TH201 6.1-9.1m 15-Oct-2014
Parameter Result (µg/L)
PHC F2 170
F1/F3/F4 comply with MECP Table 3
GROUNDWATER AT TH201 IS CONSIDERED TO BE IN COMPLIANCE, SEE CSM
TH201 6.1-9.1m 19-Dec-2016 PHCs (F1-F4) comply with MECP Table 3
TH201 6.1-9.1m 22-Nov-2017 PHCs (F1-F4) comply with MECP Table 3
TH201 6.1-9.1m 15-Nov-2018 PHCs (F1-F4) comply with MECP Table 3
TH201 6.1-9.1m 28-May-2019 PHCs (F1-F4) comply with MECP Table 3
TH201-GW 6.1-9.1m 14-Sep-2020 PHCs (F1-F4) comply with MECP Table 3

TH205A 6.1-9.1m 15-Oct-2014 PHCs (F1-F4) comply with MECP Table 3
TH205A 6.1-9.1m 19-Dec-2016 PHCs (F1-F4) comply with MECP Table 3
TH205A 6.1-9.1m 22-Nov-2017 PHCs (F1-F4) comply with MECP Table 3
TH205A 6.1-9.1m 15-Nov-2018 PHCs (F1-F4) comply with MECP Table 3
TH205A 6.1-9.1m 28-May-2019 PHCs (F1-F4) comply with MECP Table 3
TH205-GW 6.1-9.1m 14-Sep-2020 PHCs (F1-F4) comply with MECP Table 3

MW19-04 6.1-9.1m 28-May-2019 PHCs (F1-F4) comply with MECP Table 3
MW19-04-GW 6.1-9.1m 14-Sep-2020 PHCs (F1-F4) comply with MECP Table 3
MW19-04-GW2 6.1-9.1m 6-Jan-2022 PHCs (F1-F4) comply with MECP Table 3

BH1-21-GW1 9.75-11.28m 6-Jan-2022 PHCs (F1-F4) comply with MECP Table 3

BH1-GW1 5.22-8.22m 12-Apr-2019 PHCs (F1-F4) comply with MECP Table 3

MW5-23-GW1 6.17-9.22m 07-Feb-2023
Parameter Result (µg/L)
PHC F2 1650
PHC F3 1060
PHCs (F1/F4) comply with MECP Table 3
GROUNDWATER AT MW5-23 IS CONSIDERED TO BE IN COMPLIANCE, SEE CSM
MW5-23-GW2 6.17-9.22m 22-Feb-2023 PHCs (F1-F4) comply with MECP Table 3
MW5-23-GW3 6.17-9.22m 28-Feb-2023 PHCs (F1-F4) comply with MECP Table 3

MW7-23-GW1 7.07-9.51m 07-Feb-2023 PHCs (F1-F4) comply with MECP Table 3
MW7-23-GW2 7.07-9.51m 30-May-2023 PHCs (F1-F4) comply with MECP Table 3
MW7-23-GW3 7.07-9.51m 30-Aug-2023 PHCs (F1-F4) comply with MECP Table 3
MW7-23-GW4 7.07-9.51m 01-Dec-2023 PHCs(F1-F4) comply with MECP Table 3
MW7-23-GW5 7.07-9.51m 01-Mar-2024 PHCs(F1-F4) comply with MECP Table 3

BH7-22-GW1 5.21-8.26m 2-Mar-2022 PHCs (F1-F4) comply with MECP Table 3

BH6-22-GW1 4.95-8.00m 3-Mar-2022 PHCs (F1-F4) comply with MECP Table 3

BH8-GW3 4.62-7.62m 6-Jan-2022 PHCs (F1-F4) comply with MECP Table 3

BH5-22-GW1 6.12-9.17m 2-Mar-2022 PHCs (F1-F4) comply with MECP Table 3

MW9-23-GW1 7.06-10.11m 07-Feb-2023 PHCs (F1-F4) comply with MECP Table 3
MW9-23-GW2 7.06-10.11m 30-May-2023 PHCs (F1-F4) comply with MECP Table 3
MW9-23-GW3 7.06-10.11m 30-Aug-2023 PHCs (F1-F4) comply with MECP Table 3
MW9-23-GW4 7.06-10.11m 01-Dec-2023
Parameter Result (µg/L)
PHCs F3 1290
PHCS F4 580
PHCs(F1,F2) comply with MECP Table 3
Groundwater at MW9-23 is considered to be in compliance, see CSM
MW9-23-GW5 7.06-10.11m 07-Dec-2023 PHCs(F1-F4) comply with MECP Table 3
MW9-23-GW6 7.06-10.11m 15-Dec-2023 PHCs(F1-F4) comply with MECP Table 3
MW9-23-GW7 7.06-10.11m 01-Mar-2024 PHCs(F1-F4) comply with MECP Table 3

BH2-GW1 5.17-8.17m 12-Apr-2019 PHCs (F1-F4) comply with MECP Table 3

BH2-21-GW1 9.63-11.15m 6-Jan-2022 PHCs (F1-F4) comply with MECP Table 3

BH9-22-GW1 5.78-8.83m 21-Jun-2022 PHCs (F1-F4) comply with MECP Table 3

BH2-23-GW1 6.71-8.23m 17-Jul-2023 PHCs (F1-F4) comply with MECP Table 3

BH1-22-GW1 6.09-9.14m 2-Mar-2022 PHCs (F1-F4) comply with MECP Table 3

BH4-23-GW1 5.80-7.32m 17-Jul-2023 PHCs (F1-F4) comply with MECP Table 3

BH3-22-GW1 6.45-9.50m 2-Mar-2022 PHCs (F1-F4) comply with MECP Table 3

BH8-22-GW1 5.13-8.18m 2-Mar-2022 PHCs (F1-F4) comply with MECP Table 3

BH3-23-GW1 6.40-7.92m 17-Jul-2023 PHCs (F1-F4) comply with MECP Table 3

BH2-22-GW1 6.30-9.35m 2-Mar-2022 PHCs (F1-F4) comply with MECP Table 3

BH1-23-GW1 6.71-8.23m 17-Jul-2023 PHCs (F1-F4) comply with MECP Table 3

MONTREAL ROAD
#43 MONTREAL ROAD COMMERCIAL
#1 MONTREAL ROAD COMMERCIAL (RETAIL FUEL OUTLET)
MONTREAL ROAD COMMERCIAL (BINGO)
#299 EMERY ST. COMMERCIAL (AUTOMOBILE TRANSMISSION SHOP)
NORTH RIVER ROAD
SELKIRK ROAD
MONTGOMERY STREET
#307 MONTGOMERY STREET INSTITUTIONAL (ECOLE ELEMENTAIRE PUBLIQUE MAURIL-BÉLANGER)
FH-TBM
3 SELKIRK ROAD FORMER MULTI-UNIT COMMERCIAL BUILDING
APPROXIMATE EXTENT OF EXCAVATION FOR CONSTRUCTION OF PHASE 1 OF DEVELOPMENT
325&327 MONTGOMERY ST. RESIDENTIAL AND PARKING
#333 NORTH RIVER ROAD GOVERNMENT OF CANADA BUILDINGS (VANIER TOWERS)
#24 SELKIRK ROAD COMMERCIAL
#334 DUNDAS ST. PARKING
#338 DUNDAS ST. RESIDENTIAL
#50 SELKIRK ROAD RESIDENTIAL APARTMENTS
PARKLAND (RUSSIAN EMBASSY)

PATERSON GROUP
9 AURIGA DRIVE
OTTAWA, ON
K2E 7T9
TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL

RIVERAIN DEVELOPMENTS INC.

PHASE II - ENVIRONMENTAL SITE ASSESSMENT
2 MONTREAL ROAD, 3 SELKIRK STREET, 280 MONTGOMERY STREET AND 300 MONTGOMERY STREET
OTTAWA, ONTARIO

Title:

ANALYTICAL TESTING PLAN - GROUNDWATER (PHCs)

Scale:	1:500
Drawn by:	MPG
Checked by:	LK
Approved by:	LK
Date:	11/2021
Report No.:	PE4546
Drawing No.:	PE4546-13
Revision No.:	

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LEGEND:

- BOREHOLE WITH MONITORING WELL LOCATION
- BOREHOLE LOCATION, PATERSON GROUP 2020
- POST REMEDIATION MONITORING WELL 2023
- TEST PIT LOCATION, PATERSON GROUP 2021
- BOREHOLE WITH MONITORING WELL LOCATION BY OTHERS (GOLDER)
- BOREHOLE WITH MONITORING WELL LOCATION BY OTHERS (EXP)
- BOREHOLE LOCATION BY OTHERS (EXP)
- 56.08 GROUND SURFACE ELEVATION (m)
- X SOIL GRAB SAMPLE LOCATION
- PHASE I, PHASE II AND RSC PROPERTY

GROUNDWATER PARAMETERS COMPLY WITH MECP TABLE 3 STANDARDS

GROUND SURFACE ELEVATIONS ARE REFERENCED TO A GEODETIC DATUM.

SCALE: 1:500

0 5 10 15 20 25 30 35 40m

MECP Table 3 Residential Standards

Acenaphthene	600 ug/L
Acenaphthylene	1.8 ug/L
Anthracene	2.4 ug/L
Benzo[a]anthracene	4.7 ug/L
Benzo[a]pyrene	0.81 ug/L
Benzo[b]fluoranthene	0.75 ug/L
Benzo[g,h,i]perylene	0.2 ug/L
Benzo[k]fluoranthene	0.4 ug/L
Chrysene	1 ug/L
Dibenz[a,h]anthracene	0.52 ug/L
Fluoranthene	130 ug/L
Fluorene	400 ug/L
Indeno[1,2,3-cd]pyrene	0.2 ug/L
1-Methylnaphthalene	1800 ug/L
2-Methylnaphthalene	1800 ug/L
Methylnaphthalene (1&2)	1800 ug/L
Naphthalene	1400 ug/L
Phenanthrene	680 ug/L
Pyrene	68 ug/L

MONTREAL ROAD

MONTGOMERY STREET

SELKIRK ROAD

NORTH RIVER ROAD

RIDEAU RIVER

#65 MONTREAL ROAD MULTI-UNIT COMMERCIAL

#43 MONTREAL ROAD COMMERCIAL

#1 MONTREAL ROAD COMMERCIAL (RETAIL FUEL OUTLET)

#70 MONTREAL ROAD COMMERCIAL (BINGO HALL)

#299 MONTGOMERY ST. COMMERCIAL (AUTOMOBILE TRANSMISSION SHOP)

#307 MONTGOMERY STREET INSTITUTIONAL (ECOLE ÉLÉMENTAIRE PUBLIQUE MAURIL-BÉLANGER)

3 SELKIRK ROAD FORMER MULTI-UNIT COMMERCIAL BUILDING

3258;327 MONTGOMERY ST. RESIDENTIAL AND PARKING

#400 NORTH RIVER ROAD PARKLAND (RIVERAIN PARK)

#333 NORTH RIVER ROAD GOVERNMENT OF CANADA BUILDINGS (VANIER TOWERS)

#24 SELKIRK ROAD COMMERCIAL

#334 DUNDAS ST. PARKING

#338 DUNDAS ST. RESIDENTIAL

#50 SELKIRK ROAD RESIDENTIAL APARTMENTS

APPROXIMATE EXTENT OF EXCAVATION FOR CONSTRUCTION OF PHASE 1 OF DEVELOPMENT

FH-TBM

MW19-03 6.1-9.1m 28-May-2019 PAHs comply with MECP Table 3

TH206 6.1-9.1m 15-Oct-2014 PAHs comply with MECP Table 3

TH207 10.1-11.6m 15-Oct-2014 PAHs comply with MECP Table 3

TH203A 6.1-9.1m 15-Oct-2014 PAHs comply with MECP Table 3

MW19-02 6.1-9.1m 28-May-2019 PAHs comply with MECP Table 3

MW19-01 5.95-8.95m 28-May-2019 PAHs comply with MECP Table 3

TH201 6.1-9.1m 15-Oct-2014 PAHs comply with MECP Table 3

TH205A 6.1-9.1m 15-Oct-2014 PAHs comply with MECP Table 3

MW19-05 6.1-9.1m 28-May-2019 PAHs comply with MECP Table 3

BH3-21-GW1 5.92-8.97m 6-Jan-2022 PAHs comply with MECP Table 3

MW19-07 6.1-9.1m 28-May-2019 PAHs comply with MECP Table 3

MW9-23-GW1 7.06-10.11m 07-Feb-2023 PAHs comply with MECP Table 3

BH5-21-GW1 9.65-11.18m 6-Jan-2022 PAHs comply with MECP Table 3

BH6-21-GW1 5.97-9.02m 6-Jan-2022 PAHs comply with MECP Table 3

MW19-04 6.1-9.1m 28-May-2019 PAHs and PCBs comply with MECP Table 3

TH212 7.3-9.1m 15-Oct-2014 PAHs comply with MECP Table 3

TH212 7.3-9.1m 28-May-2019 PAHs comply with MECP Table 3

MW3-23-GW1 6.91-9.04m 18-Jan-2023 PAHs comply with MECP Table 3

MW19-08 5.8-8.8m 28-May-2019 PAHs comply with MECP Table 3

TH210 6.1-9.1m 15-Oct-2014 PAHs comply with MECP Table 3

MW4-23-GW1 6.85-9.90m 18-Jan-2023 PAHs comply with MECP Table 3

BH4-21-GW1 6.05-9.09m 6-Jan-2022 PAHs comply with MECP Table 3

MW2-23-GW1 7.00-10.05m 18-Jan-2023 PAHs comply with MECP Table 3

MW1-23-GW1 6.75-9.80m 18-Jan-2023 PAHs comply with MECP Table 3

MW19-09 5.5-8.5m 28-May-2019 PAHs comply with MECP Table 3

BH4-GW2 5.13-8.13m 21-Jun-2022 PAHs comply with MECP Table 3

BH5-GW2 4.67-7.67m 21-Jun-2022 PAHs comply with MECP Table 3

NO.	REVISIONS	DATE	INITIAL

PATERSON GROUP
9 AURIGA DRIVE
OTTAWA, ON
K2E 7T9
TEL: (613) 226-7381

RIVERAIN DEVELOPMENTS INC.

PHASE II - ENVIRONMENTAL SITE ASSESSMENT
2 MONTREAL ROAD, 3 SELKIRK STREET, 280 MONTGOMERY STREET AND 300 MONTGOMERY STREET
OTTAWA, ONTARIO

Title:

ANALYTICAL TESTING PLAN - GROUNDWATER (PAHs)

Scale:	1:500
Drawn by:	MPG
Checked by:	LK
Approved by:	LK
Date:	11/2021
Report No.:	PE4546
Drawing No.:	PE4546-14
Revision No.:	

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LEGEND:

- BOREHOLE WITH MONITORING WELL LOCATION
- BOREHOLE LOCATION, PATERSON GROUP 2020
- POST-REMEDIATION MONITORING WELL 2023
- TEST PIT LOCATION, PATERSON GROUP 2021
- BOREHOLE WITH MONITORING WELL LOCATION BY OTHERS (GOLDER)
- BOREHOLE WITH MONITORING WELL LOCATION BY OTHERS (EXP)
- BOREHOLE LOCATION BY OTHERS (EXP)
- 56.08 GROUND SURFACE ELEVATION (m)
- X SOIL GRAB SAMPLE LOCATION
- PHASE I, PHASE II AND RSC PROPERTY
- DELINEATION OF GROUNDWATER CONCENTRATIONS OF BENZENE EXCEEDING THE MECP TABLE 3 STANDARDS

GROUNDWATER PARAMETERS COMPLY WITH MECP TABLE 3 STANDARDS

GROUNDWATER PARAMETERS EXCEED MECP TABLE 3 STANDARDS

GROUND SURFACE ELEVATIONS ARE REFERENCED TO A GEODETIC DATUM.

SCALE: 1:500

0 5 10 15 20 25 30 35 40m

MECP Table 3 Residential Standards

Benzene	44 ug/L
Ethylbenzene	2300 ug/L
Toluene	18000 ug/L
Xylenes	4200 ug/L

TH203A 6.1-9.1m 15-Oct-2014
BTEX comply with MECP Table 3

TH203A 6.1-9.1m 19-Dec-2016
BTEX comply with MECP Table 3

TH203A 6.1-9.1m 22-Nov-2017
BTEX comply with MECP Table 3

TH203A 6.1-9.1m 15-Nov-2018
BTEX comply with MECP Table 3

TH203A 6.1-9.1m 28-May-2019
BTEX comply with MECP Table 3

TH203A-GW 6.1-9.1m 14-Sep-2020
BTEX comply with MECP Table 3

TH207 10.1-11.6m 15-Oct-2014
BTEX comply with MECP Table 3

TH207 10.1-11.6m 19-Dec-2016
BTEX comply with MECP Table 3

TH207 10.1-11.6m 22-Nov-2017
BTEX comply with MECP Table 3

TH207 10.1-11.6m 15-Nov-2018
BTEX comply with MECP Table 3

TH207 10.1-11.6m 28-May-2019
BTEX comply with MECP Table 3

TH207-GW 10.1-11.6m 14-Sep-2020
BTEX comply with MECP Table 3

TH206/DUP1 6.1-9.1m 15-Oct-2014
Parameter Result (µg/L)
Benzene 150 / 170
Ethylbenzene, Toluene & Xylene comply with MECP Table 3

TH206 6.1-9.1m 19-Dec-2016
BTEX comply with MECP Table 3

TH206 6.1-9.1m 22-Nov-2017
BTEX comply with MECP Table 3

TH206 6.1-9.1m 15-Nov-2018
BTEX comply with MECP Table 3

TH206 6.1-9.1m 28-May-2019
BTEX comply with MECP Table 3

TH206-GW 6.1-9.1m 14-Sep-2020
BTEX comply with MECP Table 3

MW19-02 6.1-9.1m 28-May-2019
BTEX comply with MECP Table 3

MW19-02-GW 6.1-9.1m 14-Sep-2020
BTEX comply with MECP Table 3

MW19-01 5.95-8.95m 28-May-2019
BTEX comply with MECP Table 3

MW19-01-GW 5.95-8.95m 14-Sep-2020
BTEX comply with MECP Table 3

TH201 6.1-9.1m 15-Oct-2014
BTEX comply with MECP Table 3

TH201 6.1-9.1m 19-Dec-2016
BTEX comply with MECP Table 3

TH201 6.1-9.1m 22-Nov-2017
BTEX comply with MECP Table 3

TH201 6.1-9.1m 15-Nov-2018
BTEX comply with MECP Table 3

TH201 6.1-9.1m 28-May-2019
BTEX comply with MECP Table 3

TH201-GW 6.1-9.1m 14-Sep-2020
BTEX comply with MECP Table 3

MW6-23-GW1 7.17-9.61m 07-Feb-2023
BTEX comply with MECP Table 3

MW6-23-GW2 7.17-9.61m 30-May-2023
Parameter Result (µg/L)
Benzene 46.3

MW6-23-GW3 7.17-9.61m 30-Aug-2023
BTEX comply with MECP Table 3

MW6-23-GW4 7.17-9.61m 01-Dec-2023
Parameter Result (µg/L)
Benzene 163
Ethylbenzene, Toluene & Xylene comply with MECP Table 3

MW6-23-GW5 7.17-9.61m 07-Dec-2023
Parameter Result (µg/L)
Benzene 56.9
Ethylbenzene, Toluene & Xylene comply with MECP Table 3

MW6-23-GW6 7.17-9.61m 15-Dec-2023
Parameter Result (µg/L)
Benzene 76.3
Ethylbenzene, Toluene & Xylene comply with MECP Table 3

MW6-23-GW7 7.17-9.61m 01-Mar-2024
Parameter Result (µg/L)
Benzene 44.2
Ethylbenzene, Toluene & Xylene comply with MECP Table 3

MW7-23-GW1 7.07-9.51m 07-Feb-2023
BTEX comply with MECP Table 3

MW7-23-GW2 7.07-9.51m 30-May-2023
Parameter Result (µg/L)
Benzene 56.6

MW7-23-GW3 7.07-9.51m 30-Aug-2023
BTEX comply with MECP Table 3

MW7-23-GW4 7.07-9.51m 01-Dec-2023
BTEX comply with MECP Table 3

MW7-23-GW5 7.07-9.51m 01-Mar-2024
BTEX comply with MECP Table 3

MW19-03 6.1-9.1m 28-May-2019
Parameter Result (µg/L)
Benzene 180
Ethylbenzene, Toluene & Xylene comply with MECP Table 3

MW19-03-GW 6.1-9.1m 14-Sep-2020
Parameter Result (µg/L)
Benzene 150
Ethylbenzene, Toluene & Xylene comply with MECP Table 3

MW19-03-GW3 6.1-9.1m 11-Apr-2022
Parameter Result (µg/L)
Benzene 62.6
Ethylbenzene, Toluene & Xylene comply with MECP Table 3

MW19-05 6.1-9.1m 28-May-2019
BTEX comply with MECP Table 3

MW19-05-GW 6.1-9.1m 14-Sep-2020
BTEX comply with MECP Table 3

MW19-07 6.1-9.1m 28-May-2019
BTEX comply with MECP Table 3

MW19-07-GW 6.1-9.1m 14-Sep-2020
BTEX comply with MECP Table 3

BH3-21-GW1 5.92-8.97m 6-Jan-2022
Parameter Result (µg/L)
Benzene 96.2
Ethylbenzene, Toluene & Xylene comply with MECP Table 3

BH3-21-GW2 5.92-8.97m 11-Apr-2022
Parameter Result (µg/L)
Benzene 85.1
Ethylbenzene, Toluene & Xylene comply with MECP Table 3

BH5-21-GW1 9.65-11.18m 6-Jan-2022
BTEX comply with MECP Table 3

BH6-21-GW1 5.97-9.02m 6-Jan-2022
BTEX comply with MECP Table 3

MW19-08 5.8-8.8m 28-May-2019
BTEX comply with MECP Table 3

MW19-08-GW 5.8-8.8m 14-Sep-2020
BTEX comply with MECP Table 3

MW8-23-GW1 11.07-12.59m 07-Feb-2023
BTEX comply with MECP Table 3

MW1-23-GW1 6.75-9.80m 18-Jan-2023
BTEX comply with MECP Table 3

MW19-09 5.5-8.5m 28-May-2019
BTEX comply with MECP Table 3

MW19-09-GW 5.5-8.5m 14-Sep-2020
BTEX comply with MECP Table 3

MW9-23-GW1 7.06-10.11m 07-Feb-2023
BTEX comply with MECP Table 3

MW9-23-GW2 7.06-10.11m 30-May-2023
BTEX comply with MECP Table 3

MW9-23-GW3 7.06-10.11m 30-Aug-2023
BTEX comply with MECP Table 3

MW9-23-GW4 7.06-10.11m 01-Dec-2023
BTEX comply with MECP Table 3

MW9-23-GW5 7.06-10.11m 07-Dec-2023
BTEX comply with MECP Table 3

MW9-23-GW6 7.06-10.11m 15-Dec-2023
BTEX comply with MECP Table 3

MW9-23-GW7 7.06-10.11m 01-Mar-2024
BTEX comply with MECP Table 3

TH210 6.1-9.1m 15-Oct-2014
Parameter Result (µg/L)
Benzene 53
Ethylbenzene, Toluene & Xylene comply with MECP Table 3

TH210 6.1-9.1m 19-Dec-2016
BTEX comply with MECP Table 3

TH210 6.1-9.1m 22-Nov-2017
BTEX comply with MECP Table 3

TH210 6.1-9.1m 15-Nov-2018
BTEX comply with MECP Table 3

TH210 6.1-9.1m 28-May-2019
BTEX comply with MECP Table 3

TH210-GW 6.1-9.1m 14-Sep-2020
BTEX comply with MECP Table 3

MW2-23-GW1 7.00-10.05m 18-Jan-2023
BTEX comply with MECP Table 3

MW2-23-GW2 7.00-10.05m 21-Apr-2023
BTEX comply with MECP Table 3

MW2-23-GW3 7.00-10.05m 20-Jul-2023
BTEX comply with MECP Table 3

MW2-23-GW4 7.00-10.05m 26-Oct-2023
BTEX comply with MECP Table 3

MW2-23-GW5 7.00-10.05m 25-Jan-2024
BTEX comply with MECP Table 3

BH3-GW1 3.45-6.45m 12-Apr-2019
BTEX comply with MECP Table 3

MW4-23-GW1 6.85-9.90m 18-Jan-2023
BTEX comply with MECP Table 3

MW4-23-GW2 6.85-9.90m 19-Apr-2023
BTEX comply with MECP Table 3

MW4-23-GW3 6.85-9.90m 20-Jul-2023
BTEX comply with MECP Table 3

MW4-23-GW4 6.85-9.90m 26-Oct-2023
BTEX comply with MECP Table 3

MW4-23-GW5 6.85-9.90m 25-Jan-2024
BTEX comply with MECP Table 3

MW3-23-GW1 6.91-9.04m 18-Jan-2023
BTEX comply with MECP Table 3

MW3-23-GW2 6.91-9.04m 19-Apr-2023
BTEX comply with MECP Table 3

MW3-23-GW3 6.91-9.04m 20-Jul-2023
BTEX comply with MECP Table 3

MW3-23-GW4 6.91-9.04m 26-Oct-2023
BTEX comply with MECP Table 3

MW3-23-GW5 6.91-9.04m 25-Jan-2024
BTEX comply with MECP Table 3

TH212 7.3-9.1m 15-Oct-2014
BTEX comply with MECP Table 3

TH212 7.3-9.1m 19-Dec-2016
BTEX comply with MECP Table 3

TH212 7.3-9.1m 22-Nov-2017
Parameter Result (µg/L)
Benzene 150
Ethylbenzene, Toluene & Xylene comply with MECP Table 3

TH212 7.3-9.1m 15-Nov-2018
BTEX comply with MECP Table 3

TH212 7.3-9.1m 28-May-2019
BTEX comply with MECP Table 3

TH212-GW 7.3-9.1m 14-Sep-2020
BTEX comply with MECP Table 3

BH1-21-GW1 9.75-11.28m 6-Jan-2022
BTEX comply with MECP Table 3

BH1-GW1 5.22-8.22m 12-Apr-2019
BTEX comply with MECP Table 3

TH205A 6.1-9.1m 15-Oct-2014
BTEX comply with MECP Table 3

TH205A 6.1-9.1m 19-Dec-2016
BTEX comply with MECP Table 3

TH205A 6.1-9.1m 22-Nov-2017
BTEX comply with MECP Table 3

TH205A 6.1-9.1m 15-Nov-2018
BTEX comply with MECP Table 3

TH205A 6.1-9.1m 28-May-2019
BTEX comply with MECP Table 3

TH205-GW 6.1-9.1m 14-Sep-2020
BTEX comply with MECP Table 3

MW5-23-GW1 6.17-9.22m 07-Feb-2023
BTEX comply with MECP Table 3

MW19-04/DUP1A 6.1-9.1m 28-May-2019
Parameter Result (µg/L)
Benzene 45/46
Ethylbenzene, Toluene & Xylene comply with MECP Table 3

MW19-04-GW 6.1-9.1m 14-Sep-2020
BTEX comply with MECP Table 3

MW19-04-GW2 6.1-9.1m 6-Jan-2022
BTEX comply with MECP Table 3

BH7-22-GW1 5.21-8.26m 2-Mar-2022
BTEX comply with MECP Table 3

BH8-GW2 4.62-7.62m 18-Apr-2019
BTEX comply with MECP Table 3

BH5-22-GW1 6.12-9.17m 2-Mar-2022
BTEX comply with MECP Table 3

BH6-22-GW1 4.95-8.00m 3-Mar-2022
BTEX comply with MECP Table 3

BH6-22-GW1 4.95-8.00m 3-Mar-2022
BTEX comply with MECP Table 3

BH3-22-GW1 6.45-9.50m 2-Mar-2022
BTEX comply with MECP Table 3

BH4-21-GW1 6.05-9.09m 6-Jan-2022
BTEX comply with MECP Table 3

BH2-21-GW1 9.63-11.15m 6-Jan-2022
BTEX comply with MECP Table 3

BH4-22-GW1 5.87-8.92m 3-Mar-2022
BTEX comply with MECP Table 3

BH8-22-GW1 5.13-8.18m 2-Mar-2022
BTEX comply with MECP Table 3

BH9-22-GW1 5.78-8.83m 21-Jun-2022
BTEX comply with MECP Table 3

BH2-23-GW1 6.71-8.23m 17-Jul-2023
BTEX comply with MECP Table 3

BH4-23-GW1 5.80-7.32m 17-Jul-2023
BTEX comply with MECP Table 3

BH3-23-GW1 6.40-7.92m 17-Jul-2023
BTEX comply with MECP Table 3

BH10-GW1 6.40-7.92m 15-Apr-2019
BTEX comply with MECP Table 3

BH2-GW1 6.17-8.17m 12-Apr-2019
BTEX comply with MECP Table 3

BH4-GW2 5.13-8.13m 21-Jun-2022
BTEX comply with MECP Table 3

BH5-GW1 4.67-7.67m 12-Apr-2019
BTEX comply with MECP Table 3

BH5-GW2 4.67-7.67m 21-Jun-2022
BTEX comply with MECP Table 3

BH7-GW1 4.97-7.97m 12-Apr-2019
BTEX comply with MECP Table 3

BH1-23-GW1 6.71-8.23m 17-Jul-2023
BTEX comply with MECP Table 3

BH2-22-GW1 6.30-9.35m 2-Mar-2022
BTEX comply with MECP Table 3

BH1-22-GW1 6.09-9.14m 2-Mar-2022
BTEX comply with MECP Table 3

MONTREAL ROAD

SELKIRK ROAD

NORTH RIVER ROAD

RIDEAU RIVER

MONTGOMERY STREET

#42 MONTREAL ROAD COMMERCIAL (RETAIL FUEL OUTLET)

#299 MONTGOMERY ST. COMMERCIAL (AUTOMOBILE TRANSMISSION SHOP)

#307 MONTGOMERY STREET INSTITUTIONAL (ÉCOLE ÉLÉMENTAIRE PUBLIQUE MAURIL-BÉLANGER)

3 SELKIRK ROAD FORMER MULTI-UNIT COMMERCIAL BUILDING

3258&327 MONTGOMERY ST. RESIDENTIAL AND PARKING

#333 NORTH RIVER ROAD GOVERNMENT OF CANADA BUILDINGS (VANIER TOWERS)

#24 SELKIRK ROAD COMMERCIAL

#334 DUNDAS ST. PARKING

#338 DUNDAS ST. RESIDENTIAL

#50 SELKIRK ROAD RESIDENTIAL APARTMENTS

FH-TBM

APPROXIMATE EXTENT OF EXCAVATION FOR CONSTRUCTION OF PHASE 1 OF DEVELOPMENT

GROUNDWATER PIT

PATERSON GROUP
9 AURIGA DRIVE
OTTAWA, ON
K2E 7T9
TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL

RIVERAIN DEVELOPMENTS INC.

PHASE II - ENVIRONMENTAL SITE ASSESSMENT
2 MONTREAL ROAD, 3 SELKIRK STREET, 280 MONTGOMERY STREET AND 300 MONTGOMERY STREET
OTTAWA, ONTARIO

Title:

ANALYTICAL TESTING PLAN - GROUNDWATER (BTEX)

Scale:	1:500
Drawn by:	MPG
Checked by:	LK
Approved by:	LK
Date:	11/2021
Report No.:	PE4546
Drawing No.:	PE4546-15
Revision No.:	

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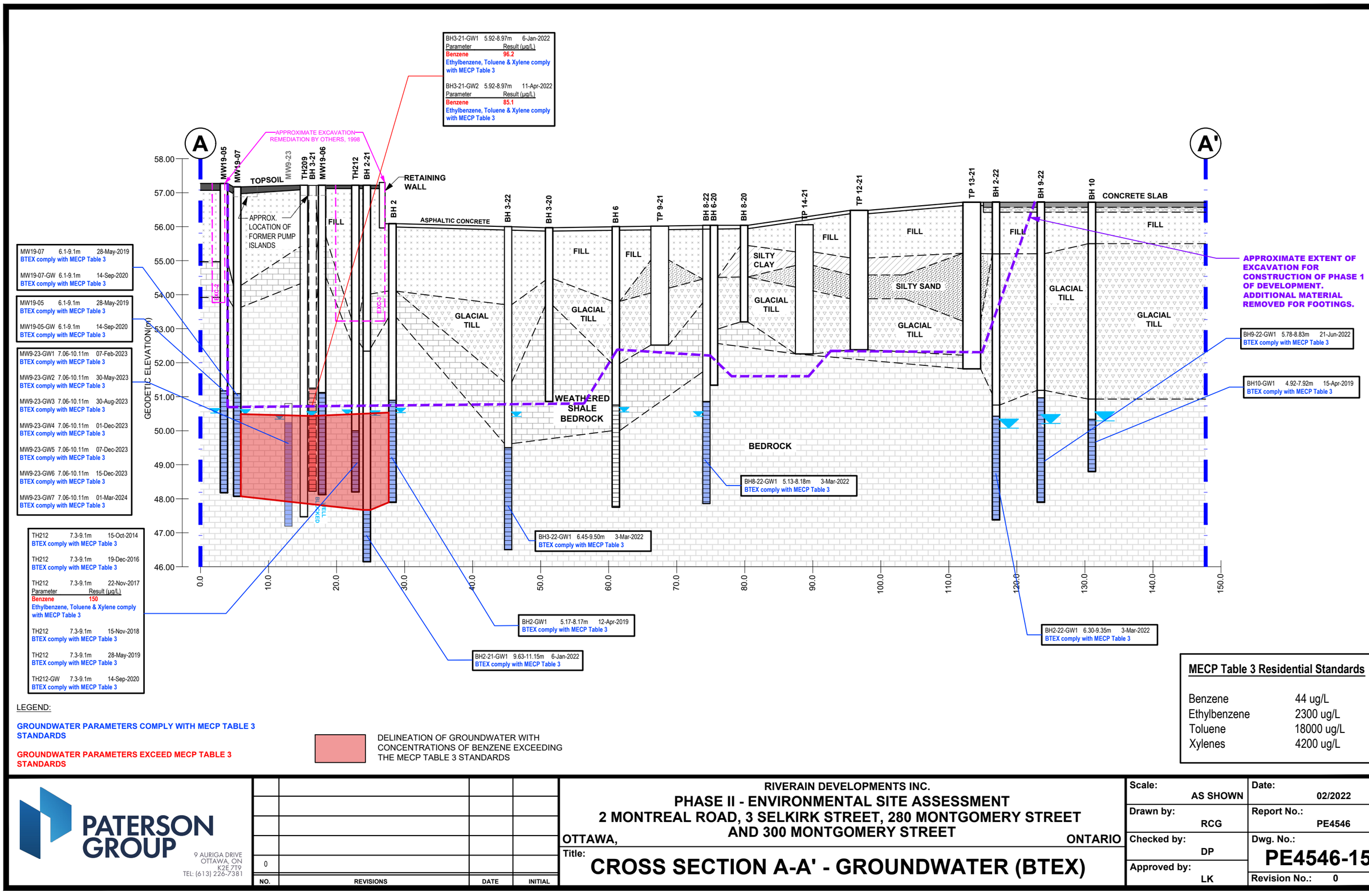

LEGEND:

GROUNDWATER PARAMETERS COMPLY WITH MECP TABLE 3 STANDARDS

GROUNDWATER PARAMETERS EXCEED MECP TABLE 3 STANDARDS

DELINEATION OF GROUNDWATER WITH CONCENTRATIONS OF BENZENE EXCEEDING THE MECP TABLE 3 STANDARDS

MECP Table 3 Residential Standards

Benzene	44 ug/L
Ethylbenzene	2300 ug/L
Toluene	18000 ug/L
Xylenes	4200 ug/L

PATERSON GROUP
9 AURIGA DRIVE
OTTAWA, ON
K2E 7T9
TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL
0			

RIVERAIN DEVELOPMENTS INC.

PHASE II - ENVIRONMENTAL SITE ASSESSMENT
2 MONTREAL ROAD, 3 SELKIRK STREET, 280 MONTGOMERY STREET AND 300 MONTGOMERY STREET
OTTAWA, ONTARIO

Title: **CROSS SECTION A-A' - GROUNDWATER (BTEX)**

Scale: AS SHOWN	Date: 02/2022
Drawn by: RCG	Report No.: PE4546
Checked by: DP	Dwg. No.: PE4546-15A
Approved by: LK	Revision No.: 0

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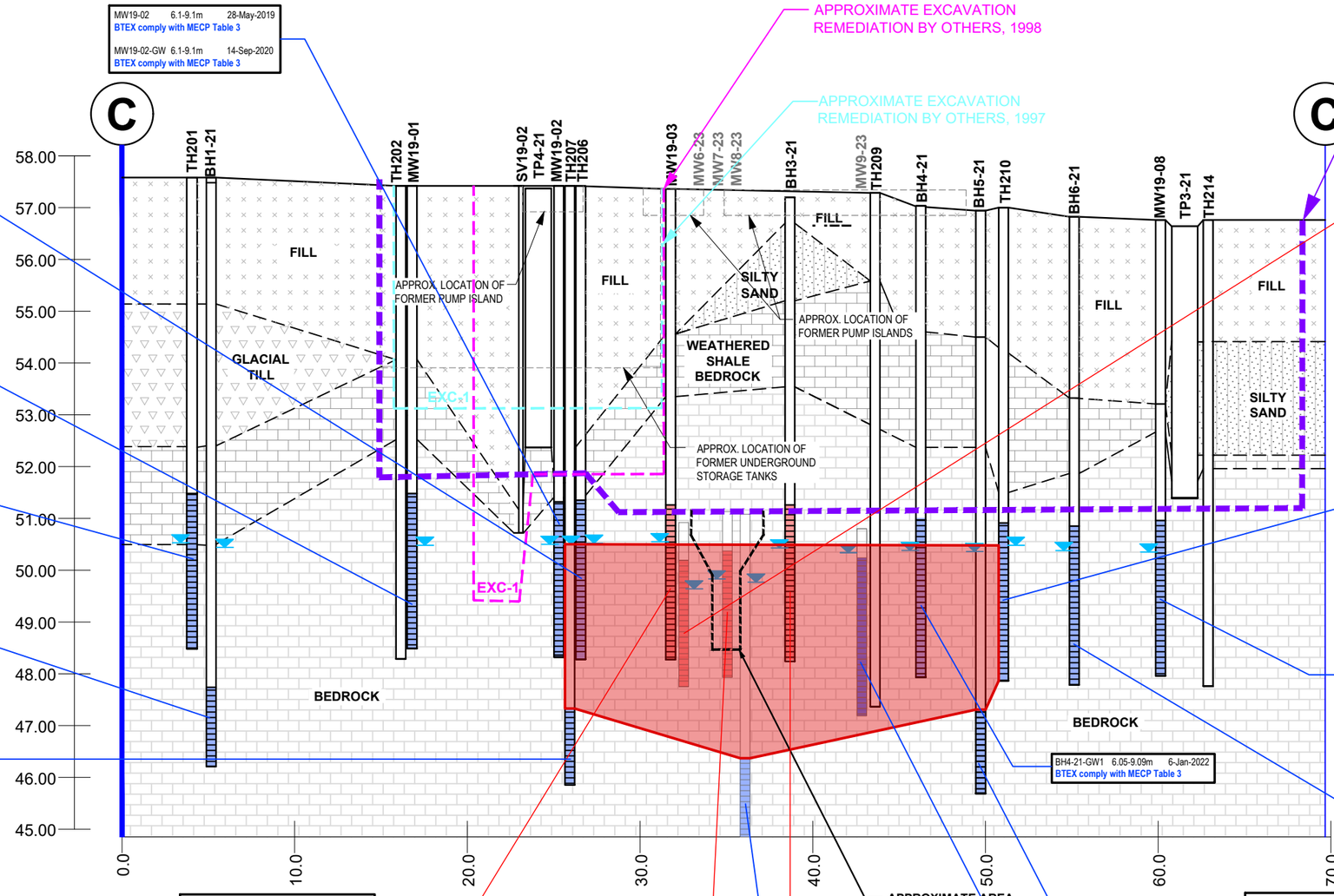

APPROXIMATE EXTENT OF EXCAVATION FOR CONSTRUCTION OF PHASE 1 OF DEVELOPMENT. ADDITIONAL MATERIAL REMOVED FOR FOOTINGS.

MW19-02 6.1-9.1m 28-May-2019
BTEX comply with MECP Table 3

MW19-02-GW 6.1-9.1m 14-Sep-2020
BTEX comply with MECP Table 3

TH206/DUP1 6.1-9.1m 15-Oct-2014

Parameter	Result (µg/L)
Benzene	150 / 170

Ethylbenzene, Toluene & Xylene comply with MECP Table 3

TH206 6.1-9.1m 19-Dec-2016
BTEX comply with MECP Table 3

TH206 6.1-9.1m 22-Nov-2017
BTEX comply with MECP Table 3

TH206 6.1-9.1m 15-Nov-2018
BTEX comply with MECP Table 3

TH206 6.1-9.1m 28-May-2019
BTEX comply with MECP Table 3

TH206-GW 6.1-9.1m 14-Sep-2020
BTEX comply with MECP Table 3

MW19-01 5.95-8.95m 28-May-2019
BTEX comply with MECP Table 3

MW19-01-GW 5.95-8.95m 14-Sep-2020
BTEX comply with MECP Table 3

TH201 6.1-9.1m 15-Oct-2014
BTEX comply with MECP Table 3

TH201 6.1-9.1m 19-Dec-2016
BTEX comply with MECP Table 3

TH201 6.1-9.1m 22-Nov-2017
BTEX comply with MECP Table 3

TH201 6.1-9.1m 15-Nov-2018
BTEX comply with MECP Table 3

TH201 6.1-9.1m 28-May-2019
BTEX comply with MECP Table 3

TH201-GW 6.1-9.1m 14-Sep-2020
BTEX comply with MECP Table 3

BH1-21-GW1 9.75-11.28m 6-Jan-2022
BTEX comply with MECP Table 3

TH207 10.1-11.6m 15-Oct-2014
BTEX comply with MECP Table 3

TH207 10.1-11.6m 19-Dec-2016
BTEX comply with MECP Table 3

TH207 10.1-11.6m 22-Nov-2017
BTEX comply with MECP Table 3

TH207 10.1-11.6m 15-Nov-2018
BTEX comply with MECP Table 3

TH207 10.1-11.6m 28-May-2019
BTEX comply with MECP Table 3

TH207-GW 10.1-11.6m 14-Sep-2020
BTEX comply with MECP Table 3

MW19-03 6.1-9.1m 28-May-2019

Parameter	Result (µg/L)
Benzene	180

Ethylbenzene, Toluene & Xylene comply with MECP Table 3

MW19-03-GW 6.1-9.1m 14-Sep-2020

Parameter	Result (µg/L)
Benzene	150

Ethylbenzene, Toluene & Xylene comply with MECP Table 3

MW19-03-GW3 6.1-9.1m 11-Apr-2022

Parameter	Result (µg/L)
Benzene	82.6

Ethylbenzene, Toluene & Xylene comply with MECP Table 3

MW7-23-GW1 7.07-9.51m 07-Feb-2023
BTEX comply with MECP Table 3

MW7-23-GW2 7.07-9.51m 30-May-2023

Parameter	Result (µg/L)
Benzene	56.6

MW7-23-GW3 7.07-9.51m 30-Aug-2023
BTEX comply with MECP Table 3

MW7-23-GW4 7.07-9.51m 01-Dec-2023
BTEX comply with MECP Table 3

MW7-23-GW5 7.07-9.51m 01-Mar-2024
BTEX comply with MECP Table 3

BH3-21-GW1 5.92-8.97m 6-Jan-2022

Parameter	Result (µg/L)
Benzene	96.2

Ethylbenzene, Toluene & Xylene comply with MECP Table 3

BH3-21-GW2 5.92-8.97m 11-Apr-2022

Parameter	Result (µg/L)
Benzene	85.1

Ethylbenzene, Toluene & Xylene comply with MECP Table 3

MW8-23-GW1 11.07-12.59m 07-Feb-2023
BTEX comply with MECP Table 3

BH4-21-GW1 6.05-9.09m 6-Jan-2022
BTEX comply with MECP Table 3

BH5-21-GW1 9.65-11.18m 6-Jan-2022
BTEX comply with MECP Table 3

MW9-23-GW1 7.06-10.11m 07-Feb-2023
BTEX comply with MECP Table 3

MW9-23-GW2 7.06-10.11m 30-May-2023
BTEX comply with MECP Table 3

MW9-23-GW3 7.06-10.11m 30-Aug-2023
BTEX comply with MECP Table 3

MW9-23-GW4 7.06-10.11m 01-Dec-2023
BTEX comply with MECP Table 3

MW9-23-GW5 7.06-10.11m 07-Dec-2023
BTEX comply with MECP Table 3

MW9-23-GW6 7.06-10.11m 15-Dec-2023
BTEX comply with MECP Table 3

MW9-23-GW7 7.06-10.11m 01-Mar-2024
BTEX comply with MECP Table 3

BH6-21-GW1 5.97-9.02m 6-Jan-2022
BTEX comply with MECP Table 3

MW19-08 5.8-8.8m 28-May-2019
BTEX comply with MECP Table 3

MW19-08-GW 5.8-8.8m 14-Sep-2020
BTEX comply with MECP Table 3

TH210 6.1-9.1m 15-Oct-2014

Parameter	Result (µg/L)
Benzene	53

Ethylbenzene, Toluene & Xylene comply with MECP Table 3

TH210 6.1-9.1m 19-Dec-2016
BTEX comply with MECP Table 3

TH210 6.1-9.1m 22-Nov-2017
BTEX comply with MECP Table 3

TH210 6.1-9.1m 15-Nov-2018
BTEX comply with MECP Table 3

TH210 6.1-9.1m 28-May-2019
BTEX comply with MECP Table 3

TH210-GW 6.1-9.1m 14-Sep-2020
BTEX comply with MECP Table 3

MW6-23-GW1 7.17-9.61m 07-Feb-2023
BTEX comply with MECP Table 3

MW6-23-GW2 7.17-9.61m 30-May-2023

Parameter	Result (µg/L)
Benzene	46.3

MW6-23-GW3 7.17-9.61m 30-Aug-2023
BTEX comply with MECP Table 3

MW6-23-GW4 7.17-9.61m 01-Dec-2023

Parameter	Result (µg/L)
Benzene	163

Ethylbenzene, Toluene & Xylene comply with MECP Table 3

MW6-23-GW5 7.17-9.61m 07-Dec-2023

Parameter	Result (µg/L)
Benzene	56.9

Ethylbenzene, Toluene & Xylene comply with MECP Table 3

MW6-23-GW6 7.17-9.61m 15-Dec-2023

Parameter	Result (µg/L)
Benzene	70.3

Ethylbenzene, Toluene & Xylene comply with MECP Table 3

MW6-23-GW7 7.17-9.61m 01-Mar-2024

Parameter	Result (µg/L)
Benzene	44.2

Ethylbenzene, Toluene & Xylene comply with MECP Table 3

LEGEND:

SOIL PARAMETERS COMPLY WITH MECP TABLE 3 STANDARDS

SOIL PARAMETERS EXCEED MECP TABLE 3 STANDARDS

GROUNDWATER RESULTS COMPLY WITH MECP TABLE 3 STANDARDS SHOWN FOR DELINEATION PURPOSES

DELINEATION OF GROUNDWATER WITH CONCENTRATIONS OF BENZENE EXCEEDING THE MECP TABLE 3 STANDARDS

MECP Table 3 Residential Standards

Benzene	44 ug/L
Ethylbenzene	2300 ug/L
Toluene	18000 ug/L
Xylenes	4200 ug/L

PATERSON GROUP
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NO.	REVISIONS	DATE	INITIAL
0			

RIVERAIN DEVELOPMENTS INC.

PHASE II - ENVIRONMENTAL SITE ASSESSMENT
2 MONTREAL ROAD, 3 SELKIRK STREET, 280 MONTGOMERY STREET AND 300 MONTGOMERY STREET
OTTAWA, ONTARIO

Title:
CROSS SECTION C-C' - GROUNDWATER (BTEX)

Scale: AS SHOWN	Date: 02/2022
Drawn by: RCG	Report No.: PE4546
Checked by: DP	Dwg. No.: PE4546-15C
Approved by: LK	Revision No.: 0

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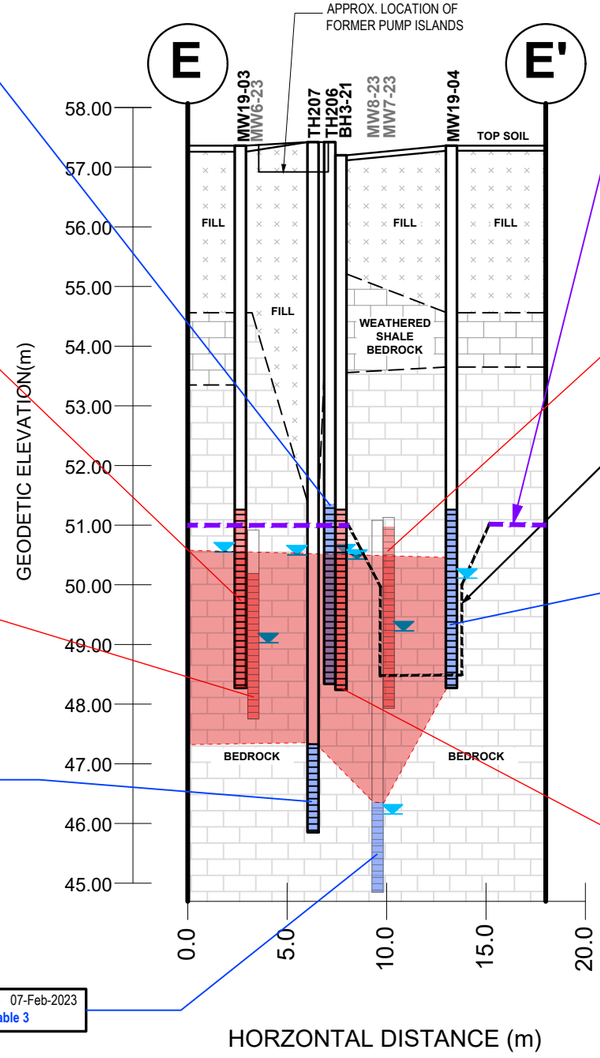

TH206/DUP1 6.1-9.1m 15-Oct-2014
Parameter Result (µg/L)
Benzene 150 / 170
Ethylbenzene, Toluene & Xylene comply with MECP Table 3

TH206 6.1-9.1m 19-Dec-2016
BTEX comply with MECP Table 3

TH206 6.1-9.1m 22-Nov-2017
BTEX comply with MECP Table 3

TH206 6.1-9.1m 15-Nov-2018
BTEX comply with MECP Table 3

TH206 6.1-9.1m 28-May-2019
BTEX comply with MECP Table 3

TH206-GW 6.1-9.1m 14-Sep-2020
BTEX comply with MECP Table 3

MW19-03 6.1-9.1m 28-May-2019
Parameter Result (µg/L)
Benzene 180
Ethylbenzene, Toluene & Xylene comply with MECP Table 3

MW19-03-GW 6.1-9.1m 14-Sep-2020
Parameter Result (µg/L)
Benzene 150
Ethylbenzene, Toluene & Xylene comply with MECP Table 3

MW19-03-GW3 6.1-9.1m 11-Apr-2022
Parameter Result (µg/L)
Benzene 82.6
Ethylbenzene, Toluene & Xylene comply with MECP Table 3

MW6-23-GW1 7.17-9.61m 07-Feb-2023
BTEX comply with MECP Table 3

MW6-23-GW2 7.17-9.61m 30-May-2023
Parameter Result (µg/L)
Benzene 46.3

MW6-23-GW3 7.17-9.61m 30-Aug-2023
BTEX comply with MECP Table 3

MW6-23-GW4 7.17-9.61m 01-Dec-2023
Parameter Result (µg/L)
Benzene 163
Ethylbenzene, Toluene & Xylene comply with MECP Table 3

MW6-23-GW5 7.17-9.61m 07-Dec-2023
Parameter Result (µg/L)
Benzene 56.9
Ethylbenzene, Toluene & Xylene comply with MECP Table 3

MW6-23-GW6 7.17-9.61m 15-Dec-2023
Parameter Result (µg/L)
Benzene 70.3
Ethylbenzene, Toluene & Xylene comply with MECP Table 3

MW6-23-GW7 7.17-9.61m 01-Mar-2024
Parameter Result (µg/L)
Benzene 44.2
Ethylbenzene, Toluene & Xylene comply with MECP Table 3

TH207 10.1-11.6m 15-Oct-2014
BTEX comply with MECP Table 3

TH207 10.1-11.6m 19-Dec-2016
BTEX comply with MECP Table 3

TH207 10.1-11.6m 22-Nov-2017
BTEX comply with MECP Table 3

TH207 10.1-11.6m 15-Nov-2018
BTEX comply with MECP Table 3

TH207 10.1-11.6m 28-May-2019
BTEX comply with MECP Table 3

TH207-GW 10.1-11.6m 14-Sep-2020
BTEX comply with MECP Table 3

MW8-23-GW1 11.07-12.59m 07-Feb-2023
BTEX comply with MECP Table 3

APPROXIMATE EXTENT OF EXCAVATION FOR CONSTRUCTION OF PHASE 1 OF DEVELOPMENT. ADDITIONAL MATERIAL REMOVED FOR FOOTINGS.

MW7-23-GW1 7.07-9.51m 07-Feb-2023
BTEX comply with MECP Table 3

MW7-23-GW2 7.07-9.51m 30-May-2023
Parameter Result (µg/L)
Benzene 56.6

MW7-23-GW3 7.07-9.51m 30-Aug-2023
BTEX comply with MECP Table 3

MW7-23-GW4 7.07-9.51m 01-Dec-2023
BTEX comply with MECP Table 3

MW7-23-GW5 7.07-9.51m 01-Mar-2024
BTEX comply with MECP Table 3

GROUNDWATER PIT

MW19-04/DUPA 6.1-9.1m 28-May-2019
Parameter Result (µg/L)
Benzene 45/46
Ethylbenzene, Toluene & Xylene comply with MECP Table 3

MW19-04-GW 6.1-9.1m 14-Sep-2020
BTEX comply with MECP Table 3

MW19-04-GW2 6.1-9.1m 6-Jan-2022
BTEX comply with MECP Table 3

BH3-21-GW1 5.92-8.97m 6-Jan-2022
Parameter Result (µg/L)
Benzene 96.2
Ethylbenzene, Toluene & Xylene comply with MECP Table 3

BH3-21-GW2 5.92-8.97m 11-Apr-2022
Parameter Result (µg/L)
Benzene 85.1
Ethylbenzene, Toluene & Xylene comply with MECP Table 3

LEGEND:

GROUNDWATER PARAMETERS COMPLY WITH MECP TABLE 3 STANDARDS

GROUNDWATER PARAMETERS EXCEED MECP TABLE 3 STANDARDS

DELINEATION OF GROUNDWATER WITH CONCENTRATIONS OF BENZENE EXCEEDING THE MECP TABLE 3 STANDARDS

MECP Table 3 Residential Standards

Benzene	44 ug/L
Ethylbenzene	2300 ug/L
Toluene	18000 ug/L
Xylenes	4200 ug/L

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NO.	REVISIONS	DATE	INITIAL
0			

MAIN AND MAIN DEVELOPMENTS
PHASE II - ENVIRONMENTAL SITE ASSESSMENT
2 MONTREAL ROAD, 3 SELKIRK STREET, 280 MONTGOMERY STREET AND 300 MONTGOMERY STREET
OTTAWA, ONTARIO

Title:
CROSS SECTION E-E' - GROUNDWATER (BTEX)

Scale: AS SHOWN	Date: 07/2024
Drawn by: GK	Report No.: PE4546
Checked by: LK	Dwg. No.: PE4546-15E
Approved by: LK	Revision No.: 0

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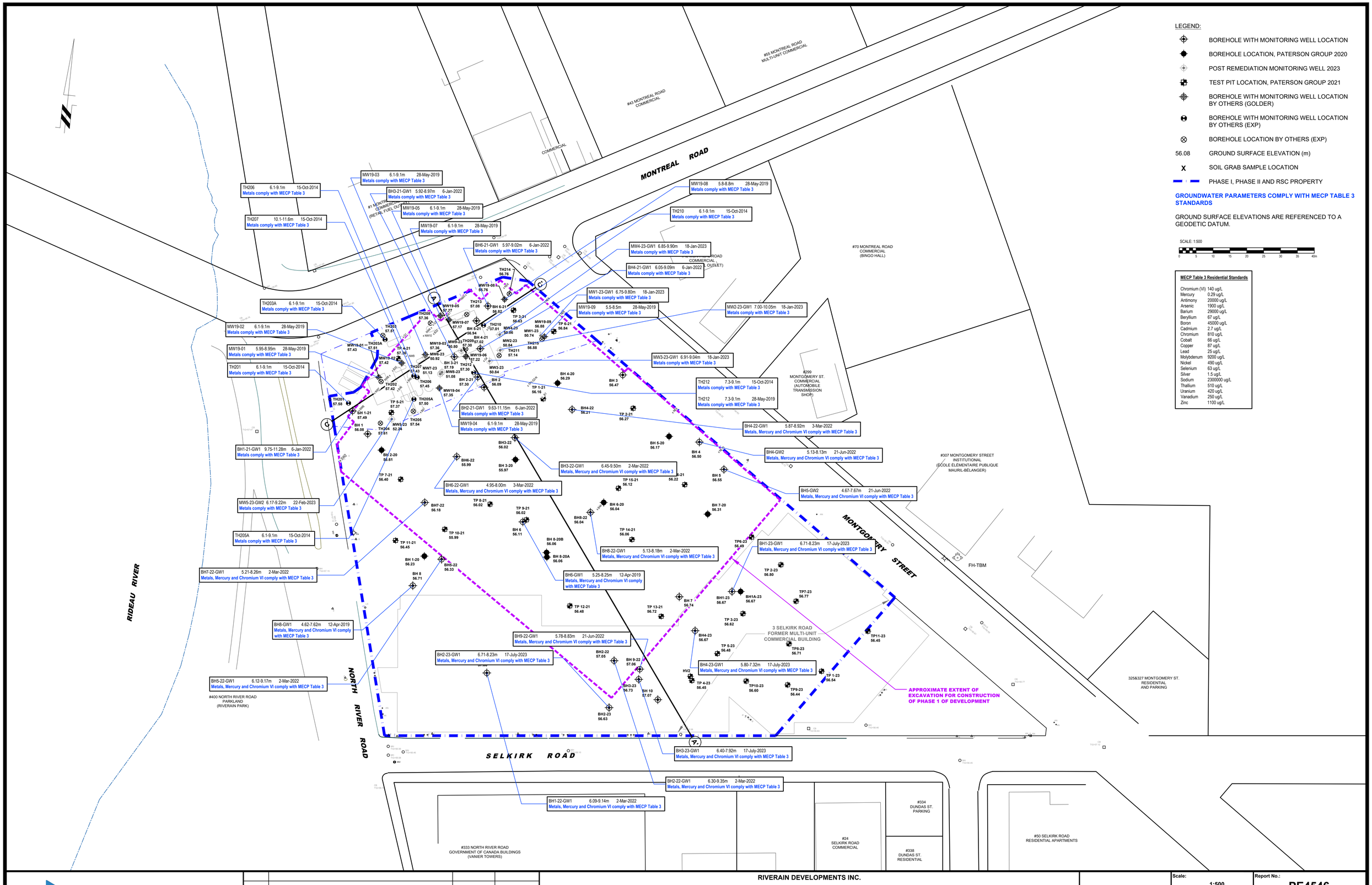

LEGEND:

- BOREHOLE WITH MONITORING WELL LOCATION
- BOREHOLE LOCATION, PATERSON GROUP 2020
- POST REMEDIATION MONITORING WELL 2023
- TEST PIT LOCATION, PATERSON GROUP 2021
- BOREHOLE WITH MONITORING WELL LOCATION BY OTHERS (GOLDER)
- BOREHOLE WITH MONITORING WELL LOCATION BY OTHERS (EXP)
- BOREHOLE LOCATION BY OTHERS (EXP)
- 56.08 GROUND SURFACE ELEVATION (m)
- X SOIL GRAB SAMPLE LOCATION
- PHASE I, PHASE II AND RSC PROPERTY

GROUNDWATER PARAMETERS COMPLY WITH MECP TABLE 3 STANDARDS

GROUND SURFACE ELEVATIONS ARE REFERENCED TO A GEODETIC DATUM.

SCALE: 1:500

0 5 10 15 20 25 30 35 40m

MECP Table 3 Residential Standards

Chromium (VI)	140 ug/L
Mercury	0.29 ug/L
Antimony	20000 ug/L
Arsenic	1900 ug/L
Barium	29000 ug/L
Beryllium	67 ug/L
Boron	45000 ug/L
Cadmium	2.7 ug/L
Chromium	810 ug/L
Cobalt	66 ug/L
Copper	87 ug/L
Lead	25 ug/L
Molybdenum	9200 ug/L
Nickel	490 ug/L
Selenium	63 ug/L
Silver	1.5 ug/L
Sodium	2300000 ug/L
Thallium	510 ug/L
Uranium	420 ug/L
Vanadium	250 ug/L
Zinc	1100 ug/L

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NO.	REVISIONS	DATE	INITIAL

RIVERAIN DEVELOPMENTS INC.

PHASE II - ENVIRONMENTAL SITE ASSESSMENT
2 MONTREAL ROAD, 3 SELKIRK STREET, 280 MONTGOMERY STREET AND 300 MONTGOMERY STREET
OTTAWA, ONTARIO

Title:

ANALYTICAL TESTING PLAN - GROUNDWATER (Cr VI, Hg, METALS INCLUDING As, Sb AND Se)

Scale:	1:500
Drawn by:	MPG
Checked by:	LK
Approved by:	LK
Date:	11/2021
Report No.:	PE4546
Drawing No.:	PE4546-16
Revision No.:	

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LEGEND:

- BOREHOLE WITH MONITORING WELL LOCATION
- BOREHOLE LOCATION, PATERSON GROUP 2020
- POST REMEDIATION MONITORING WELL 2023
- TEST PIT LOCATION, PATERSON GROUP 2021
- BOREHOLE WITH MONITORING WELL LOCATION BY OTHERS (GOLDER)
- BOREHOLE WITH MONITORING WELL LOCATION BY OTHERS (EXP)
- BOREHOLE LOCATION BY OTHERS (EXP)
- 56.08 GROUND SURFACE ELEVATION (m)
- X SOIL GRAB SAMPLE LOCATION
- PHASE I, PHASE II AND RSC PROPERTY

GROUNDWATER PARAMETERS COMPLY WITH MECP TABLE 3 STANDARDS

GROUND SURFACE ELEVATIONS ARE REFERENCED TO A GEODETIC DATUM.

SCALE: 1:500

0 5 10 15 20 25 30 35 40m

MONTREAL ROAD

#1 MONTREAL ROAD COMMERCIAL (RETAIL FUEL OUTLET)

#43 MONTREAL ROAD COMMERCIAL

#55 MONTREAL ROAD MULTI-UNIT COMMERCIAL

COMMERCIAL

#42 MONTREAL ROAD COMMERCIAL (RETAIL FUEL OUTLET)

#70 MONTREAL ROAD COMMERCIAL (BINGO HALL)

#299 MONTGOMERY ST. COMMERCIAL (AUTOMOBILE TRANSMISSION SHOP)

#307 MONTGOMERY STREET INSTITUTIONAL (ÉCOLE ÉLÉMENTAIRE PUBLIQUE MAURIL-BÉLANGER)

MONTGOMERY STREET

FH-TBM

RIDEAU RIVER

#400 NORTH RIVER ROAD PARKLAND (RIVERAIN PARK)

NORTH RIVER ROAD

SELKIRK ROAD

3 SELKIRK ROAD FORMER MULTI-UNIT COMMERCIAL BUILDING

APPROXIMATE EXTENT OF EXCAVATION FOR CONSTRUCTION OF PHASE 1 OF DEVELOPMENT

325&327 MONTGOMERY ST. RESIDENTIAL AND PARKING

#333 NORTH RIVER ROAD GOVERNMENT OF CANADA BUILDINGS (VANIER TOWERS)

#24 SELKIRK ROAD COMMERCIAL

#334 DUNDAS ST. PARKING

#338 DUNDAS ST. RESIDENTIAL

#50 SELKIRK ROAD RESIDENTIAL APARTMENTS

MW19-04/DUPA 6.1-9.1m 28-May-2019
PCBs comply with MECP Table 3

TH214 56.76
MW19-08 56.76
TH213 57.08
BH 6-21 56.92
MW19-05 57.27
TH208 57.36
MW19-07 57.17
TH210 57.01
TP 3-21 56.63
MW19-09 56.88
TP 6-21 56.84
TH203 57.51
SV19-03
BH 5-21 56.94
MW4-23 50.86
MW1-23 50.74
MW19-01 57.43
TH203A 57.51
SV19-01
TP 4-21 57.36
MW19-03 57.36
MW5-23 50.80
BH 4-21 57.02
MW2-23 50.84
TH215 56.88
MW19-02 57.42
MW6-23 50.92
MW19-06 57.22
TH211 57.14
TH207 57.43
MW7-23 51.13
BH 3-21 57.19
MW8-23 51.08
TH212 57.30
MW3-23 50.84
BH 4-20 56.29
BH 3 56.47
TH202 57.42
TH206 57.45
BH 2-21 57.30
BH 2 56.09
TP 1-21 56.16
SV19-02
MW19-04 57.35
TH201 57.58
TH205A 57.60
TP 5-21 57.37
BH4-22 56.21
TP 2-21 56.27
BH 1-21 57.49
TH205 57.54
BH 1 56.08
TH204 57.61
MW5-23 52.24
BH3-22 56.02
BH 5-20 56.17
BH 4 56.50
BH 2-20 56.61
BH6-22 55.99
BH 3-20 55.97
TP 7-21 56.40
TP 15-21 56.12
TP 16-21 56.22
BH 5 56.55
TP 8-21 56.02
BH7-22 56.18
TP 9-21 56.02
BH 6-20 56.04
BH 7-20 56.31
BH8-22 56.04
BH 6 56.11
TP 14-21 56.06
TP 10-21 55.99
BH 8-20B 56.06
TP6-23 56.49
TP 11-21 56.45
BH 8-20A 56.06
BH 1-20 56.23
BH5-22 56.33
TP 2-23 56.80
BH 8 56.71
TP 12-21 56.48
TP 13-21 56.72
BH 7 56.74
BH1-23 56.67
BH1A-23 56.67
TP7-23 56.77
TP 3-23 56.62
BH4-23 56.67
TP11-23 56.45
TP 5-23 56.48
TP8-23 56.71
BH2-22 57.05
BH 9-22 57.06
BH1-22 57.06
HV2
TP 1-23 56.84
TP 4-23 56.45
TP10-23 56.60
TP9-23 56.44
BH3-23 56.73
BH 10 57.07
BH2-23 56.63

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NO.	REVISIONS	DATE	INITIAL

RIVERAIN DEVELOPMENTS INC.

PHASE II - ENVIRONMENTAL SITE ASSESSMENT
2 MONTREAL ROAD, 3 SELKIRK STREET, 280 MONTGOMERY STREET AND 300 MONTGOMERY STREET
OTTAWA, ONTARIO

Title:

ANALYTICAL TESTING PLAN - GROUNDWATER (PCBs)

Scale:	1:500
Drawn by:	MPG
Checked by:	LK
Approved by:	LK
Date:	11/2021
Report No.:	PE4546
Drawing No.:	PE4546-17
Revision No.:	

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LEGEND:

- BOREHOLE WITH MONITORING WELL LOCATION
- POST REMEDIATION MONITORING WELL 2023
- TEST PIT LOCATION, PATERSON GROUP 2021
- BOREHOLE WITH MONITORING WELL LOCATION BY OTHERS (GOLDER)
- SOIL VAPOUR PROBE LOCATION (GOLDER)
- BOREHOLE WITH MONITORING WELL LOCATION BY OTHERS (EXP)
- BOREHOLE LOCATION BY OTHERS (EXP)
- MONITORING WELL LOCATION BY OTHERS (AQUA TERRE)
- TEST PIT LOCATION BY OTHERS (AQUA TERRE)
- 56.08 GROUND SURFACE ELEVATION (m)
- PHASE I, PHASE II AND RSC PROPERTY
- APPROXIMATE EXCAVATION REMEDIATION BY OTHERS, 1997
- APPROXIMATE EXCAVATION REMEDIATION BY OTHERS, 1998

SCALE: 1:200

0 1 2 3 4 5 10 20m

1997 TABLE B SOIL REMEDIATION CRITERIA (COMMERCIAL / INDUSTRIAL)	
TPH (HO) (mg/kg)	5000
TPH (G/D) (mg/kg)	1000
BENZENE (mg/kg)	5.3
TOLUENE (mg/kg)	34
XYLENES (mg/kg)	34

1997 TABLE B GROUNDWATER REMEDIATION CRITERIA (COMMERCIAL / INDUSTRIAL)	
BENZENE	1900 ug/L

SAMPLE ID	SS-32
SAMPLE DEPTH (m)	1.0
TPH (G/D) (mg/kg)	2630 / 1790
BENZENE (mg/kg)	14
TOLUENE (mg/kg)	170 / 160
XYLENES (mg/kg)	430 / 370

SAMPLE ID	TP 2-3	TP 2-4
SAMPLE DEPTH (m)	2.4	3.4
TPH (G/D) (mg/kg)	3100	1549
XYLENES (mg/kg)	433	50.3

SAMPLE ID	TP 9-7
SAMPLE DEPTH (m)	3.0
TPH (G/D) (mg/kg)	1632

SAMPLE ID	SS-203
SAMPLE DEPTH (m)	3.0
TPH (HO) (mg/kg)	6500

SAMPLE ID	TP 16-5
SAMPLE DEPTH (m)	2.5
TPH (HO) (mg/kg)	7800 / 5200

SAMPLE ID	BH-2-8
SAMPLE DEPTH (m)	5.94 - 6.55
BENZENE (mg/kg)	7.8
XYLENES (mg/kg)	45.7

HISTORICAL RESULTS EXCEEDING 1997 TABLE B INDUSTRIAL / COMMERCIAL GROUNDWATER REMEDIATION CRITERIA	
SAMPLE ID	MW-2
SAMPLE INTERVAL (m)	5.48 - 8.53
BENZENE (ug/L)	5100 / 5200
1997 INVESTIGATION - EXCEEDENCES OF BENZENE STANDARD OF 1900 ug/L	

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NO.	REVISIONS	DATE	INITIAL

RIVERAIN DEVELOPMENTS INC.

PHASE II - ENVIRONMENTAL SITE ASSESSMENT
2 MONTREAL ROAD, 3 SELKIRK STREET, 280 MONTGOMERY STREET AND 300 MONTGOMERY STREET
OTTAWA, ONTARIO

Title:

HISTORICAL RESULTS EXCEEDING 1997 TABLE B INDUSTRIAL/COMMERCIAL SOIL REMEDIATION CRITERIA

Scale:	1:200
Drawn by:	MPG
Checked by:	LK
Approved by:	LK
Date:	06/2023
Report No.:	PE4546
Drawing No.:	PE4546-18
Revision No.:	

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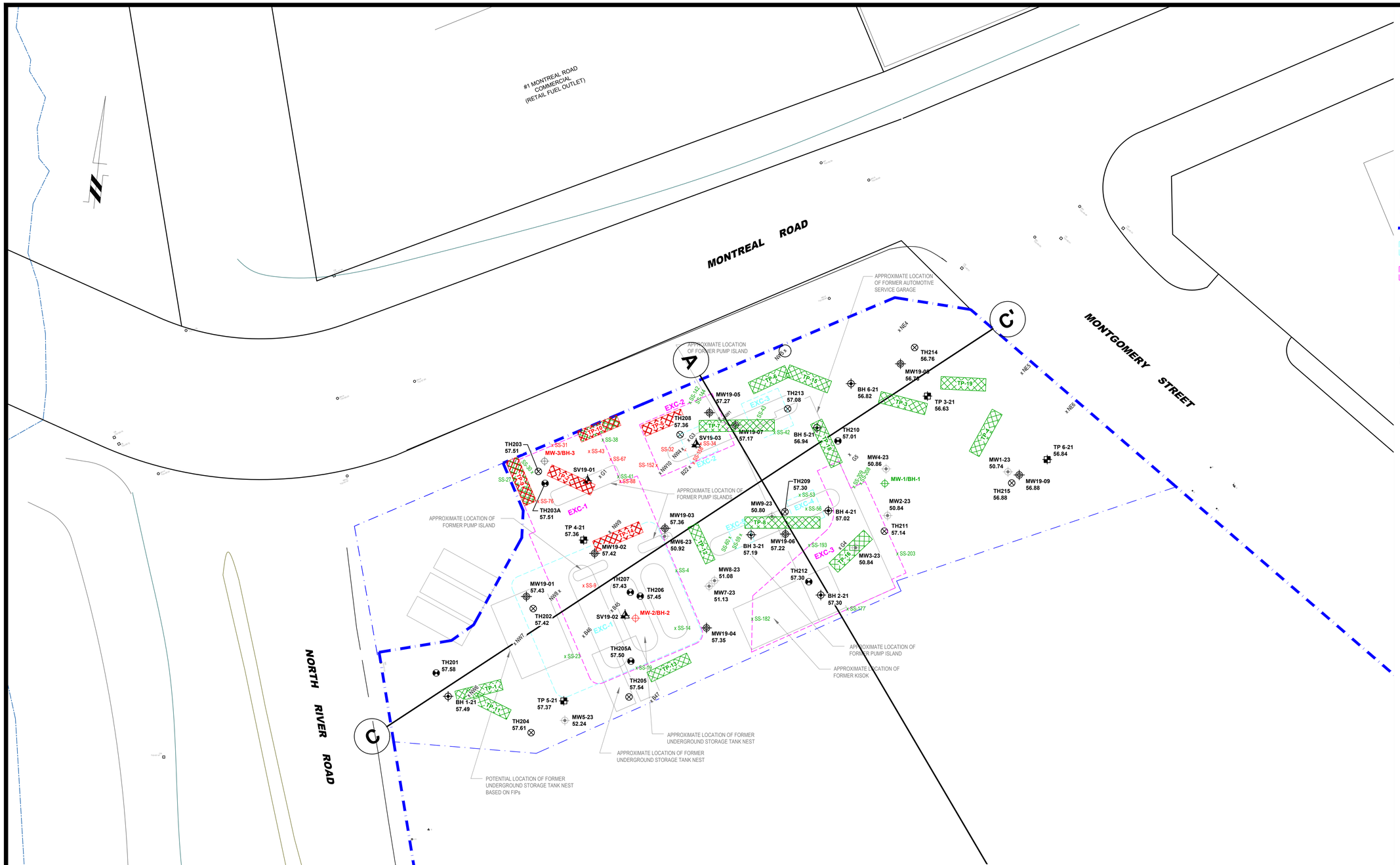

Parameter	Units	Regulation	Historical Soil Samples Exceeding MECP Table 3 Residential BTEX Standards																					
			SS-9	SS-32	SS-33 (SS-32 DUP)	SS-34	TP-2-3	TP-2-4	TP-5-5	BH-2-8	BH-3-3	BH-4-3 (BH-3-3 DUP)	BH-3-7	TP9-8	TP10-9	TP14-8	TP14-9	SS-31	SS-43	SS-67	SS-76	SS-88	SS-152	SS-158
Sample Date		MECP Table 3 Residential	16-Apr-97	11-Jun-97	11-Jun-97	11-Jun-97	16-Apr-97	16-Apr-97	17-Apr-97	24&25/Apr/97	25-Apr-97	25-Apr-97	25-Apr-97	12-Nov-98	12-Nov-98	12-Nov-98	12-Nov-98	1-Dec-98	1-Dec-98	2-Dec-98	3-Dec-98	3-Dec-98	14-Dec-98	14-Dec-98
Depth			4.30m	1.0m	1.0m	2.25m	2.4m	3.4m	2.6m	5.94-6.55m	2.29-2.89m	2.29-2.89m	5.33-5.94m	4.6m	4.0m	4.7m	5.1m	4.0m	5.0m	5.0m	6.2m	4.5m	4.0m	2.0m
BTEX																								
Benzene	ug/g	0.21 ug/g	<0.03	14	<0.75	<0.03	<1.5	<0.75	<0.3	7.8	2.5	3.1	4.8	1.3	0.43	<0.3	1.3	1.9	2.2	0.86	1	3.2	<0.03	0.36
Toluene	ug/g	2.3 ug/g	2.4	170	160	1.1	<4.5	<2.3	<0.9	15	0.38	<0.09	4.9	0.21	0.18	<0.9	2.7	<0.90	0.091	0.15	0.36	0.29	0.12	0.38
Ethylbenzene	ug/g	2 ug/g	2.8	53	43	0.21	73	<0.75	<0.3	7.6	5.7	2.2	5.4	3.1	2.3	7.4	2.6	10	<0.03	2.1	5.1	3.1	0.93	0.069
Xylenes, total	ug/g	3.1 ug/g	9.39	430	370	5.8	433	50.3	30.8	45.7	2.3	1.2	20.9	1.42	2.41	25.5	14.1	6	<0.1	3.577	4.83	11.31	10.49	0.6

Remaining samples were in compliance for BTEX and shown in green

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NO.	REVISIONS	DATE	INITIAL

RIVERAIN DEVELOPMENTS INC.

PHASE II - ENVIRONMENTAL SITE ASSESSMENT
2 MONTREAL ROAD, 3 SELKIRK STREET, 280 MONTGOMERY STREET AND 300 MONTGOMERY STREET
OTTAWA, ONTARIO

Title:

HISTORICAL BTEX SOIL RESULTS COMPARED TO MECP TABLE 3 RESIDENTIAL

Scale:	1:200
Drawn by:	GK
Checked by:	LK
Approved by:	LK
Date:	07/2024
Report No.:	PE4546
Drawing No.:	PE4546-19
Revision No.:	

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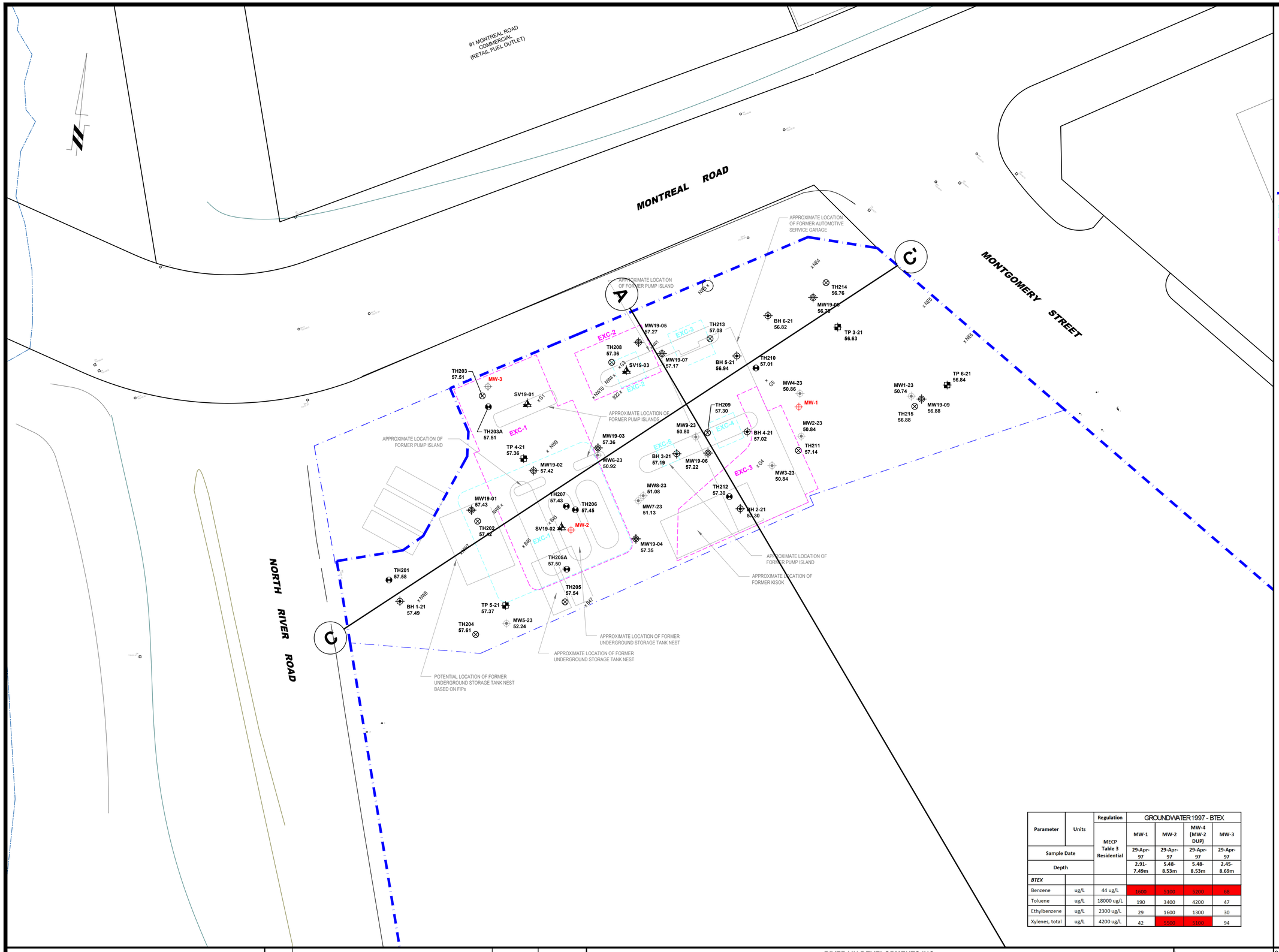

LEGEND:

- BOREHOLE WITH MONITORING WELL LOCATION
- POST REMEDIATION MONITORING WELL 2023
- TEST PIT LOCATION, PATERSON GROUP 2021
- BOREHOLE WITH MONITORING WELL LOCATION BY OTHERS (GOLDER)
- SOIL VAPOUR PROBE LOCATION (GOLDER)
- BOREHOLE WITH MONITORING WELL LOCATION BY OTHERS (EXP)
- BOREHOLE LOCATION BY OTHERS (EXP)
- MONITORING WELL LOCATION BY OTHERS (AQUA TERRE)
- 56.08 GROUND SURFACE ELEVATION (m)
- PHASE I, PHASE II AND RSC PROPERTY
- APPROXIMATE EXCAVATION REMEDIATION BY OTHERS, 1997
- APPROXIMATE EXCAVATION REMEDIATION BY OTHERS, 1998

SCALE: 1:200

0 1 2 3 4 5 10 20m

MECP Table 3 Residential Standards

Benzene	44 ug/L
Ethylbenzene	2300 ug/L
Toluene	18000 ug/L
Xylenes	4200 ug/L

Parameter	Units	Regulation	GROUNDWATER 1997 - BTEX			
		MECP Table 3 Residential	MW-1	MW-2	MW-4 (MW-2 DUP)	MW-3
Sample Date			29-Apr-97	29-Apr-97	29-Apr-97	29-Apr-97
Depth			2.91-7.49m	5.48-8.53m	5.48-8.53m	2.45-8.69m
BTEX						
Benzene	ug/L	44 ug/L	1600	5100	5200	68
Toluene	ug/L	18000 ug/L	190	3400	4200	47
Ethylbenzene	ug/L	2300 ug/L	29	1600	1300	30
Xylenes, total	ug/L	4200 ug/L	42	5500	5100	94

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NO.	REVISIONS	DATE	INITIAL

RIVERAIN DEVELOPMENTS INC.

PHASE II - ENVIRONMENTAL SITE ASSESSMENT
2 MONTREAL ROAD, 3 SELKIRK STREET, 280 MONTGOMERY STREET AND 300 MONTGOMERY STREET
OTTAWA, ONTARIO

Title: HISTORICAL BTEX GROUNDWATER RESULTS COMPARED TO MECP TABLE 3 RESIDENTIAL

Scale: 1:200
Drawn by: GK
Checked by: LK
Approved by: LK
Date: 07/2024

Report No.: PE4546
Drawing No.: PE4546-20
Revision No.:

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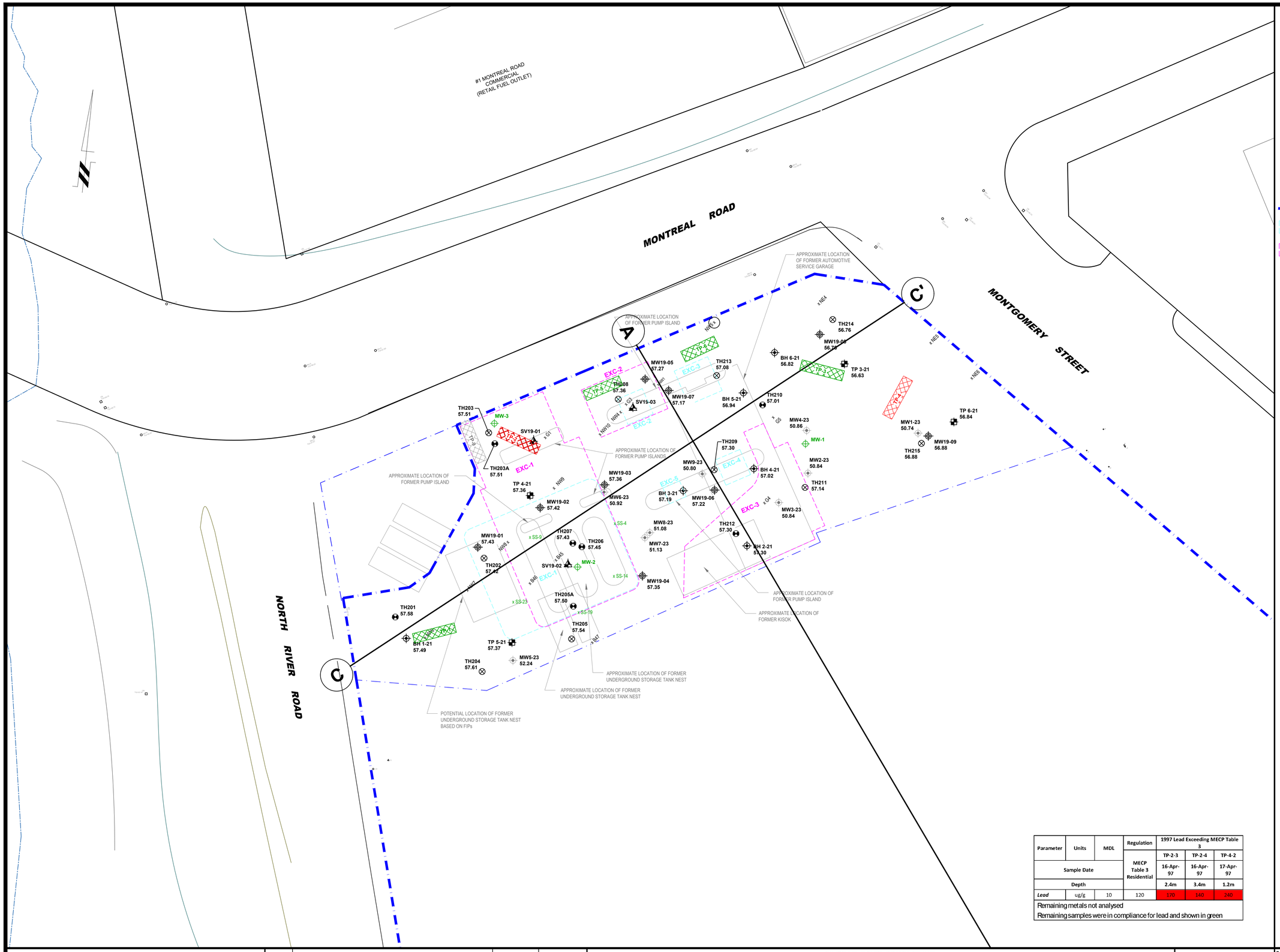
MONTREAL ROAD
MONTGOMERY STREET
NORTH RIVER ROAD
#1 MONTREAL ROAD COMMERCIAL (RETAIL FUEL OUTLET)
A
A'
B
B'
C
C'
APPROXIMATE LOCATION OF FORMER PUMP ISLAND
APPROXIMATE LOCATION OF FORMER AUTOMOTIVE SERVICE GARAGE
APPROXIMATE LOCATION OF FORMER PUMP ISLANDS
APPROXIMATE LOCATION OF FORMER PUMP ISLAND
APPROXIMATE LOCATION OF FORMER KIOSK
APPROXIMATE LOCATION OF FORMER UNDERGROUND STORAGE TANK NEST
APPROXIMATE LOCATION OF FORMER UNDERGROUND STORAGE TANK NEST
POTENTIAL LOCATION OF FORMER UNDERGROUND STORAGE TANK NEST BASED ON FIPs
EXC-1
EXC-2
EXC-3
EXC-4
EXC-5
TH203 57.51
MW-3
SV19-01
TH203A 57.51
TP 4-21 57.36
MW19-03 57.36
MW19-02 57.42
MW6-23 50.92
MW19-01 57.43
TH207 57.43
TH206 57.45
SV19-02
MW-2
TH202 57.42
TH205A 57.50
TH205 57.54
MW19-04 57.35
TH201 57.58
BH 1-21 57.49
TP 5-21 57.37
TH204 57.61
MW5-23 52.24
MW19-05 57.27
TH213 57.08
TH208 57.36
SV19-03
MW19-07 57.17
BH 5-21 56.94
TH210 57.01
BH 6-21 56.82
TH214 56.76
MW19-08 56.78
TP 3-21 56.63
MW4-23 50.86
MW-1
TH209 57.30
MW9-23 50.80
BH 4-21 57.02
BH 3-21 57.19
MW19-06 57.22
MW8-23 51.08
MW7-23 51.13
TH212 57.30
BH 2-21 57.30
MW2-23 50.84
TH211 57.14
MW3-23 50.84
MW1-23 50.74
TH215 56.88
MW19-09 56.88
TP 6-21 56.84
TP-5
TP-6
TP-3
TP-4
TP-2
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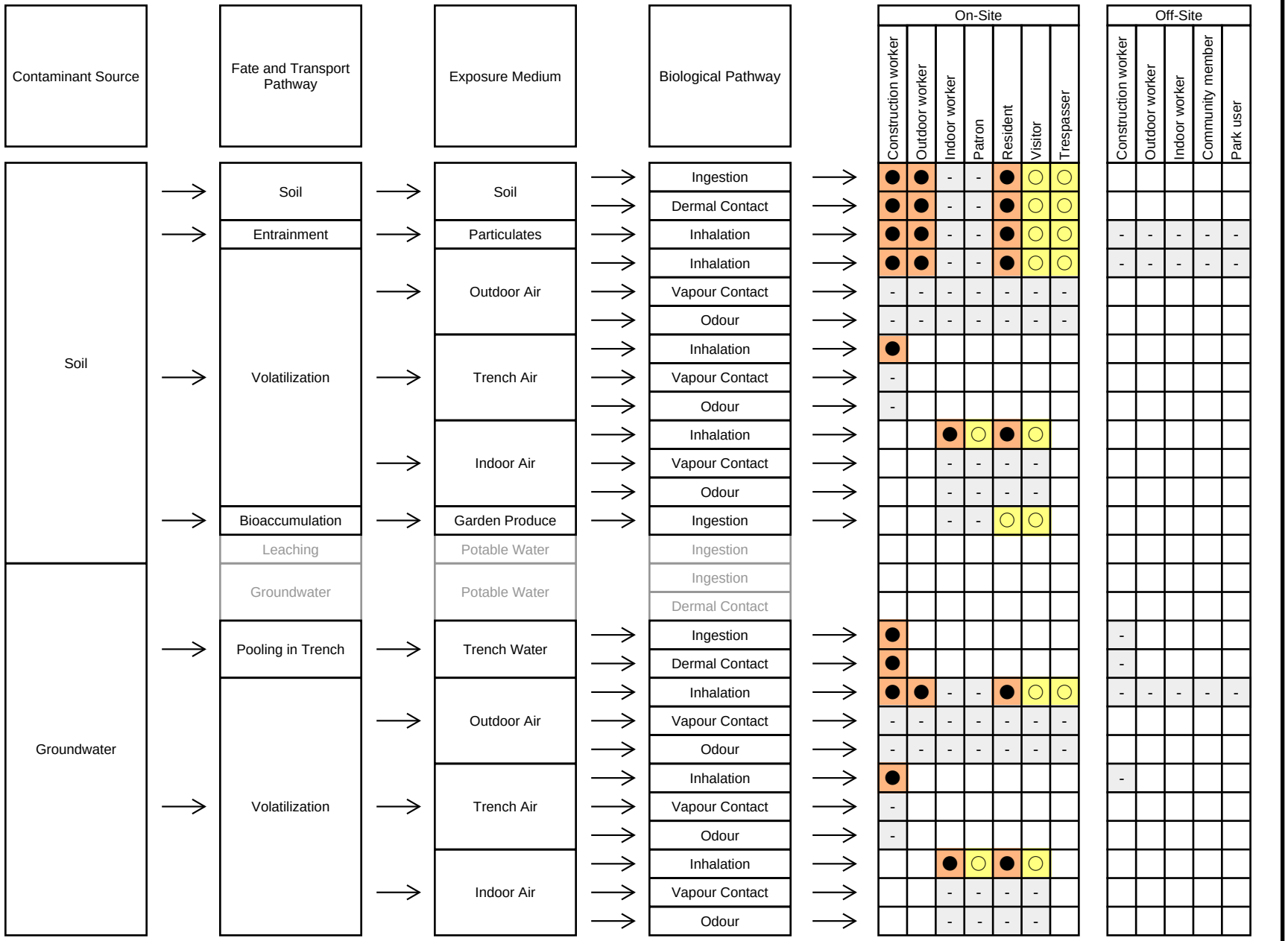

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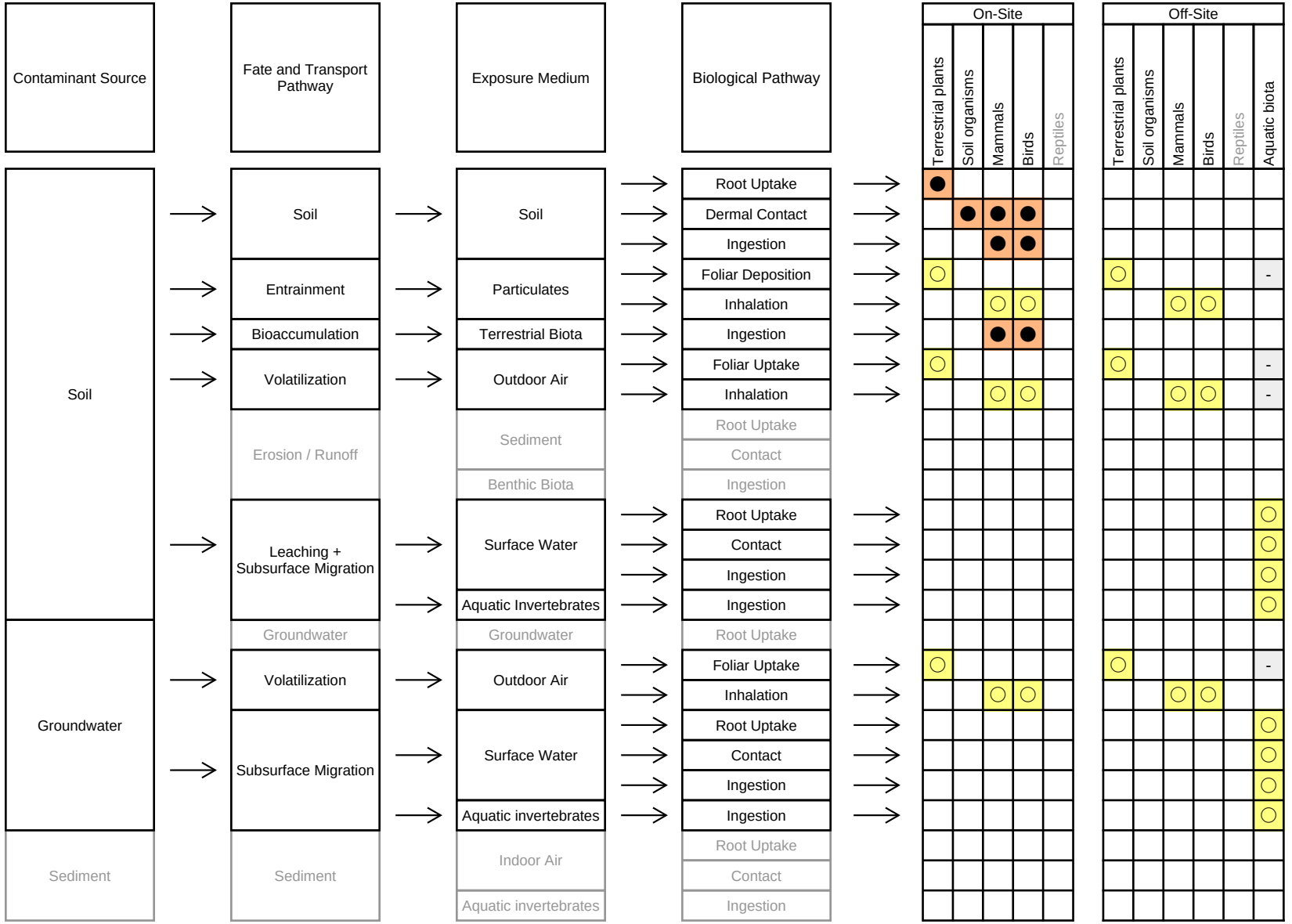
RIVERAIN DEVELOPMENTS INC.

HUMAN HEALTH AND ECOLOGICAL RISK ASSESSMENT
3 SELKIRK STREET, 2 MONTREAL ROAD, 280 AND 300 MONTGOMERY STREET
OTTAWA, ONTARIO

Title:
HUMAN HEALTH CONCEPTUAL EXPOSURE MODEL

Scale: N.T.S.	Date: 12/2024
Drawn by: CM	Report No.: PE4546-RA.03
Checked by: CM	Dwg. No.: PE4546-FIG.04
Approved by: CM	Revision No.:

8.5x11



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OTTAWA, ONTARIO

Title: ECOLOGICAL CONCEPTUAL EXPOSURE MODEL

Scale: N.T.S.	Date: 12/2024
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Approved by: CM	Revision No.:

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