

Certificate of Property Use

Issued under the authority of the Environmental Protection Act, R.S.O. 1990, c. E.19,
sections 168.6 (CPU) and 197 (Order)

Certificate of property use number **5663-C82HQ4**
Risk assessment number **1472-BLZJLQ**

Owner: Greenwin Barrie Inc.
19 Lesmill Road
Toronto, Ontario, M3B 2T3

And

2714708 Ontario Inc.
3200 Highway 7
Vaughan, Ontario, L4K 5Z5

Site: 51, 53, 55, and 75 Bradford Street and 20 Checkley Street
Barrie, Ontario

with a legal description as follows:

PART OF BROKEN LOT 25 CONCESSION 5 VESPRA, PART OF EAST PART LOT 24 CONCESSION 5 VESPRA, LOTS 115-121 INCLUSIVE, EAST SIDE OF BRADFORD STREET, ALL OF BOB STREET ON ROBERT ROSS UNREGISTERED PLAN, LOT 90 WEST SIDE OF HIGH STREET, PART OF LOT 65 EAST SIDE OF HIGH STREET & PART OF HIGH STREET REGISTERED PLAN 115, PART OF ELLEN STREET (CLOSED BY BY-LAW AS IN SC450705) REGISTERED PLAN 22, PARTS 1 TO 18 INCLUSIVE 51R37947; CITY OF BARRIE

being all of Property Identification Number 58795-0643 (LT)

as outlined on Figure 1 - "Surveyor's Real Property Report, Part 1, Plan of Survey of Part of All of Lot 90 West Side of High Street, Part of Lot 65 East Side of High Street, Part of High Street Registered Plan 115, All of Lots 115 to 120, Both Inclusive Part of Lot 121, All of Bob Street Robert Ross Unregistered Plan, Part of Ellen Street Registered Plan 22, East Part of Lot 24 and East Part of Broken Lot 25, Concession 5, City of Barrie, County of Simcoe" dated July 31, 2019 by Schaeffer Dzaldov Bennett Ltd., Ontario Land Surveyors, a copy of which is attached hereto in Schedule "B".

The conditions of this Certificate of Property Use (CPU) address the Risk Management Measures in the Risk Assessment noted above and described in detail in Part 1 below (Risk Assessment). In the event of a conflict between the CPU and the Risk Assessment, the conditions of the CPU take precedence.

Summary:

Refer to Part 1 of the CPU, Interpretation, for the meaning of all the defined capitalized terms that apply to the CPU.

- i) CPU requirements addressed in Part 4 of the CPU, Director Requirements, are summarized as follows:
 - a. Installing/maintaining any equipment Yes
 - b. Monitoring any contaminant Yes
 - c. Refraining from constructing any building specified Yes
 - d. Refraining from using the Property for any use specified Yes
 - e. Other: Maintaining a barrier to site soils, and preparing and implementing a soil and ground water management plan and health and safety plan for the Property. Yes

- ii) Duration of Risk Management Measures identified in Part 4 of the CPU is summarized as follows:
 - a. The barrier to site soils shall be maintained indefinitely until the Director alters or revokes the CPU.
 - b. The soil and ground water management plan and the health and safety plan shall be required for the Property during any activities potentially in contact with or exposing Impacted Soils, Impacted Ground Water or Impacted Sediments for as long as the Contaminants of Concern are present on the Property.
 - c. All other Risk Management Measures shall continue indefinitely until the Director alters or revokes the CPU.

Part 1: Interpretation

In the CPU the following terms shall have the meanings described below:

“Act” means the *Environmental Protection Act*, R.S.O. 1990, c. E.19.

“Active SVIMS” means a soil vapour intrusion mitigation system designed and operated to collect and remove soil vapour from below a Building and convey the soil vapour through vent risers to the outside air by means of one or more electrical fan powered vents drawing air from below the Building.

“Adverse Effect” has the same meaning as in the Act; namely,

- (a) impairment of the quality of the natural environment for any use that can be made of it;
- (b) injury or damage to property or to plant or animal life;
- (c) harm or material discomfort to any person;
- (d) an adverse effect on the health of any person;
- (e) impairment of the safety of any person;
- (f) rendering any property or plant or animal life unfit for human use;

- (g) loss of enjoyment of normal use of property; and,
- (h) interference with the normal conduct of business.

“Building” means an enclosed structure occupying an area greater than ten square metres consisting of a wall or walls, roof and floor.

“Building Area” means the area of the Building requiring a soil vapour mitigation system under Item 4.2.10 of the CPU but excludes the area of the Building utilizing the “Building with Storage Garage” Risk Management Measure under Item 4.2.11 of the CPU and/or areas where a raft foundation slab of a minimum thickness of 1000 mm is present below the floor slab.

“Building Code” means the Ontario Regulation 332/12; ‘Building Code’, made under the *Building Code Act, 1992*, S.O. 1992, c.23.

“Competent Person” has the same meaning as in the Occupational Health and Safety Act, R.S.O. 1990, c. O.1

“Contaminant” has the same meaning as in the Act; namely, any solid, liquid, gas, odour, heat, sound, vibration, radiation or combination of any of them, resulting directly or indirectly from human activities that causes or may cause an Adverse Effect.

“Contaminants of Concern” and “COC” has the meaning as set out in Item 3.2 of the CPU.

“CPU” means this Certificate of Property Use as may be altered from time to time and bearing the document number [5663-C82HQ4](#).

"Director" means the undersigned Director, or any other person appointed as a Director for the purpose of issuing a certificate of property use.

“EBR” means the *Environmental Bill of Rights, 1993*, S.O. 1993, c. 28.

“Impacted Soil” means soil in which one or more Contaminants are present at concentrations greater than the Residential/Parkland/Institutional/Industrial/Commercial/Community Property Use Standards for soils within **Table 1 “Full Depth Background Site Condition Standards”** of the ***Soil, Ground water and Sediment Standards for Use under Part XV.1 of the Act*** published by the Ministry and dated April 15, 2011 for coarse textured soil.

“Impacted Ground Water” means ground water in which one or more Contaminants are present at concentrations greater than the Ground Water Standards for All Types of Property Uses within **Table 1 “Full Depth Background Site Condition Standards”** of the ***Soil, Ground water and Sediment Standards for Use under Part XV.1 of the Act*** published by the Ministry and dated April 15, 2011 for All Types of Property Use.

“Impacted Sediment” means sediment in which one or more Contaminants are present at concentrations greater than the Sediment Standards for All Types of Property Uses within **Table 1 “Full Depth Background Site Condition Standards”** of the ***Soil, Ground water and Sediment Standards for Use under Part XV.1 of the Act*** published by the Ministry and dated April 15, 2011 for All Types of Property Use.

“Intrusive Activities” means any intrusive activity undertaken at the Property, such as excavating or drilling into soil or ground water, which may disturb or expose Contaminants of Concern at the Property.

“Licensed Professional Engineer” means a person who holds a licence, limited licence or temporary licence under the *Professional Engineers Act*, R.S.O. 1990, c. P.28 and who has obtained the appropriate education and training and has demonstrated experience and expertise in the areas related to the work required to be carried out in this CPU.

“Ministry” means the ministry of the government of Ontario responsible for the administration of the Act, currently named the Ministry of the Environment, Conservation and Parks.

“O. Reg. 153/04” means Ontario Regulation 153/04, “Record of Site Condition – Part XV.1 of the Act” made under the Act.

“O. Reg. 406/19” means Ontario Regulation 406/19, “On-Site and Excess Soil Management” made under the Act.

“Owner” means the owner(s) of the Property, beginning with the person(s) to whom the CPU is issued, described in the “Owner” section on Page 1 above, and any subsequent owner(s) of the Property.

“OWRA” means the *Ontario Water Resources Act*, R.S.O. 1990, c. O.40.

“Passive SVIMS” means a soil vapour intrusion mitigation system designed and operated to collect and remove soil vapour from below a Building and convey the soil vapour through vent risers to the outside air by means of natural forces or one or more wind turbines, or solar powered wind turbine operated vents drawing air from below the Building.

“Property” means the property that is the subject of the CPU and described in the “Site” section on page 1 above.

“Property Management Oversight” means management, on an ongoing basis, of all structural, mechanical, electrical, ventilation and other Building and Property services that relate to the installed Passive SVIMS, or the installed Active SVIMS, as applicable for the Property as set out in section 7 of the Risk Assessment report including oversight of operation, inspection, monitoring, maintenance and repair activities, and of operational and reserve funding for these activities, by a property manager or management company engaged by the Owner or, in the case of collective ownership, by an authorized representative or representatives of the collective ownership of the Building and Property, such as a condominium board.

“Property Specific Standards” or “PSS” means the property specific standards established for the Contaminants of Concern set out in the Risk Assessment and in Item 3.2 of the CPU and are the same standards specified in the Risk Assessment.

“Provincial Officer” means a person who is designated as a provincial officer for the purposes of the Act.

“Qualified Person” means a person who meets the qualifications prescribed in subsection 5 (2) of O. Reg. 153/04, namely a person who:

- a. Holds a licence, limited licence or temporary licence under the *Professional Engineers Act*, or
- b. Holds a certificate of registration under the *Professional Geoscientists Act, 2000*, and is a practising member, temporary member, or limited member of the Association of Professional Geoscientists of Ontario.

“Risk Assessment” means the Risk Assessment number **1472-BLZJLQ** accepted by the Director on September 29, 2021 and set out in the following documents and information/correspondence:

- The document entitled “Risk Assessment Pre-Submission Report for 51, 53, 55, and 75 Bradford St. and 20 Checkley Street, Barrie, Ontario” by GHD dated February 14, 2020;
- The report entitled “Risk Assessment, (PSF1848-20, IDS No. 1472-BLZJLQ), 51, 53, 55, and 75 Bradford Street and Checkley Street, Barrie, Ontario” by GHD dated August 20, 2020;
- The report entitled “Risk Assessment, (PSF1848-20, IDS No. 1472-BLZJLQ), 51, 53, 55, and 75 Bradford Street and Checkley Street, Barrie, Ontario”, report prepared by GHD dated February 8, 2021; and
- The report entitled “Risk Assessment, (PSF1848-20, IDS No. 1472-BLZJLQ), 51, 53, 55, and 75 Bradford Street and 20 Checkley Street Barrie, Ontario”, report prepared by GHD dated June 18, 2021.

“Risk Management Measures” means the risk management measures specific to the Property described in the Risk Assessment and/or Part 4 of the CPU.

“Storage Garage” has the same meaning as in the Building Code.

“SVIMS” means soil vapour intrusion mitigation system.

“Tribunal” has the same meaning as in the Act; namely, the Ontario Land Tribunal.

“Unimpacted Soil” means soil in which Contaminants are present at concentrations less than the Residential/Parkland/Institutional/Industrial/Commercial/Community Property Use Standards for soils within **Table 1 “Full Depth Background Site Condition Standards”** of the ***Soil, Ground water and Sediment Standards for Use under Part XV.1 of the Act*** published by the Ministry and dated April 15, 2011 for coarse textured soil.

Part 2: Legal Authority

- 2.1 Section 19 of the Act states that a certificate of property use is binding on the executor, administrator, administrator with the will annexed, guardian of property or attorney for property of the person to whom it was directed, and on any other successor or assignee of the person to whom it was directed.

- 2.2 Subsection 132(1.1) of the Act states that the Director may include in a certificate of property use a requirement that the person to whom the certificate is issued provide financial assurance to the Crown in right of Ontario for any one or more of,
- a. the performance of any action specified in the certificate of property use;
 - b. the provision of alternate water supplies to replace those that the Director has reasonable and probable grounds to believe are or are likely to be contaminated or otherwise interfered with by a contaminant on, in or under the property to which the certificate of property use relates; and
 - c. measures appropriate to prevent adverse effects in respect of the property to which the certificate of property use relates.
- 2.3 Section 168.6(1) of the Act states that if a risk assessment related to the property has been accepted under clause 168.5(1)(a), the Director may issue a certificate of property use to the owner of the property, requiring the owner to do any of the following things:
1. Take any action that is specified in the certificate and that, in the Director's opinion, is necessary to prevent, eliminate or ameliorate any adverse effect that has been identified in the risk assessment, including installing any equipment, monitoring any contaminant or recording or reporting information for that purpose.
 2. Refrain from using the property for any use specified in the certificate or from constructing any building specified in the certificate on the property.
- 2.4 Subsection 168.6(2) of the Act states that a certificate of property use shall not require an owner of property to take any action that would have the effect of reducing the concentration of a contaminant on, in or under the property to a level below the level that is required to meet the standards specified for the contaminant in the risk assessment.
- 2.5 Subsection 168.6(3) of the Act states that the Director may, on his or her own initiative or on application by the owner of the property in respect of which a certificate has been issued under subsection 168.6(1),
- a. alter any terms and conditions in the certificate or impose new terms and conditions;
 - or
 - b. revoke the certificate.
- 2.6 Subsection 168.6(4) of the Act states that if a certificate of property use contains a provision requiring the owner of property to refrain from using the property for a specified use or from constructing a specified building on the property,
- a. the owner of the property shall ensure that a copy of the provision is given to every occupant of the property;
 - b. the provision applies, with necessary modifications, to every occupant of the property who receives a copy of the provision; and
 - c. the owner of the property shall ensure that every occupant of the property complies with the provision.
- 2.7 Subsection 197(1) of the Act states that a person who has authority under the Act to make an order or decision affecting real property also has authority to make an order requiring any person with an interest in the property, before dealing with the property in any way, to give a copy of the order or decision affecting the property to every person who will acquire an interest in the property as a result of the dealing.

- 2.8 Subsection 197(2) of the Act states that a certificate setting out a requirement imposed under subsection 197(1) may be registered in the proper land registry office on the title of the real property to which the requirement relates, if the certificate is in a form approved by the Minister, is signed or authorized by a person who has authority to make orders imposing requirements under subsection 197(1) and is accompanied by a registrable description of the property.
- 2.9 Subsection 197(3) of the Act states that a requirement, imposed under subsection 197(1) that is set out in a certificate registered under subsection 197(2) is, from the time of registration, deemed to be directed to each person who subsequently acquires an interest in the real property.
- 2.10 Subsection 197(4) of the Act states that a dealing with real property by a person who is subject to a requirement imposed under subsection 197(1) or 197(3) is voidable at the instance of a person who was not given the copy of the order or decision in accordance with the requirement.

Part 3: Background

- 3.1 The Risk Assessment was undertaken for the Property on behalf of the Owner to assess the human health risks and ecological risks associated with the presence or discharge of Contaminants on, in or under the Property and to identify appropriate Risk Management Measures to be implemented to ensure that the Property is suitable for the intended mixed use of “Residential” and “Commercial” property uses, as defined in O. Reg. 153/04. The Property was historically used for industrial/commercial purposes including a historical tannery and vehicle sales, maintenance, and servicing operations. The Property is currently vacant with one single storey vacant commercial building and is proposed to be developed into a mixed use of residential and commercial land uses consisting of high-rise residential, townhouses, hotel, retail and above grade parking.
- 3.2 The Contaminants on, in or under the Property that are present above the Residential/Parkland/Institutional/Industrial/Commercial/Community Property Use Standards for soils, ground water, and sediments within **Table 1 “Full Depth Background Site Condition Standards”** of the ***Soil, Ground water and Sediment Standards for Use under Part XV.1 of the Act*** published by the Ministry and dated April 15, 2011 for coarse textured soil or for which there are no such standards are defined as the Contaminants of Concern. The Property Specific Standards for the Contaminants of Concern are set out in Schedule “A” attached to and forming part of the CPU.
- 3.3 The following Schedules form part of this CPU:
- Schedule A – Property Specific Standards
- Table 1.1 “Recommended Property-Specific Standards for Residential Land Use”
- Schedule B – Figures

- Figure 1: “Surveyor’s Real Property Report, Plan of Survey” dated July 31, 2019 by Schaeffer Dzaldov Bennett Ltd., Ontario Land Surveyors.
- Figure K.1 “Area Requiring a Physical Barrier” by GHD dated August 2020.
- Plan of Survey entitled “Area Requiring Physical Barrier” by Schaeffer Dzaldov Bennett Ltd., Ontario Land Surveyors dated September 9, 2021.
- Figure K.2 “Typical Physical Barrier Details” by GHD dated August 2020.
- Figure J.1 “Conceptual Vapour Mitigation System” by GHD dated July 2020.

Schedule C – Table J.1 “Summary of Indoor Air and Soil Vapour Criteria”.

Schedule D – Certificate of Requirement

- 3.4 I am of the opinion, for the reasons set out in the Risk Assessment that the Risk Management Measures described therein and outlined in Part 4 of the CPU are necessary to prevent, eliminate or ameliorate an Adverse Effect on the Property.
- 3.5 The Risk Assessment indicates the presence of Contaminants of Concern in soil and ground water which requires on-going restrictions on land use and pathway elimination. As such, it is necessary to restrict the use of the Property, impose building restrictions, and implement Risk Management Measures as set out in the Risk Assessment and in Part 4 of the CPU.
- 3.6 I believe for the reasons set out in the Risk Assessment that it is also advisable to require the disclosure of this CPU and the registration of notice of the CPU on title to the Property as set out in Items 4.8 and 4.9 of this CPU.

Part 4: Director Requirements

Pursuant to the authority vested in me under section 168.6(1) of the Act, I hereby require the Owner to do or cause to be done the following:

Risk Management Measures

- 4.1 Implement, and thereafter maintain or cause to be maintained, the Risk Management Measures.
- 4.2 Without restricting the generality of the foregoing in Item 4.1, carry out or cause to be carried out the following key elements of the Risk Management Measures. The performance objectives of the Risk Management Measures are as follows:
- block soil exposure pathways for human receptors and ecological receptors;
 - block soil and ground water vapour pathways for new buildings to be developed at the Site;

- block ground water pathways for human receptors; and
- establish inspection and monitoring programs to evaluate the effectiveness of the Risk Management Measures.

4.2.1 CAPPING (“Cap”)

The Property shall be covered by a physical barrier where there is less than 0.5 m of Unimpacted Soils between the final developed grade and Impacted Soils, all as illustrated on Figure K.1 “Area Requiring a Physical Barrier” by GHD dated August 2020 and the Plan of Survey entitled “Area Requiring Physical Barrier” by Schaeffer Dzaldov Bennett Ltd., Ontario Land Surveyors, dated September 9, 2021 in Schedule “B”.

The barrier shall be designed, installed and maintained in accordance with the Risk Assessment so as to prevent exposure to the Contaminants of Concern. The barrier to Impacted Soils shall consist of a clean soil cap (fill cap), hard cap and/or fence as specified below:

4.2.1.1 Fill Cap - A clean soil cap shall consist of a minimum of 0.5 m of Unimpacted Soils. The material above the Impacted Soil may also include up to 0.5 m of non-soil surface treatment such as asphalt, concrete, concrete pavers, stone pavers, brick, aggregate or other suitable material, all as illustrated in Figure K.2 “Typical Physical Barrier Details” by GHD dated August 2020 in Schedule “B”.

For any plants that are to be planted within, or near, Impacted Soils with root structures that would typically extend to depths greater than the clean soil cap depth (i.e. trees), then the planting hole shall be excavated such that there is a minimum of 500 mm of Unimpacted Soils or planting media around the root ball diameter and the planting hole shall be filled with Unimpacted Soils or planting media.

Alternatively, landscaping can be planted in concrete boxes or similar planting container containing growth media or Unimpacted Soils on top of the Cap.

4.2.1.2 Hard Cap - For areas that are not under structures, a hard cap shall consist of at least 75 mm of hard surface consisting of hot mix asphalt, concrete or other surface treatment not required to support vegetative growth underlain by at least 150 mm of Granular “A” or other suitable material, all as illustrated in Figure K.2 “Typical Physical Barrier Details” by GHD dated August 2020 in Schedule “B”.

4.2.1.3 Upon issuance of the CPU, for portion(s) of the Property, under re-development or not in use and not capped, these areas shall have a temporary physical barrier consisting of either a temporary hard cap of a minimum 75 mm of hard surface consisting of hot mix asphalt, concrete or other surface treatment not required to support vegetative growth and/or a 0.5m Fill Cap or a fence barrier that will prevent the

general public from accessing that part of the Property. The use of fencing shall also include a dust control plan to prevent any Impacted Soil from impacting the adjacent properties.

4.2.2 INSPECTION AND MAINTENANCE PROGRAM

4.2.2.1 Prepare and implement a written inspection and maintenance program, prepared by a Qualified Person and to be retained by the Owner, and be available for inspection upon request by a Provincial Officer, so as to ensure the continuing integrity of each barrier at the Property so long as the Contaminants of Concern are present at the Property, including, at a minimum:

- i. procedures and timing for implementing the program;
- ii. semi-annual inspections (spring and fall) of the Cap;
- iii. noting any deficiencies in the barrier observed during the inspections, or at any other time;
- iv. repairing promptly any such deficiencies, to the original design specifications, with written confirmation that the barrier has been properly repaired;
- v. contingency measures, such as fencing, to be implemented if cracks, breaches or any loss of integrity of the barrier cannot be repaired or addressed in a timely manner, to prevent exposure to the Contaminants of Concern in that area of the Property; and
- vi. recording, in writing, all inspections, deficiencies, repairs and implementation of contingency measures, to be retained by the Owner and be available for inspection upon request by a Provincial Officer;

and which is,

- vii. delivered to the Owner before use of all or any part of the Property begins, or within 90 days following completion of covering of all or any part of the Property, whichever is earlier; and
- viii. updated and delivered to the Owner within 30 days following making any alteration to the program; and

4.2.2.2 Prepare a site plan of the entire Property, prepared by a Licensed Professional Engineer and to be retained by the Owner, and be available for inspection upon request by a Provincial Officer, showing the Property, any fencing, and the location, type and design of each barrier at the Property, including cross-sectional drawings of the

barrier showing its design and vertical and lateral extent;

and which are,

- i. delivered to the Owner before use of all or any part of the Property begins, or within 90 days following completion of covering of all or any part of the Property, whichever is earlier; and
- ii. updated and delivered to the Owner within 30 days following making any alteration to the location, design or extent of the barrier, or other relevant feature shown on the site plan; and

4.2.2.3 Prior to initiating any Intrusive Activities, prepare and implement written procedures, prepared by a Qualified Person and to be retained by the Owner, and be available for inspection upon request by a Provincial Officer, for written and oral communication to all persons who may be involved in Intrusive Activities at the Property that may disturb a barrier at the Property, so as to ensure the persons are made aware of the presence and significance of the barrier and the Contaminants of Concern at the Property and the precautions to be taken to ensure the continued integrity of the barrier when undertaking the Intrusive Activities, and if damaged, to ensure that the barrier is repaired promptly to the original design specifications, or, if it cannot be repaired promptly, to ensure that the contingency measures are implemented, and records kept, as specified in the inspection and maintenance program;

and which are,

- i. delivered to the Owner before any Intrusive Activities are undertaken at the Property; and
- ii. updated and delivered to the Owner within 30 days following making any alteration to the procedures.

4.2.3 BUILDING RESTRICTIONS

No enclosed structures shall be constructed on the Property unless the building is equipped with a vapour mitigation system as per Item Nos. 4.2.10 "SVIMS" and/or 4.2.11 "Building with Storage Garage" of the CPU.

The existing vacant commercial building that is located on the Site shall not be occupied at any time and remain secured from access by the general public until such time that it is demolished as part of the redevelopment of the Property.

4.2.4 LAND USE RESTRICTIONS

No vegetable gardens or other gardens to grow edible produce shall be installed at the

Property unless placed within a planting container containing growth media or Unimpacted Soils on top of the Cap.

At no time shall there be privately owned greenspace/landscaped areas on the Property. All greenspace/landscaped areas of the Property are common areas and are to be managed through Property Management Oversight.

4.2.5 SOIL AND GROUND WATER MANAGEMENT PLAN

Prior to initiating any Intrusive Activities, prepare and implement a written soil and ground water management plan for the Property, prepared by a Qualified Person and to be retained by the Owner, and be available for inspection upon request by a Provincial Officer, for managing excavated soil (including sediment, if required) or soil brought to the Property, and, if any, ground water from dewatering during Intrusive Activities at the Property, so as to prevent exposure to or uncontrolled movement or discharge of the Contaminants of Concern in soil, sediment or ground water at the Property, including, at a minimum:

- a. procedures and timing for implementing the plan, including the supervision of persons implementing the plan; and
- b. measures to control dust and prevent tracking of soil by vehicles and persons from the Property, including the cleaning of equipment and vehicles; and
- c. measures, in addition to any applicable measures specified in O. Reg. 153/04, to manage soil excavated at the Property and any soil brought to or removed from the Property, including:
 - i. characterizing for contaminant quality all excavated soil and any soil brought to the Property, including determining whether the soil:
 1. is to be used as capping soil,
 2. meets the standards; or
 3. exceeds the standards;
 - ii. managing excavated soil separately from any soil brought to the Property, including any excavated soil that is to be:
 1. used as capping soil at the Property;
 2. otherwise used as fill at the Property;
 3. removed from the Property for off-site storage or processing but is to be returned for use as fill at the Property; or
 4. removed from the Property for off-site use as fill or disposal; and
 - iii. stockpiling of excavated soil and any soil brought to the Property in separate designated areas that:
 1. reflect the distinctions described in parts (c) i and ii; and
 2. have been lined and covered, as appropriate, to prevent uncontrolled movement or discharge of the Contaminants of Concern; and

3. have been bermed or fenced, as appropriate, to restrict access by persons; and
 4. have storm water runoff controls in place to minimize storm water runoff contacting stockpiled soil, with provision for discharge of storm water runoff to a sanitary sewer or to other approved treatment if needed; and
- d. measures to manage storm water and any ground water from dewatering at the Property to prevent the movement of entrained soil and Contaminants of Concern within and away from the Property, including, in addition to any applicable measures specified pursuant to other applicable law or other instruments, measures such as silt fences, filter socks for catch-basins and utility covers, and provision for discharge to a sanitary sewer or to other approved treatment if needed; and
- e. recording, in writing, the soil, storm water and any ground water management measures undertaken, in addition to any applicable record keeping requirements specified in O. Reg. 153/04 or pursuant to other applicable law or other instruments, to be retained by the Owner, and be available for inspection upon request by a Provincial Officer, including:
- i. dates and duration of the Intrusive Activities being undertaken;
 - ii. weather and site conditions during the Intrusive Activities;
 - iii. the location and depth of excavation activities, and dewatering activities, if any;
 - iv. dust control and soil tracking control measures;
 - v. characterization results for excavated soil and any soil brought to or removed from the Property, and for any ground water from dewatering;
 - vi. soil management activities including soil quantities excavated and brought to and removed from the Property, and stockpile management and storm water runoff control;
 - vii. management activities for any ground water from dewatering;
 - viii. names and contact information for the Qualified Persons and on-site contractors involved in the Intrusive Activities;
 - ix. names and contact information for any haulers and receiving sites for soil and any ground water removed from the Property, and for haulers and source sites of any soil brought to the Property; and
 - x. any complaints received relating to the Intrusive Activities, including the soil, storm water and any ground water management activities;

and which is,

- xi. delivered to the Owner before any Intrusive Activities are undertaken at the Property; and
- xii. updated and delivered to the Owner within 30 days following making any alteration to the plan.

4.2.6 HEALTH AND SAFETY PLAN

In addition to any requirements under the Occupational Health and Safety Act, R.S.O. 1990, c. O.1, prepare and implement a written health and safety plan for the Property, prepared by a Competent Person in consultation with a Qualified Person and to be

retained by the Owner, and be available for inspection upon request by a Provincial Officer, that includes information concerning the potential hazards and safe work measures and procedures with respect to the Contaminants of Concern at the Property and the communication of this information to all persons who may be involved in Intrusive Activities at the Property, including, at a minimum:

- a. the procedures and timing for implementing the plan, including the supervision of persons implementing the plan; and
- b. all relevant information concerning the presence of, human exposure to, and risk posed by, the Contaminants of Concern through dermal contact, soil or ground water ingestion and inhalation of soil particles or vapour, and concerning any biogenic gases such as methane that may be present at the Property including information in the Risk Assessment; and
- c. all relevant information, measures and procedures concerning protection of the persons from exposure to the Contaminants of Concern and the precautions to be taken when undertaking Intrusive Activities, including the supervision of workers, occupational hygiene requirements, use of personal protective equipment, provision of air flow augmentation in excavations or other areas or situations of minimal air ventilation, and other protective measures and procedures as appropriate; and
- d. all relevant information concerning the presence and significance of the Risk Management Measures and requirements which are being, or have been, implemented at the Property; and
- e. the procedures and timing for implementing emergency response and contingency measures and procedures, including contact information, in the event of a health and safety incident; and
- f. the recording, in writing, of the implementation of the plan and any health and safety incidents that occur, to be retained by the Owner and be available for inspection upon request by a Provincial Officer;

and which is,

- g. delivered to the Owner before any Intrusive Activities are undertaken at the Property; and
- h. updated and delivered to the Owner within 30 days following making any alteration to the plan.

4.2.7 FUTURE SITE DEVELOPMENT

All Impacted Soil, Impacted Ground Water, and Impacted Sediment encountered during future site development that was not addressed under the Risk Assessment must be delineated and remediated in keeping with the requirements and assumptions of the Risk Assessment. If remediation is required, upon completion, a summary report completed by a Qualified Person shall be retained by the Owner and be available to a Provincial Officer upon request. The summary report shall include the following:

- 4.2.7.1 The dates and duration of work completed;

4.2.7.2 A summary of the work completed;

4.2.7.3 A site plan showing the location of the work;

4.2.7.4 Material characterization results and confirmatory sampling results, including copies of the laboratory certificates of analysis.

4.2.8 SITE PLAN

The Owner shall submit a site plan prepared and signed by a Qualified Person prior to use of any future site development which will describe the Property, the proposed development and the location of the specified Risk Management Measures. This site plan shall be submitted to the Director and the Owner shall retain one copy for inspection upon request by a Provincial Officer. The site plan shall be revised and resubmitted to the Director following the completion of any changes or subsequent phases to the development.

4.2.9 SITE RESTORATION PLAN

After construction of the Cap, a site restoration plan shall be developed and implemented for the Property prior to any development activities that may disturb the Cap. This plan shall include the steps to repair/replace the Cap to meet the requirements set out under Item 4.2.1 above. A log of steps taken to implement the plan shall be maintained and be available upon request by a Provincial Officer. The plan shall also be made available upon request by a Provincial Officer.

4.2.10 SOIL VAPOUR INTRUSION MITIGATION SYSTEM (SVIMS) – PASSIVE SVIMS

In accordance with Item 4.2.3 of the CPU, if SVIMS RMM is to be utilized at the Property, the Owner shall ensure that no enclosed structures are constructed on the Property unless the building is equipped with a soil vapour mitigation system designed by a Licensed Professional Engineer and signed off confirming that the design is suitable for its intended purpose. A copy of the final design including drawings and specifications, as well as, the sign-off by the professional engineer shall be provided to the Director prior to implementation, including as-built drawings. A conceptual design of a generic vapour control system is illustrated in Figure J.1 “Conceptual Vapour Mitigation System” by GHD dated July 2020 in Schedule “B”.

4.2.10.1 DESIGN, INSTALLATION AND OPERATION

Design, install and operate a SVIMS for the Building, designed by a Licensed Professional Engineer in consultation with a Qualified Person and installed by a person acceptable to and under the supervision of a Licensed Professional Engineer, so as to remove soil vapour from below the Building and prevent soil vapour containing the Contaminants of Concern from entering the Building air, including the following requirements and components for the SVIMS:

4.2.10.1.1

SYSTEM REQUIREMENTS

The Passive SVIMS is to:

- i. be designed, installed and operated with the objective of achieving during all seasons at least a 6 Pascal lower air pressure differential below the foundation floor slab, relative to the indoor air pressure within the Building, across at least 90% of the Building Area; and
- ii. be able to be readily converted to operation as an Active SVIMS, if necessary, to ensure soil vapour is being sufficiently removed from below the Building, including making provision to readily allow installation and operation of an electrical powered fan on each vent riser, with the objective of achieving during all seasons at least a 6 Pascal lower air pressure differential below the foundation floor slab, relative to the indoor air pressure within the Building, across at least 90% of the Building Area, and making provision for an automated monitoring system of electrical fan operation which remotely detects and indicates system malfunctions; and
- iii. have in place or be able to easily put in place, measures, as appropriate based on an assessment carried out in accordance with ASTM E1998;

4.2.10.1.2 SUB-SLAB FOUNDATION LAYER

Throughout the Building Area below the foundation floor slab, a sub-slab foundation layer, above soil containing the Contaminants of Concern, designed by a Licensed Professional Engineer for the Building constructor in consultation with the Licensed Professional Engineer for the SVIMS.

4.2.10.1.3 SOIL VAPOUR VENTING LAYER

Throughout the Building Area below the foundation floor slab and above the sub-slab foundation layer, a soil vapour venting layer designed for collection and venting of soil vapour from below the floor slab to vent risers for venting to the outdoor air, with the soil vapour venting layer consisting of:

- i. perforated collection pipes or geocomposite strips of sufficient size or diameter, frequency and locations to promote efficient collection and venting, embedded in granular materials of sufficient air permeability and depth;
- or,

other soil vapour collection and venting products used to construct a soil vapour venting layer with continuous open void space, such as an aerated sub-floor below the floor slab and around the exterior walls such as the Cupolex system or equivalent, which provides similar or greater air permeability and collection and venting efficiency; and

- ii. for a Building with isolated soil vapour venting layer areas caused by interior grade beams or areas of thickened slabs, ventilation pipes to connect the isolated areas or a soil vapour venting layer that extends below these elements of the Building foundation; and
- iii. clean-outs, drains or openings to ensure drainage and removal of condensate or water, including any entrained dust, that may enter collection pipes, geocomposite strips or vent risers, and, if required, to ensure drainage or dewatering of the soil vapour venting layer in Property areas with a shallow ground water table.

4.2.10.1.4 SOIL VAPOUR BARRIER MEMBRANE

Throughout the Building Area, a continuous leak free soil vapour barrier membrane, such as a sheet geomembrane or spray applied membrane, below the foundation floor slab and above the soil vapour venting layer, and below and along the walls of any subsurface structures such as a sump, and which:

- i. is of appropriate thickness and meets the appropriate gas permeability and chemical resistance specifications to be considered substantially impermeable to the soil vapour, in accordance with the appropriate ASTM standards such as D412 and D543, as applicable; and
- ii. has a suitable protective geotextile, or other suitable protective material, such as a sand layer, immediately below or above the soil vapour barrier membrane, as considered appropriate by the Licensed Professional Engineer; and

4.2.10.1.5 VENT RISERS

Vent risers must be of sufficient size or diameter, frequency and locations to promote efficient venting and that terminate above the roof of the Building, to convey soil vapour from the soil vapour venting layer to the outdoor air above the roof of the Building and that discharge at an appropriate distance from Building air intakes and openable windows, doors and other openings through which exhausted vapours could be entrained in Building air and, consistent with the separation provisions in ASTM E2121 but modified as appropriate for the characteristics of the soil vapour and Building, including:

- i. at least one vent riser per isolated section of the soil vapour venting layer caused by interior grade beams or thickened slabs, unless analysis or testing indicates a lesser number of vent risers is required;
- ii. vent pipe riser diameter that is greater than the collection pipe diameter, to promote efficient venting; and
- iii. vent risers located within the Building, where appropriate, to promote temperature induced convective venting during colder weather; and
- iv. a wind turbine or solar powered wind turbine on each vent risers for a Passive SVIMS.

4.2.10.1.6 MONITORING DEVICES

Monitoring ports must be installed below the foundation floor slab across the Building Area to measure the (lower) air pressure differential, relative to the indoor air pressure within the Building, being achieved by the soil vapour venting layer, with the number and locations of the monitoring devices installed being as considered appropriate by the Licensed Professional Engineer in consultation with the Qualified Person, taking into account factors such as the Building Area and the design and configuration of the Building foundation.

4.2.10.1.7 LABELING OF EQUIPMENT

Equipment for the SVIMS must be clearly labelled, including information such as the installer's name, date of installation and identification of all visible piping, consistent with the labeling provisions in ASTM E1465 but modified as appropriate for the characteristics of the soil vapour and Building.

4.2.10.1.8 UTILITY SEALING

Where utilities or subsurface Building penetrations are a potential conduit for soil vapour migration,

- a. utility trench dams, consisting of a soil-bentonite mixture, sand-cement slurry or other appropriate material must be installed as a precautionary measure to reduce the potential for soil vapour to migrate beneath the Building through relatively permeable trench backfill; and
- b. conduit seals constructed of closed cell polyurethane foam, or other inert gas-impermeable material must be installed at the termination of all utility conduits and at subsurface Building penetrations, such as sumps, to reduce the potential for vapour migration along the conduit to the interior of the Building.

4.2.10.1.9 QUALITY ASSURANCE / QUALITY CONTROL

Prepare and implement a quality assurance and quality control program, prepared by a Licensed Professional Engineer and to be retained by the Owner, and be available for

inspection upon request by a Provincial Officer, so as to ensure that the SVIMS is being, and has been, properly installed and the installation documented, including inspections, verification testing and documenting of the installation as it is carried out, including at a minimum:

- i. procedures and timing for implementing the program, by a person acceptable to and under the supervision of a Licensed Professional Engineer; and
- ii. daily inspections of the installation of the SVIMS, including of the quality assurance and quality control measures and procedures undertaken by the installer; and
- iii. undertaking, at a minimum, during installation of the SVIMS the following quality control measures and verification testing of the soil vapour barrier membrane:
 1. daily inspection reports noting any deficiencies and corrective actions taken; and
 2. smoke testing of the soil vapour barrier membrane, or equivalent alternative testing method that provides comparable results; and
 3. verification of the type and thickness of the soil vapour barrier membrane through testing of representative samples of materials used, including destructive testing and repair of portions of the membranes to be conducted in a manner and at a frequency that meets or exceeds manufacturer's recommendations; and
 4. verification of field seams of sheet geomembranes as being continuous and leak free, through vacuum or pressure testing, geophysical testing or other appropriate means; and
 5. verification that appropriate measures to prevent post-construction damage or degradation to the soil vapour barrier membrane have been taken, including at a minimum, appropriate preparation of the sub-slab foundation layer, placement of a protective geotextile, or other suitable protective material, below or above the soil vapour barrier membrane, if included in the design, and work practices to prevent post-construction damage; and
- iv. noting any deficiencies in the materials or installation of the SVIMS; and
- v. ensuring the prompt repair of any deficiencies, to the design specifications; and
- vi. preparing a written report of all inspections, quality control measures and verification testing undertaken, and any deficiencies and repairs, prepared by the Licensed Professional Engineer and to be retained by the Owner, and be available for inspection upon request by a Provincial Officer;

and which are,
- vii. delivered to the Owner before operation of the SVIMS begins; and

- viii. updated and delivered to the Owner within 30 days of making any alteration to the program.

4.2.10.1.10 AS CONSTRUCTED PLANS

Prepare as constructed plans of the SVIMS, prepared by a Licensed Professional Engineer and to be retained by the Owner, and be available for inspection upon request by a Provincial Officer, showing the location of the Building and the location and specifications of the installed SVIMS, including cross-sectional drawings specifying the design and the vertical and lateral extent of the SVIMS relative to the Building and the ground surface,

and which are:

- i. delivered to the Owner before use of all or any part of the Building begins, or within 90 days following completion of installation of the SVIMS, whichever is earlier; and
- ii. updated and delivered to the Owner within 30 days following making any alteration to the SVIMS, or other relevant feature shown on the plans.

4.2.10.1.11 INSPECTION AND MAINTENANCE

Prepare and implement a written inspection and maintenance program, prepared by a Licensed Professional Engineer and to be retained by the Owner, and be available for inspection upon request by a Provincial Officer, to ensure the continued integrity and effectiveness of the SVIMS, including, at a minimum:

- i. procedures and timing for implementing the program, by a person meeting the qualifications as set out in the program; and
- ii. maintenance and calibration of operational, monitoring and other equipment, as appropriate; and
- iii. inspections of the SVIMS including:
 - 1. semi-annual inspections, in spring and fall, of the visible areas of the foundation floor slab or subsurface walls in contact with soil, to identify any cracks, breaches or other deficiencies that may allow soil vapour to enter the Building; and
 - 2. semi-annual inspections, in spring and fall, the visible components of the SVIMS, to identify any cracks, breaches or other deficiencies that may hinder the collection or venting of soil vapour from below the Building; and
 - 3. additional inspections, on a more frequent basis as appropriate, of the wind turbine(s) or solar powered wind turbine(s) to determine whether

they turn frequently and/or of the electrical powered fans to confirm they turn freely, to confirm the automated monitoring system of fan operation is operational and to confirm operational parameters such as amperage levels are within appropriate ranges; and

4. additional inspections during winter, as appropriate, to identify any significant accumulation of snow or ice requiring removal; and
 - iv. noting any deficiencies with the floor slab and SVIMS identified during any inspection, or at any other time; and
 - v. repairing promptly any deficiencies, including under the supervision of a Licensed Professional Engineer for a deficiency referred to in part iii above; and
 - vi. factors and considerations for determining if additional inspections or monitoring should be undertaken; and
 - vii. a contingency plan to be implemented in the event the deficiencies cannot be repaired promptly, including prompt notification of the Ministry of such deficiencies, along with operational monitoring results, any additional lines of evidence that suggest that soil vapour intrusion into the Building may occur, as determined by a Licensed Professional Engineer; and
 - viii. preparing a written report of all inspections, deficiencies, repairs and maintenance, and of implementation of the contingency plan if necessary, prepared by a Licensed Professional Engineer and to be retained by the Owner, and be available for inspection upon request by a Provincial Officer;
- and which are,
- ix. delivered to the Owner before use of all or any part of the Building begins, or within 90 days following completion of installation of the SVIMS, whichever is earlier; and
 - x. updated and delivered to the Owner within 30 days following making any alteration to the program.

4.2.10.1.12 OPERATIONAL MONITORING

Prepare and implement a written program for monitoring of the operation of the installed SVIMS, prepared by a Licensed Professional Engineer in consultation with a Qualified Person and to be retained by the Owner, and be available for inspection upon request by a Provincial Officer, to ensure the continued integrity and effectiveness of the SVIMS, including, at a minimum:

- i. procedures and timing for implementing the program, by a person meeting the qualifications as set out in the program; and
- ii. locations and description of the devices and equipment used, or tested, for each monitoring event; and

- iii. procedures for undertaking the testing, measurement and evaluation during a monitoring event, including calibration of operational, monitoring and other equipment, as appropriate; and
- iv. undertaking operational monitoring, including recording of the monitoring results, in accordance with the following:
 - 1. at least once before occupancy and as considered appropriate by a Licensed Professional Engineer after occupancy has commenced, vacuum testing of the soil vapour venting system by conducting pilot testing using temporary or permanently installed electrically powered fan(s), including with respect to the soil vapour venting layer being able to achieve a 6 Pascal lower air pressure differential objective below the foundation floor slab across the Building Area, relative to the indoor air pressure within the Building; and
 - 2. at least once before occupancy, quarterly during the first two years after occupancy has commenced and semi-annually thereafter measuring of the (lower) air pressure differential below the foundation floor slab across the Building Area, relative to the indoor air pressure within the Building, being achieved by the soil vapour venting layer, using all of the monitoring devices, including those referred to in part vi. of section g. above; and
- v. for each year, undertaking an assessment and preparing a written monitoring report, by a Licensed Professional Engineer in consultation with a Qualified Person and to be retained by the Owner, and be available for inspection upon request by a Provincial Officer, on the operational monitoring undertaken and its results and findings with respect to the integrity and effectiveness of the installed SVIMS, including taking into account previous monitoring undertaken, and with recommendations and any follow-up actions to be taken,
 - such as:
 - 1. the need to repeat or undertake additional or follow-up operational monitoring and assessment, or additional inspections; and
 - 2. changes to the frequency or nature of the monitoring; and
 - 3. the need to make repairs or changes to the design or operation of the SVIMS; and
 - 4. if necessary, implementation of the contingency plan in the event needed repairs or changes to the SVIMS cannot be made promptly, including notification of the Ministry if the operational monitoring results, inspections and any additional lines of evidence suggest that soil vapour intrusion into the Building may occur, as determined by a Licensed Professional Engineer; and

and which are,

- vi. delivered to the Owner before use of all or any part of the Building begins, or within 90 days following completion of installation of the SVIMS, whichever is earlier; and
- vii. updated and delivered to the Owner within 30 days of following making any alteration to the program.

4.2.10.1.13 INTRUSIVE ACTIVITIES CAUTION

Prepare and implement written procedures, prepared by a Qualified Person and to be retained by the Owner, and be available for inspection upon request by a Provincial Officer, for written and oral communication to all persons who may be involved in Intrusive Activities at the Property that may disturb an installed SVIMS, so as to ensure the persons are made aware of the presence and significance of the SVIMS and the Contaminants of Concern at the Property and the precautions to be taken to ensure the continued integrity of the SVIMS when undertaking the Intrusive Activities, and if damaged, to ensure the SVIMS is repaired promptly to the original design specifications, or if it cannot be repaired promptly, to ensure the contingency measures are implemented, and records kept, as specified in the inspection and maintenance program;

and which are,

- i. delivered to the Owner before any Intrusive Activities are undertaken at the Property; and
- ii. updated and delivered to the Owner within 30 days following making any alteration to the procedures.

4.2.10.1.14 BUILDING CODE

The Building complies with all applicable requirements of the Building Code, such as the provisions governing the following:

- i. soil gas control as set out in Division B, subsection 9.13.4. (Soil Gas Control) of the Building Code; and
- ii. protection against depressurization as set out in Division B, Article 9.32.3.8. (Protection Against Depressurization) of the Building Code; and
- iii. separation of air intakes and exhaust outlet openings and protection against contamination of the ventilation air by the exhaust air as set out in Division B, Article 9.32.3.12. (Outdoor Intake and Exhaust Openings) of the Building Code.

4.2.11 BUILDING WITH STORAGE GARAGE (INTERMITTENT 3.9 LITRES/SECOND OF VENTILATION) RISK MANAGEMENT MEASURE.

In accordance with Item 4.2.3 of the CPU, if the Building with Storage Garage RMM is to be utilized at the Property, the Owner shall ensure that no enclosed structures are constructed on the Property unless the building is equipped with a Building with Storage Garage (intermittent 3.9 Litres/second ventilation) designed by a Licensed Professional Engineer and signed off confirming that the design is suitable for its intended purpose. A

copy of the final design including drawings and specifications, as well as, the sign-off by the professional engineer shall be provided to the Director prior to implementation, including as-built drawings.

- a. The Storage Garage is constructed at or below the Grade of the Building; and
- b. The Storage Garage area covers the entire Building Area at Grade; and
- c. The Storage Garage complies with all applicable requirements of the Building Code, such as the provisions governing:
 - iv. design of a mechanical ventilation system as set out in Division B, Article 6.2.2.3. (Ventilation of Storage and Repair Garages) of the Building Code; and
 - ii. interconnection of air duct systems as set out in Division B, Sentence (2) of Article 6.2.3.9. (Interconnection of Systems) of the Building Code; and
 - iii. air leakage as set out in Division B, Section 5.4. (Air Leakage) of the Building Code; and
- d. The mechanical ventilation system for the storage garage is designed to provide, during operating hours a continuous supply of outdoor air at a rate of not less than 3.9 litres per second for each square metre of floor area or be activated on an as-needed basis by carbon monoxide or nitrogen dioxide monitoring devices as required by the Building Code.
- e. For an open air storage/parking garage (open sides to allow passive venting), the ventilation requirements above would not apply.

4.2.12 AMBIENT AIR QUALITY MONITORING

An outdoor ambient air quality monitoring program shall be completed post construction and prior to occupancy of the Site to assess the potential for vinyl chloride vapour migration from impacted ground water to the outdoor air as follows:

- i) One outdoor air quality sample in the vicinity of Ground Water Monitoring Well No. MW6-09 where the maximum vinyl chloride ground water concentration was identified shall be obtained utilizing TO-15 methodology or equivalent (collection of gas into prepared canisters) over a 24-hour duration.
- ii) The outdoor air quality analytical sample results shall be compared to the ministry's Health Based Indoor Air Criteria for residential Property Use for vinyl chloride of 0.13 ug/m³.
- iii) The results of the Ambient Air Quality Monitoring program shall be summarized into a final report and include a summary of the outdoor air monitoring plan, the analytical results of the outdoor air sampling, and a conclusion as to whether the outdoor air quality is safe for on-site receptors. A copy of this report shall be provided to the Director prior to occupancy of the Site.
- iv) If the ambient air quality sampling results indicate a vinyl chloride concentration

greater than the MECP Health Based Indoor Air Criterion (Residential), then the following actions will be undertaken:

- a. The Director will be notified within 3 calendar days from the identification of the exceedance.
- b. Resample ambient air to confirm the initial result within 7 days following the identification of the exceedance.
- c. Should the ambient air results from the resampling event confirm that there is a potential for ambient air concentrations to exceed their respective MECP Health Based Indoor Air Criteria (Residential), the owner will have a Qualified Person prepare and submit a Contingency Plan to the Director. This plan must provide recommendations for further sampling to identify the potential source/sources of vinyl chloride in the ambient air, and will include sampling at the property boundaries to evaluate the potential for off-Site contributing sources. The results of the follow-up monitoring must be provided to the Director within 30 days of completion of the sampling activities.
- d. If the follow up monitoring outlined above confirms the presence of an on-Site vinyl chloride source that is impacting ambient air, additional RMMs will be developed and provided to the Director for review. The additional RMMs could include measures to improve ventilation, measures to prevent vapours from reaching the ambient air, or measures to reduce contaminant concentrations in the subsurface.

4.2.13 INDOOR AIR/SUB-SLAB MONITORING PROGRAM

Prior to occupancy of each building and quarterly thereafter an indoor air/sub-slab vapour monitoring program shall be developed and implemented by an appropriately qualified person(s) (Qualified Person or certified hygienist) in order to assess the potential for migration of COC vapours from Impacted Soils and Impacted Ground Water located beneath the buildings into the indoor air environment. A copy of the monitoring program shall be provided to the Director prior to implementation.

The monitoring program shall include the following:

- 4.2.13.1 Indoor air samples and/or sub-slab vapour samples (i.e. beneath the floor slab of the building) shall be obtained utilizing TO-15 methodology or equivalent (collection of gas into prepared canisters) over a 24-hour duration and analyzed for the COCs outlined in Table J.1 "Summary of Indoor Air and Soil Vapour Criteria" of Schedule "C".
- 4.2.13.2 The indoor air samples and/or sub-slab vapour samples shall be compared to the Indoor Air or Soil Vapour Criteria as outlined in Table J.1 of Schedule "C".
- 4.2.13.3 If the indoor air/sub-slab sample concentrations obtained under Item 4.2.12.1 exceed the respective criteria as outlined in Table J.1 of Schedule "C", then the sample shall be re-sampled immediately (within two (2) business days) of receipt of the results.

- 4.2.13.4 If the results of the re-sample of the indoor air/sub-slab vapour confirm and exceedance of the respective criteria in Table J.1, the Owner shall notify the Director in writing within two (2) business days of receipt of the analytical results and provide to the Director a mitigation plan, which may include one or more of the following: maintenance, confirmatory sampling, additional indoor air/sub-slab monitoring, recommendations for modifying the vapour mitigation systems such as converting from a passive system to an active system.
- 4.2.13.5 If the results of any monitoring event exceed the criteria values in Table J.1, no un-authorized access to the area of the Building with the exceedance is allowed until it is confirmed that the indoor air/sub-slab vapour is below the trigger values in Table J.1.
- 4.2.13.6 Any proposed changes to the indoor air/sub-slab vapour monitoring program shall be submitted to the Director for approval, along with appropriate justification, prior to implementation.
- 4.2.13.7 A cost estimate for financial assurances to account for a minimum of 3 years of on-going monitoring and reporting for the indoor air/sub-slab monitoring programs to be implemented at the Site.

4.2.14 PROHIBITION ON GROUND WATER USE

Upon issuance of the CPU, the Owner shall take all actions necessary or advisable to prevent any use of ground water in or under the Property as a water source. The Owner shall,

- 4.2.14.1 Refrain from using ground water in or under the Property as a source of water; and
- 4.2.14.2 Except, as may be required for continued use as a monitoring well, as defined in the OWRA:
 - 4.2.14.2.1 Properly abandon on the Property any wells, as described or defined in the OWRA, according to the requirements set out in Regulation 903 of the Revised Regulations of Ontario 1990: (Wells), made under the OWRA; and,
 - 4.2.14.2.2 Refrain from constructing on the Property any wells as described or defined in the OWRA.

4.2.15 ANNUAL REPORT

Upon issuance of the CPU, the Owner shall prepare by March 31st of each year, an annual report documenting activities relating to the Risk Management Measures undertaken during the previous calendar year. A copy of this report shall be maintained on file by the Owner and shall be made available for review by a Provincial Officer upon request. The report shall be signed by a Qualified Person and

shall include, but not be limited to, the following minimum information requirements:

- 4.2.15.1 A copy of all records relating to the inspection and maintenance program for the barrier to the site soils.
 - 4.2.15.2 A copy of all records relating to the inspection and maintenance program for the SVIMS.
 - 4.2.15.3 A copy of all records related to pressure monitoring of the SVIMS.
 - 4.2.15.4 A copy of all records related to the Indoor Air/Sub-Slab monitoring program.
 - 4.2.15.5 A copy of all records relating to the soil and ground water management plan.
 - 4.2.15.6 A copy of all records relating to the health and safety plan.
 - 4.2.15.7 An evaluation and interpretation of the results of the monitoring programs.
 - 4.2.15.8 A copy of any signed as constructed plans for the SVIMS, Building with Storage Garage for any Building.
 - 4.2.15.9 A copy of signed site plans including any alterations.
 - 4.2.15.10 Confirmation that the Building(s) with Storage Garage covers the entire Building footprint and is ventilated in accordance to Item 4.2.11.
 - 4.2.15.11 Any recommendations on changes to the monitoring programs and risk management measures.
- 4.3 Refrain from using the Property for any of the following use(s): "Agriculture or Other" Property Uses as defined in O.Reg. 153/04.
- 4.4 Refrain from constructing the following building(s): No new enclosed structures on the Property unless the building is equipped with a SVIMS as per Item No. 4.2.10 and/or a storage garage as per Item No. 4.2.11 of the CPU.
- 4.5 Pursuant to the requirements of subsection 168.6(4) of the Act, the Owner shall ensure that every occupant of the Property is given notice that the Ministry has issued this CPU and that it contains the provisions noted above in Items 4.3 and 4.4. For the purposes of this requirement, an occupant means any person with whom the Owner has a contractual relationship regarding the occupancy of all or part of the Property for a period of greater than 30 days.

Site Changes

- 4.6 In the event of a change in the physical site conditions or receptor characteristics at the Property that may affect the Risk Management Measures and/or any underlying basis for the Risk Management Measures, forthwith notify the Director of such changes and the steps taken, to implement, maintain and operate any further Risk Management Measures as are necessary to prevent, eliminate or ameliorate any Adverse Effect that will result from the presence on, in or under the Property or the discharge of any Contaminant of Concern into the natural environment from the Property. An amendment to the CPU will be issued to address the changes set out in the notice received and any further changes that the Director considers necessary in the circumstances.

Reports

- 4.7 Retain a copy of any reports required under the CPU for a period of seven (7) years from the date the report is created and within ten (10) days of the Director or a Provincial Officer making a request for a report, provide a copy to the Director or Provincial Officer.

Property Requirement

- 4.8 For the reasons set out in the CPU and pursuant to the authority vested in me under subsection 197(1) of the Act, I hereby order you and any other person with an interest in the Property, before dealing with the Property in any way, to give a copy of the CPU, including any amendments thereto, to every person who will acquire an interest in the Property as a result of the dealing.

Certificate of Requirement

- 4.9 Within fifteen (15) days from the date of receipt of a certificate of requirement issued under subsection 197(2) of the Act, completed as outlined in Schedule "D", register the certificate of requirement on title to the Property in the appropriate land registry office.

Verification

- 4.10 Immediately after registration of the certificate of requirement, provide to the Director a copy of the registered certificate and of the parcel register(s) for the Property confirming that registration has been completed.

Owner Change

- 4.11 While the CPU is in effect, the Owner shall forthwith report in writing by email, to the Director at Chris.Hyde@Ontario.ca and the Ministry's Barrie District Office at Environment.Barrie@Ontario.ca any changes of ownership of the Property, except that while the Property is registered under the *Condominium Act, 1998*, S.O.1998 c.19, no notice shall be given of changes in the ownership of individual condominium units or any appurtenant common elements on the Property.

Financial Assurance

- 4.12 The Director has not included in the CPU a requirement that the Owner provide financial assurance at this time.

Part 5: General

- 5.1 The requirements of the CPU are severable. If any requirement of the CPU or the application of any requirement to any circumstance is held invalid, the application of such requirement to other circumstances and the remainder of the CPU are not affected.
- 5.2 An application under sub section 168.6(3) of the Act to,
- a. alter any terms and conditions in the CPU or impose new terms and conditions; or
 - b. revoke the CPU;
- shall be made in writing to the Director, with reasons for the request.
- 5.3 The Director may alter the CPU under subsections 132(2) or (3) of the Act to change a requirement as to financial assurance, including that the financial assurance may be increased or reduced or released in stages. The total financial assurance required may be reduced from time to time or released by an order issued by the Director under section 134 of the Act upon request and submission of such supporting documentation as required by the Director.
- 5.4 Subsection 186(3) of the Act provides that failure to comply with the requirements of the CPU constitutes an offence.
- 5.5 The requirements of the CPU are minimum requirements only and do not relieve the Owner from,
- a. complying with any other applicable order, statute, regulation, municipal, provincial or federal law; or
 - b. obtaining any approvals or consents not specified in the CPU.
- 5.6 Notwithstanding the issuance of the CPU, further requirements may be imposed in accordance with legislation as circumstances require. The Director shall also alter the CPU where the approval or acceptance of the Director is required in respect of a matter under the CPU and the Director either does not grant the approval or acceptance or does not grant it in a manner agreed to by the Owner.
- 5.7 In the event that, any person is, in the opinion of the Director, rendered unable to comply with any requirements in the CPU because of,
- a. natural phenomena of an inevitable or irresistible nature, or insurrections,
 - b. strikes, lockouts or other labour disturbances,
 - c. inability to obtain materials or equipment for reasons beyond your control, or

- d. any other cause whether similar to or different from the foregoing beyond your control,

the requirements shall be adjusted in a manner defined by the Director. To obtain such an adjustment, the Director must be notified immediately of any of the above occurrences, providing details that demonstrate that no practical alternatives are feasible in order to meet the requirements in question.

- 5.8 Failure to comply with a requirement of the CPU by the date specified does not absolve the Owner from compliance with the requirement. The obligation to complete the requirement shall continue each day thereafter.
- 5.9 In the event that the Owner complies with the provisions of Items 4.9 and 4.10 of the CPU regarding the registration of the certificate of requirement on title to the Property, and then creates a condominium corporation by the registration of a declaration and description with respect to the Property pursuant to the *Condominium Act, 1998*, S.O. 1998, c.19, and then transfers the ownership of the Property to various condominium owners, the ongoing obligations of the Owner under this CPU can be carried out by the condominium corporation on behalf of the new Owners of the Property.

Part 6: Hearing before the Ontario Land Tribunal

With respect to those provisions relating to my authority in issuing a certificate of property use under section 168.6 and an order under section 197 of the Act:

- 6.1 Pursuant to section 139 of the Act, you may require a hearing before the Ontario Land Tribunal (the "Tribunal"), if within fifteen (15) days after service on you of a copy of the CPU, you serve written notice upon the Director and the Tribunal.
- 6.2 Pursuant to section 142 of the Act, the notice requiring the hearing must include a statement of the portions of the CPU and the grounds on which you intend to rely at the hearing. Except by leave of the Tribunal, you are not entitled to appeal a portion of the CPU, or to rely on a ground, that is not stated in the notice requiring the hearing.
- 6.3 Service of a notice requiring a hearing must be carried out in a manner set out in section 182 of the Act and Ontario Regulation 227/07: *Service of Documents*, made under the Act as they may be amended from time to time. The contact information for the Director and the Tribunal is the following:

Registrar
Ontario Land Tribunal
655 Bay Street, Suite 1500
Toronto, ON, M5G 1E5
Email: OLT.Registrar@ontario.ca

and

Chris Hyde
Director, section 168.6 of the Act
Ministry of the Environment, Conservation and Parks
54 Cedar Pointe Drive, Unit 1201
Barrie, Ontario
L4N 5R7
Fax: 705-739-6440
Email: Chris.Hyde@Ontario.ca

The contact information of the Ontario Land Tribunal and further information regarding its appeal requirements can be obtained directly from the Tribunal at: Tel: (416) 212-6349 or Toll Free 1 (866) 448-2248 or www.olt.gov.on.ca

Further information regarding service can be obtained from e-Laws at www.ontario.ca/laws. Please note where service is made by mail, it is deemed to be made on the fifth day after the date of mailing and choosing service by mail does not extend any timelines.

- 6.4 Unless stayed by the Tribunal under section 143 of the Act, the CPU is effective from the date of issue.
- 6.5 If you commence an appeal before the Tribunal, under section 47 of the *Environmental Bill of Rights, 1993* (the "EBR"), you must give notice to the public in the Environmental Registry of Ontario. The notice must include a brief description of the CPU (sufficient to identify it) and a brief description of the grounds of appeal.

The notice must be delivered to the Minister of the Environment, Conservation and Parks who will place it on the Environmental Registry of Ontario. The notice must be delivered to the Minister of the Environment, Conservation and Parks at College Park, 5th Floor, 777 Bay Street, Toronto, Ontario M7A 2J3 by the earlier of:

- 6.5.1 two (2) days after the day on which the appeal before the Tribunal was commenced; and
- 6.5.2 fifteen (15) days after service on you of a copy of the CPU.
- 6.6 Pursuant to subsection 47(7) of the EBR, the Tribunal may permit any person to participate in the appeal, as a party or otherwise, in order to provide fair and adequate representation of the private and public interests, including governmental interests, involved in the appeal.
- 6.7 Pursuant to section 38 of the EBR, any person resident in Ontario with an interest in the CPU may seek leave to appeal the CPU. Pursuant to section 40 of the EBR, the application for leave to appeal must be made to the Tribunal by the earlier of:
- 6.7.1 fifteen (15) days after the day on which notice of the issuance of the CPU is given in the Environmental Registry of Ontario; and

6.7.2 if you appeal, fifteen (15) days after the day on which your notice of appeal is given in the Environmental Registry of Ontario.

Issued at xxxx this xth day of xxxx, 2022.

Draft

Chris Hyde
Director, section 168.6 of the Act

Draft

Schedule 'A'
Property Specific Standards

Table 1.1 "Recommended Property-Specific Standards for Residential Land Use"

Draft

Table 1.1

Recommended Property-Specific Standards for Residential Land Use
 Risk Assessment
 51, 53, 55, and 75 Bradford Street and 20 Checkley Street
 Barrie, Ontario

Environmental Media	Contaminant of Concern	Maximum Concentration	Units	Applicable Site Condition Standard ⁽¹⁾		Proposed Property-Specific Standard		Dominant Exposure Pathway ⁽²⁾	Basis	Risk Management Required ⁽³⁾	Potential for Off-Site Exceedance of SCS ⁽⁴⁾
				Standard	Units	Standard	Units				
Soil	Acetone	8.3	mg/kg	0.5	mg/kg	10	mg/kg	S-GWG	Maximum Concentration x 1.2	Yes(D)	No
	Benzene	0.28	mg/kg	0.02	mg/kg	0.34	mg/kg	S-IA	Maximum Concentration x 1.2	Yes(A, D)	No
	Chlorobenzene	0.10	mg/kg	0.05	mg/kg	0.12	mg/kg	S-GWG	Maximum Concentration x 1.2	Yes(D)	No
	Dichloroethylene, 1,2-cis-	53	mg/kg	0.05	mg/kg	64	mg/kg	S-GWI	Maximum Concentration x 1.2	Yes(A, B, D)	No
	Dichloroethylene, 1,2-trans-	0.52	mg/kg	0.05	mg/kg	0.62	mg/kg	S-IA	Maximum Concentration x 1.2	Yes(A, D)	No
	Ethylbenzene	0.62	mg/kg	0.05	mg/kg	0.74	mg/kg	S-GWI	Maximum Concentration x 1.2	Yes(D)	No
	Methyl Ethyl Ketone	1.1	mg/kg	0.5	mg/kg	1.3	mg/kg	S-IA	Maximum Concentration x 1.2	Yes(D)	No
	Toluene	1.5	mg/kg	0.2	mg/kg	1.8	mg/kg	S-Nose	Maximum Concentration x 1.2	Yes(D)	No
	Trichloroethylene	0.065	mg/kg	0.05	mg/kg	0.078	mg/kg	S-IA	Maximum Concentration x 1.2	Yes(A, D)	No
	Vinyl Chloride	0.05	mg/kg	0.02	mg/kg	0.060	mg/kg	S-IA	Maximum Concentration x 1.2	Yes(A, D)	No
	Xylenes, Total	4.1	mg/kg	0.05	mg/kg	4.9	mg/kg	S-IA	Maximum Concentration x 1.2	Yes(A, D)	No
	Methylnaphthalene, 2-(1-)	15	mg/kg	0.59	mg/kg	18	mg/kg	S-Nose	Maximum Concentration x 1.2	Yes(B, D)	No
	Acenaphthene	1.1	mg/kg	0.072	mg/kg	1.3	mg/kg	S-IA	Maximum Concentration x 1.2	Yes(B, D)	No
	Acenaphthylene	0.51	mg/kg	0.093	mg/kg	0.61	mg/kg	S-GWG	Maximum Concentration x 1.2	Yes(D)	No
	Anthracene	6.7	mg/kg	0.16	mg/kg	8	mg/kg	S-GWG	Maximum Concentration x 1.2	Yes(B, D)	No
	Benz[a]anthracene	19	mg/kg	0.36	mg/kg	23	mg/kg	Plants & Soil Org.	Maximum Concentration x 1.2	Yes(B, D)	No
	Benzo[a]pyrene	15	mg/kg	0.3	mg/kg	18	mg/kg	S1	Maximum Concentration x 1.2	Yes(B, C, D)	No
	Benzo[b]fluoranthene	17	mg/kg	0.47	mg/kg	20	mg/kg	S1	Maximum Concentration x 1.2	Yes(B, D)	No
	Benzo[ghi]perylene	8.4	mg/kg	0.68	mg/kg	10	mg/kg	Plants & Soil Org.	Maximum Concentration x 1.2	Yes(B, D)	No
	Benzo[k]fluoranthene	7.7	mg/kg	0.48	mg/kg	9.2	mg/kg	S1	Maximum Concentration x 1.2	Yes(B, D)	No
	Chrysene	14	mg/kg	2.8	mg/kg	17	mg/kg	Plants & Soil Org.	Maximum Concentration x 1.2	Yes(B, D)	No
	Dibenz[a,h]anthracene	2.6	mg/kg	0.1	mg/kg	3.1	mg/kg	S1	Maximum Concentration x 1.2	Yes(B, D)	No
	Fluoranthene	46	mg/kg	0.56	mg/kg	55	mg/kg	Mammals & Birds	Maximum Concentration x 1.2	Yes(B, D)	No
	Fluorene	1.5	mg/kg	0.12	mg/kg	1.8	mg/kg	S-GWG	Maximum Concentration x 1.2	Yes(D)	No
	Indeno[1,2,3-cd]pyrene	10	mg/kg	0.23	mg/kg	12	mg/kg	Plants & Soil Org.	Maximum Concentration x 1.2	Yes(B, D)	No
	Naphthalene	5.8	mg/kg	0.09	mg/kg	7	mg/kg	Plants & Soil Org.	Maximum Concentration x 1.2	Yes(B, D)	No
	Phenanthrene	18	mg/kg	0.69	mg/kg	22	mg/kg	Plants & Soil Org.	Maximum Concentration x 1.2	Yes(B, D)	No
	Pyrene	34	mg/kg	1	mg/kg	41	mg/kg	S1	Maximum Concentration x 1.2	Yes(B, D)	No
	Antimony	130	mg/kg	1.3	mg/kg	156	mg/kg	S1	Maximum Concentration x 1.2	Yes(B, C, D)	No
	Arsenic	35	mg/kg	18	mg/kg	42	mg/kg	S1	Maximum Concentration x 1.2	Yes(B, D)	No
	Barium	1,310	mg/kg	220	mg/kg	1,572	mg/kg	Mammals & Birds	Maximum Concentration x 1.2	Yes(B, D)	No
	Boron (total)	73	mg/kg	36	mg/kg	88	mg/kg	Mammals & Birds	Maximum Concentration x 1.2	Yes(D)	No
	Boron (Hot Water Soluble)	4.9	mg/kg	--	mg/kg	5.9	mg/kg	Plants & Soil Org.	Maximum Concentration x 1.2	Yes(B, D)	No
	Cadmium	5.8	mg/kg	1.2	mg/kg	7	mg/kg	S1	Maximum Concentration x 1.2	Yes(B, D)	No
Chromium Total	1,400	mg/kg	70	mg/kg	1,680	mg/kg	Mammals & Birds	Maximum Concentration x 1.2	Yes(B, D)	No	
Chromium VI	ND(4.0)	mg/kg	0.66	mg/kg	4.8	mg/kg	Plants & Soil Org.	Maximum Concentration x 1.2	Yes(D)	No	
Copper	290	mg/kg	92	mg/kg	348	mg/kg	Plants & Soil Org.	Maximum Concentration x 1.2	Yes(B, D)	No	
Cyanide (CN-)	1.7	mg/kg	0.051	mg/kg	2	mg/kg	S-GWG	Maximum Concentration x 1.2	Yes(B, D)	No	

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Table 1.1

Recommended Property-Specific Standards for Residential Land Use
 Risk Assessment
 51, 53, 55, and 75 Bradford Street and 20 Checkley Street
 Barrie, Ontario

Environmental Media	Contaminant of Concern	Maximum Concentration	Units	Applicable Site Condition Standard ⁽¹⁾	Units	Proposed Property-Specific Standard	Units	Dominant Exposure Pathway ⁽²⁾	Basis	Risk Management Required ⁽³⁾	Potential for Off-Site Exceedance of SCS ⁽⁴⁾
Soil (cont'd)	Lead	2,500	mg/kg	120	mg/kg	3,000	mg/kg	Mammals & Birds	Maximum Concentration x 1.2	Yes(B, D)	No
	Mercury	1.8	mg/kg	0.27	mg/kg	1.9	mg/kg	S-IA	Maximum Concentration x 1.2	Yes(A, D)	No
	Molybdenum	9.3	mg/kg	2	mg/kg	11	mg/kg	Mammals & Birds	Maximum Concentration x 1.2	Yes(B, D)	No
	Nickel	1,500	mg/kg	82	mg/kg	1,800	mg/kg	Plants & Soil Org.	Maximum Concentration x 1.2	Yes(B, C, D)	No
	Selenium	3.3	mg/kg	1.5	mg/kg	4	mg/kg	Mammals & Birds	Maximum Concentration x 1.2	Yes(B, D)	No
	Vanadium	110	mg/kg	86	mg/kg	132	mg/kg	Mammals & Birds	Maximum Concentration x 1.2	Yes(B, D)	No
	Zinc	830	mg/kg	290	mg/kg	996	mg/kg	Mammals & Birds	Maximum Concentration x 1.2	Yes(B, D)	No
	PHC F1 (C8-C10)	320	mg/kg	25	mg/kg	384	mg/kg	S-GW3	Maximum Concentration x 1.2	Yes(A, B, D)	No
	PHC F2 (C10-C16)	4,100	mg/kg	10	mg/kg	4,920	mg/kg	S-IA	Maximum Concentration x 1.2	Yes(A, B, D)	No
	PHC F3 (C16-C34)	19,000	mg/kg	240	mg/kg	22,800	mg/kg	Plants & Soil Org.	Maximum Concentration x 1.2	Yes(B, D)	No
	PHC F4 (C34-C50)	3,800	mg/kg	120	mg/kg	4,560	mg/kg	Plants & Soil Org.	Maximum Concentration x 1.2	Yes(B, D)	No
	Groundwater	Benzene	ND(1)	µg/L	0.5	µg/L	1.2	µg/L	Res GW2	Maximum Concentration x 1.2	Yes(A, D)
Bromo dichloromethane		2.1	µg/L	2	µg/L	2.5	µg/L	GW1	Maximum Concentration x 1.2	Yes(D)	Yes
Chlorobenzene		2.5	µg/L	0.5	µg/L	3	µg/L	GW1	Maximum Concentration x 1.2	Yes(D)	Yes
Chloroform		6.7	µg/L	2	µg/L	8	µg/L	Res GW2	Maximum Concentration x 1.2	Yes(D)	Yes
Dichloroethylene, 1,2-cis-		170	µg/L	1.6	µg/L	204	µg/L	GW1	Maximum Concentration x 1.2	Yes(D, E)	Yes
Ethylbenzene		ND(1)	µg/L	0.5	µg/L	1.2	µg/L	GW1	Maximum Concentration x 1.2	Yes(D)	Yes
Toluene		5.3	µg/L	0.8	µg/L	6.4	µg/L	GW1	Maximum Concentration x 1.2	Yes(D)	Yes
Trichloroethylene		ND(1)	µg/L	0.5	µg/L	1.2	µg/L	Res GW2	Maximum Concentration x 1.2	Yes(A, D)	Yes
Vinyl Chloride		310	µg/L	0.5	µg/L	372	µg/L	Res GW2	Maximum Concentration x 1.2	Yes(A, D, E)	Yes
Anthracene		0.44	µg/L	0.1	µg/L	0.53	µg/L	GW3	Maximum Concentration x 1.2	Yes(D)	Yes
Benzo [a]pyrene		0.032	µg/L	0.01	µg/L	0.038	µg/L	GW1	Maximum Concentration x 1.2	Yes(D, E)	Yes
Benzo [b]fluoranthene		0.16	µg/L	0.1	µg/L	0.19	µg/L	GW1	Maximum Concentration x 1.2	Yes(D, E)	Yes
Fluoranthene		0.70	µg/L	0.4	µg/L	0.84	µg/L	GW1	Maximum Concentration x 1.2	Yes(D, E)	Yes
Phenanthrene		1.4	µg/L	0.1	µg/L	1.7	µg/L	GW1	Maximum Concentration x 1.2	Yes(D, E)	Yes
Pyrene		0.48	µg/L	0.2	µg/L	0.58	µg/L	GW1	Maximum Concentration x 1.2	Yes(D)	Yes
Antimony		1.7	µg/L	1.5	µg/L	2	µg/L	GW1	Maximum Concentration x 1.2	Yes(D)	Yes
Beryllium		ND(1)	µg/L	0.5	µg/L	1.2	µg/L	GW1	Maximum Concentration x 1.2	Yes(D)	Yes
Copper		7.8	µg/L	5	µg/L	9.1	µg/L	GW3	Maximum Concentration x 1.2	Yes(D)	Yes
Cyanide (CN ⁻)		ND(10)	µg/L	5	µg/L	12	µg/L	GW3	Maximum Concentration x 1.2	Yes(D)	Yes
Lead		3.4	µg/L	1.9	µg/L	4.1	µg/L	GW1	Maximum Concentration x 1.2	Yes(D)	Yes

Table 1.1

Recommended Property-Specific Standards for Residential Land Use
 Risk Assessment
 51, 53, 55, and 75 Bradford Street and 20 Checkley Street
 Barrie, Ontario

Environmental Media	Contaminant of Concern	Maximum Concentration	Units	Applicable Site Condition Standard ⁽¹⁾	Units	Proposed Property-Specific Standard	Units	Dominant Exposure Pathway ⁽²⁾	Basis	Risk Management Required ⁽³⁾	Potential for Off-Site Exceedance of SCS ⁽⁴⁾
Groundwater (cont'd)	Silver	ND(0.5)	µg/L	0.3	µg/L	0.60	µg/L	GW3	Maximum Concentration x 1.2	Yes(D)	Yes
	Thallium	0.54	µg/L	0.5	µg/L	0.65	µg/L	GW1	Maximum Concentration x 1.2	Yes(D)	Yes
	Vanadium	11	µg/L	3.9	µg/L	13	µg/L	GW1	Maximum Concentration x 1.2	Yes(D, E)	Yes
	PHC F3 (C16-C34)	2,000	µg/L	500	µg/L	2,400	µg/L	1/2 solubility	Maximum Concentration x 1.2	Yes(D, E)	Yes
Sediment	Benzene	0.016	mg/kg	NV	mg/kg	0.019	mg/kg	AQU	Maximum Concentration x 1.2	No	No
	Trichloroethylene	0.016	mg/kg	NV	mg/kg	0.019	mg/kg	AQU	Maximum Concentration x 1.2	No	No
	Trichlorofluoromethane	2.0	mg/kg	NV	mg/kg	2.4	mg/kg	AQU	Maximum Concentration x 1.2	No	No
	Methylnaphthalene, 2-(1-)	0.55	mg/kg	NV	mg/kg	0.66	mg/kg	AQU	Maximum Concentration x 1.2	No	No
	Acenaphthene	1.0	mg/kg	NV	mg/kg	1.2	mg/kg	AQU	Maximum Concentration x 1.2	No	No
	Anthracene	2.3	mg/kg	0.22	mg/kg	2.7	mg/kg	AQU	Maximum Concentration x 1.2	No	Yes
	Benzo[a]anthracene	3.5	mg/kg	0.32	mg/kg	4.2	mg/kg	AQU	Maximum Concentration x 1.2	No	Yes
	Benzo[b]pyrene	3.0	mg/kg	0.37	mg/kg	3.5	mg/kg	AQU	Maximum Concentration x 1.2	No	Yes
	Benzo[k]fluoranthene	3.8	mg/kg	NV	mg/kg	4.5	mg/kg	AQU	Maximum Concentration x 1.2	No	No
	Benzo[ghi]perylene	1.6	mg/kg	0.17	mg/kg	2.0	mg/kg	AQU	Maximum Concentration x 1.2	No	Yes
	Benzo[j]fluoranthene	1.5	mg/kg	0.24	mg/kg	1.8	mg/kg	AQU	Maximum Concentration x 1.2	No	Yes
	Chrysene	3.6	mg/kg	0.34	mg/kg	4.3	mg/kg	AQU	Maximum Concentration x 1.2	No	Yes
	Dibenz[a,h]anthracene	0.47	mg/kg	0.06	mg/kg	0.57	mg/kg	AQU	Maximum Concentration x 1.2	No	Yes
	Fluoranthene	9.8	mg/kg	0.75	mg/kg	12	mg/kg	AQU	Maximum Concentration x 1.2	No	Yes
	Fluorene	1.5	mg/kg	0.19	mg/kg	1.8	mg/kg	AQU	Maximum Concentration x 1.2	No	Yes
	Indeno[1,2,3-cd]pyrene	1.9	mg/kg	0.2	mg/kg	2.3	mg/kg	AQU	Maximum Concentration x 1.2	No	Yes
	Naphthalene	0.62	mg/kg	NV	mg/kg	0.75	mg/kg	AQU	Maximum Concentration x 1.2	No	No
	Phenanthrene	10	mg/kg	0.56	mg/kg	12	mg/kg	AQU	Maximum Concentration x 1.2	No	Yes
	Pyrene	7.3	mg/kg	0.49	mg/kg	8.8	mg/kg	AQU	Maximum Concentration x 1.2	No	Yes
	Barium	79	mg/kg	NV	mg/kg	94	mg/kg	AQU	Maximum Concentration x 1.2	No	No
	Boron (total)	5.7	mg/kg	NV	mg/kg	6.8	mg/kg	AQU	Maximum Concentration x 1.2	No	No
	Boron (Hot Water Soluble)	0.75	mg/kg	NA	mg/kg	0.90	mg/kg	AQU	Maximum Concentration x 1.2	No	No
	Cadmium	1.2	mg/kg	0.6	mg/kg	1.4	mg/kg	AQU	Maximum Concentration x 1.2	No	Yes
	Chromium Total	32	mg/kg	26	mg/kg	39	mg/kg	AQU	Maximum Concentration x 1.2	No	Yes
	Chromium VI	0.46	mg/kg	NV	mg/kg	0.55	mg/kg	AQU	Maximum Concentration x 1.2	No	No
	Copper	72	mg/kg	16	mg/kg	86	mg/kg	AQU	Maximum Concentration x 1.2	No	Yes
	Lead	241	mg/kg	31	mg/kg	289	mg/kg	AQU	Maximum Concentration x 1.2	No	Yes
Vanadium	26	mg/kg	NV	mg/kg	31	mg/kg	AQU	Maximum Concentration x 1.2	No	No	
Zinc	350	mg/kg	120	mg/kg	420	mg/kg	AQU	Maximum Concentration x 1.2	No	Yes	

Table 1.1

Recommended Property-Specific Standards for Residential Land Use
Risk Assessment
51, 53, 55, and 75 Bradford Street and 20 Checkley Street
Barrie, Ontario

Environmental Media	Contaminant of Concern	Maximum Concentration	Units	Applicable Site Condition Standard ⁽¹⁾	Units	Proposed Property-Specific Standard	Units	Dominant Exposure Pathway ⁽²⁾	Basis	Risk Management Required ⁽³⁾	Potential for Off-Site Exceedance of SCS ⁽⁴⁾
Sediment (cont'd)	PHC F1 (C8-C10)	5.9	mg/kg	NV	mg/kg	7.1	mg/kg	AQU	Maximum Concentration x 1.2	No	No
	PHC F2 (C10-C16)	80	mg/kg	NV	mg/kg	96	mg/kg	AQU	Maximum Concentration x 1.2	No	No
	PHC F3 (C16-C34)	1,080	mg/kg	NV	mg/kg	1,296	mg/kg	AQU	Maximum Concentration x 1.2	No	No
	PHC F4 (C34-C50)	2,450	mg/kg	NV	mg/kg	2,940	mg/kg	AQU	Maximum Concentration x 1.2	No	No

Notes:

NA Not applicable.

NV No value derived.

(1) MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011 and updates.
Table 1: Full Depth Background Site Condition Standards, Residential/Parkland/Institutional/Industrial/Commercial/Community Property Use.

(2) Dominant Exposure Pathway (exposure pathway with the lowest MECP component value adjusted for site-specific characteristics):

1/2 solubility, half the solubility limit

GW1, potable water exposure

GW3, exposure to groundwater discharging to surface water

Mammals & Birds, wildlife direct contact and prey ingestion exposure to soil

Plants & Soil Org., plants and invertebrates direct contact exposure to soil

Res GW2, resident inhalation exposure to indoor air (from groundwater)

S1, resident direct contact exposure

S-GW1, exposure to soil COCs leaching to potable well

S-GW3, exposure to soil COCs leaching to groundwater which discharges to surface water

S-IA, resident inhalation exposure to indoor air (from soil)

S-Nose, exposure to an unacceptable odour from direct sniffing of soil

AQU, aquatic receptor direct contact exposure to sediment

(3) Risk Management Measures:

A: Building Restriction to mitigate receptor inhalation of indoor air

B: Physical Barrier to mitigate receptor direct contact to soil

C: Health and Safety Plan to mitigate receptor direct contact to soil during ground intrusive activities

D: No vegetable gardens to mitigate receptor exposure to soil and groundwater COCs accumulating in produce

E: No potable wells to mitigate receptor potable groundwater exposure

(4) For soil lateral migration of COCs is not expected to occur and therefore, there is no potential exceedance of the applicable SCS for off-site properties.

No: groundwater and sediment PSS less than site condition standard applicable to off-site properties (MECP Table 1 Standards are assumed)

Yes: groundwater and sediment PSS greater than site condition standard applicable to off-site properties (MECP Table 1 Standards are assumed)

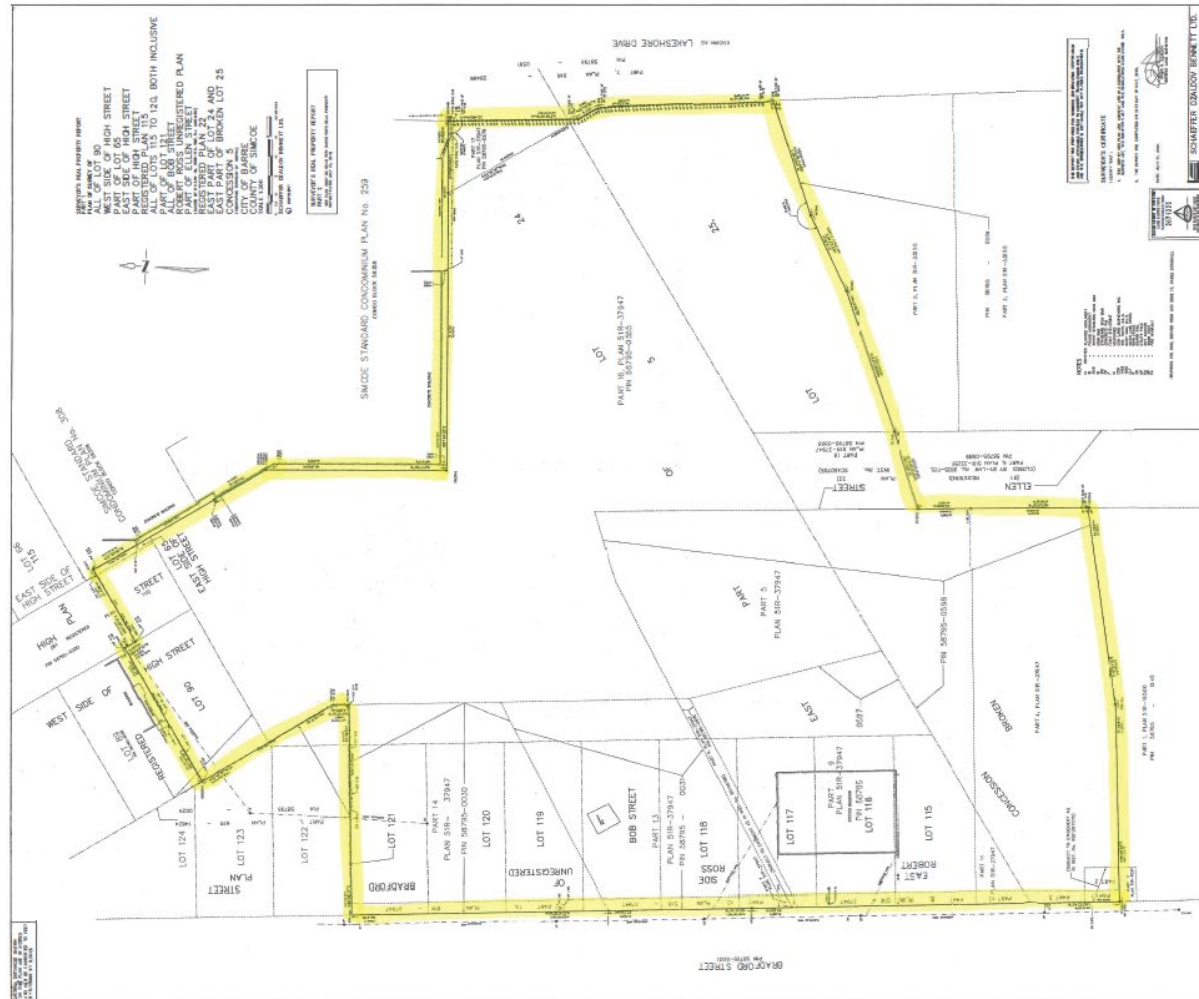
The potential for off-site human and ecological risks were qualitatively evaluated in the RAAs detailed in Sections 4.4.6 and 5.5.6 of the RA report.

Schedule 'B'

FIGURES

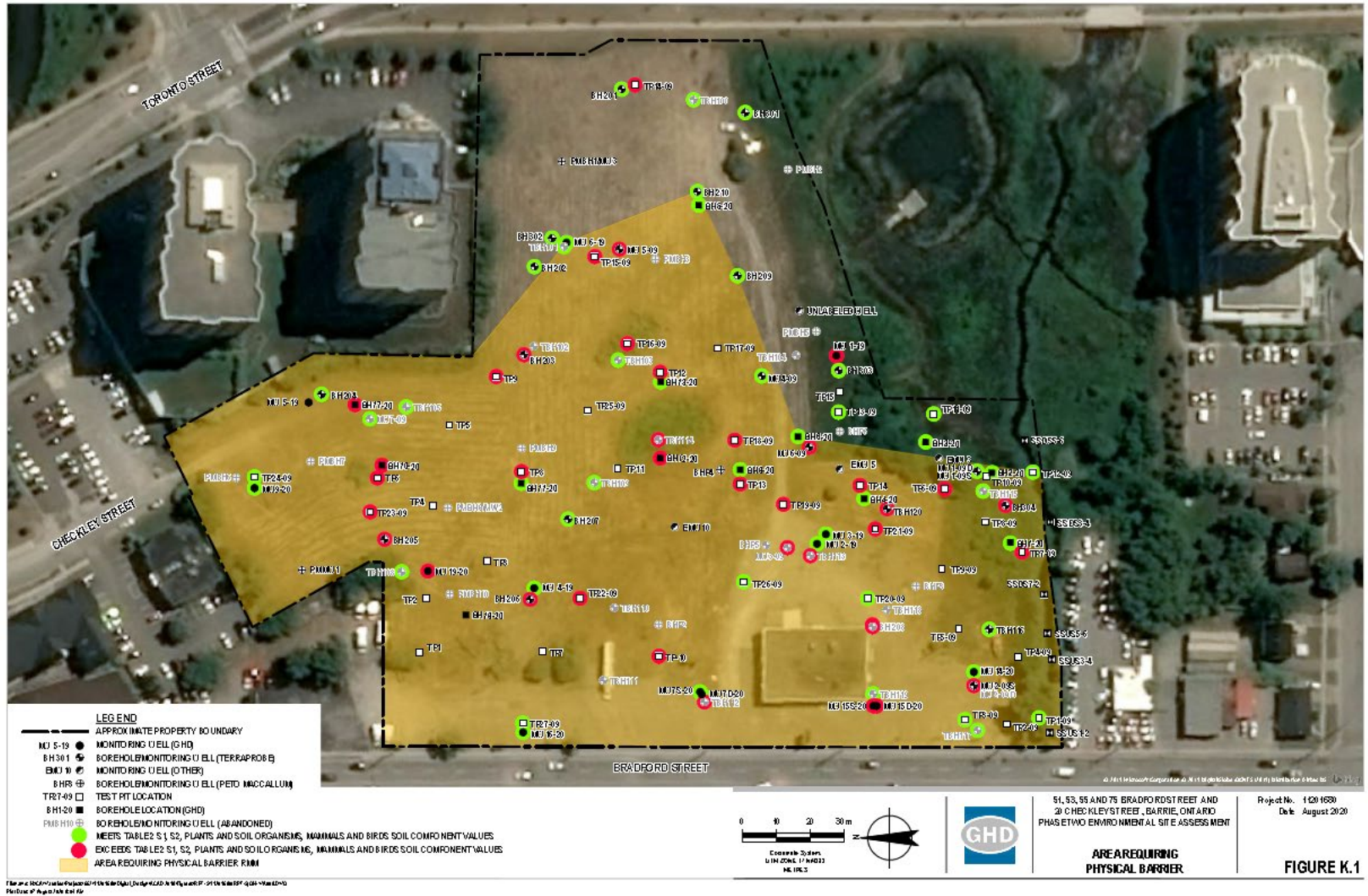
- Figure 1: "Surveyor's Real Property Report, Plan of Survey" dated July 31, 2019 by Schaeffer Dzaldov Bennett Ltd., Ontario Land Surveyors.
- Figure K.1 "Area Requiring a Physical Barrier" by GHD dated August 2020.
- Figure K.2 "Typical Physical Barrier Details" by GHD dated August 2020.
- Plan of Survey entitled "Area Requiring Physical Barrier" by Schaeffer Dzaldov Bennett Ltd., Ontario Land Surveyors dated September 9, 2021.
- Figure J.1 "Conceptual Vapour Mitigation System" by GHD dated July 2020.

Figure 1: "Surveyor's Real Property Report, Plan of Survey" dated July 31, 2019 by Schaeffer Dzaldov Bennett Ltd., Ontario Land Surveyors



Phase One ESA, Phase Two
 ESA, Risk Assessment and
 Record of Site Condition
 Property

Figure K.1 "Area Requiring a Physical Barrier" by GHD dated August 2020



Plan of Survey entitled "Area Requiring Physical Barrier" by Schaeffer Dzaldov Bennett Ltd., Ontario Land Surveyors dated September 9, 2021

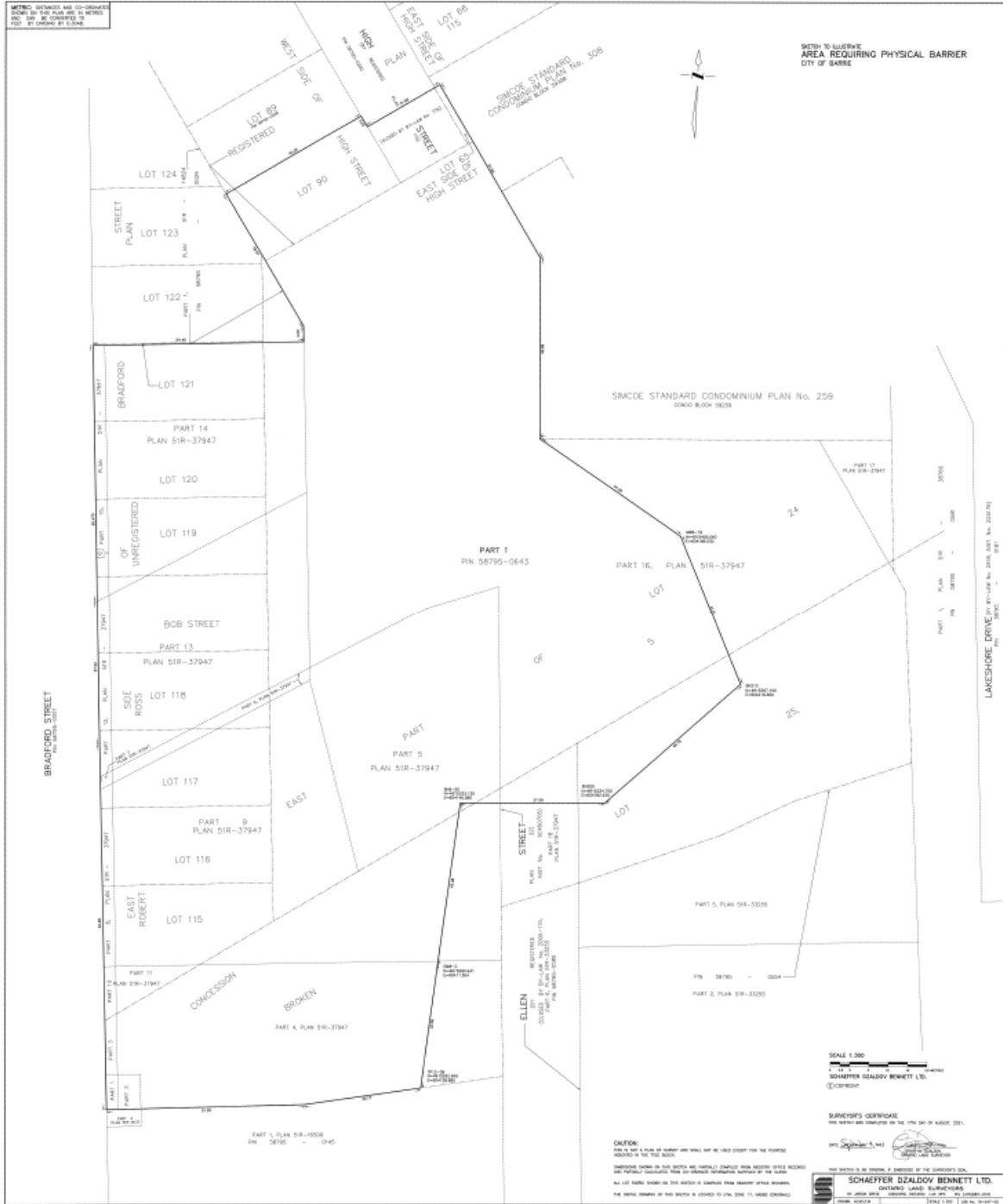
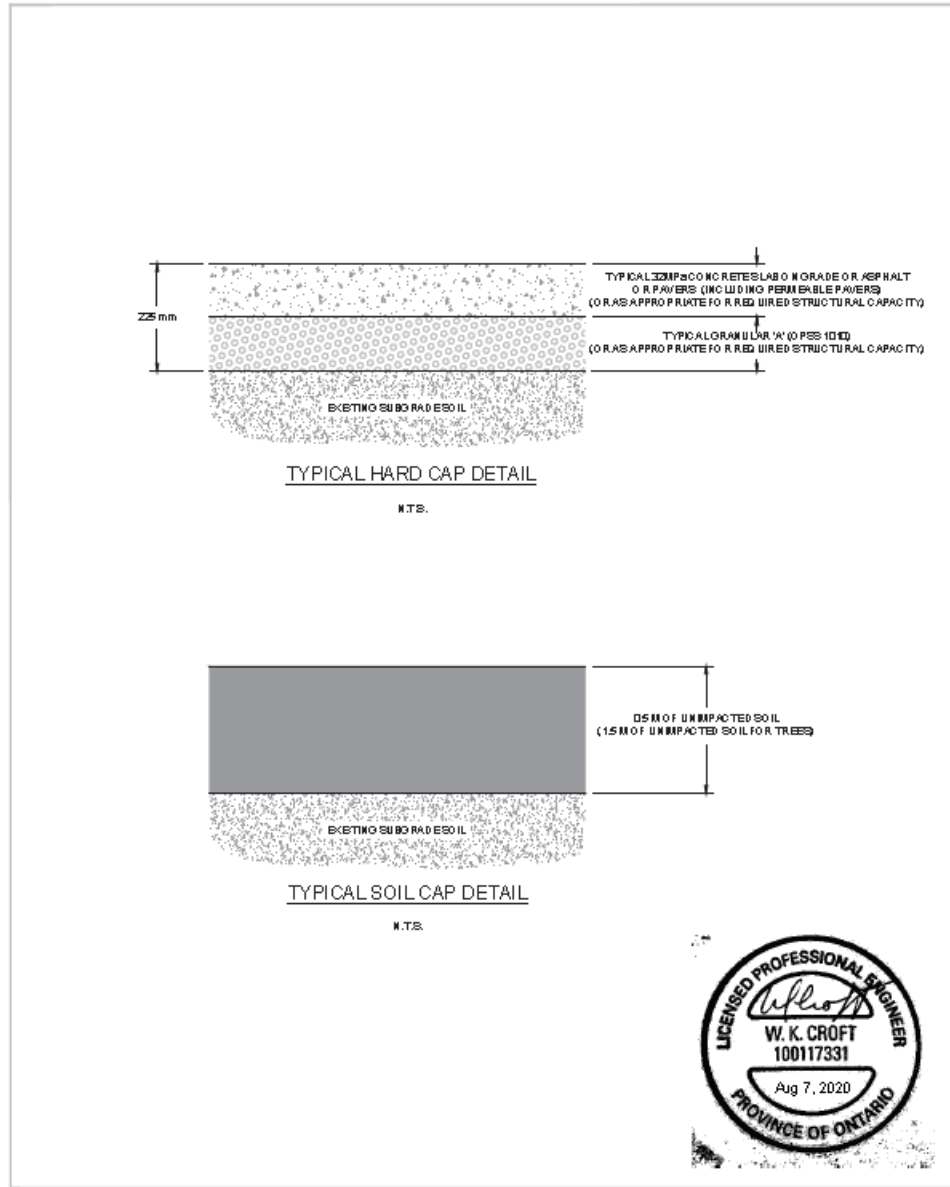


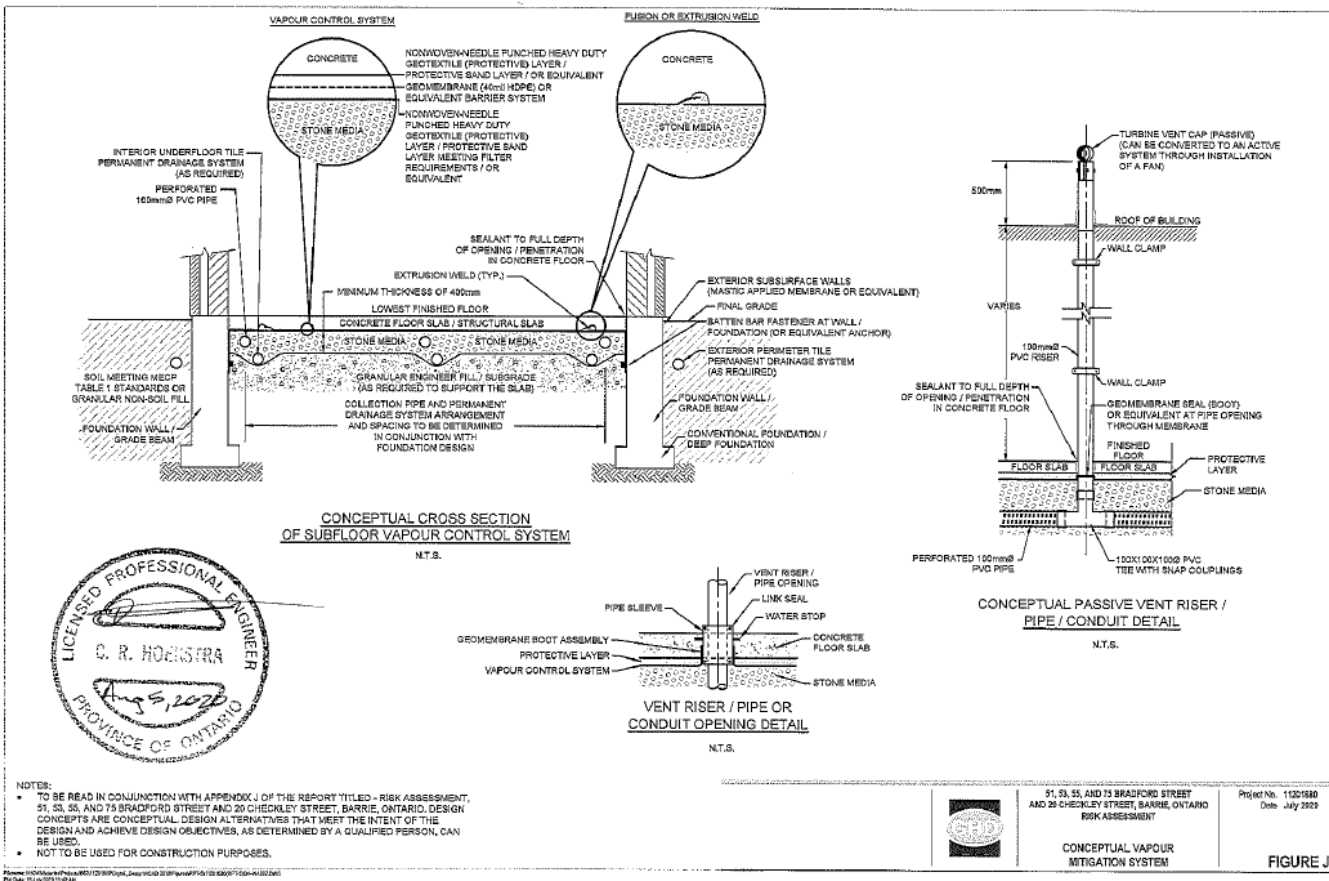
Figure K.2 "Typical Physical Barrier Details" by GHD dated August 2020



	<p>51, 53, 55, AND 75 BRADFORD STREET AND 20 CHECKLEY STREET, BARRIE, ONTARIO RISK ASSESSMENT</p>	<p>Project No. 11201630 Date August 2020</p>
<p>TYPICAL PHYSICAL BARRIER DETAILS</p>		<p>FIGURE K.2</p>

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Plot Date: 8/23/2020 1:23:54 PM

Figure J.1 "Conceptual Vapour Mitigation System" by GHD dated July 2020



Schedule 'C'

Table J.1

**Summary of Indoor Air and Soil Vapour Criteria
Risk Assessment
51, 53, 55, and 75 Bradford Street and 20 Checkley Street
Barrie, Ontario**

Parameter	Residential Land Use		Commercial Land Use	
	Health Based	Health Based	Health Based	Health Based
	Indoor Air Criteria ($\mu\text{g}/\text{m}^3$) ^{3,(1)}	Soil Vapour Criteria ($\mu\text{g}/\text{m}^3$) ^{3,(2)}	Indoor Air Criteria ($\mu\text{g}/\text{m}^3$) ^{3,(1)}	Soil Vapour Criteria ($\mu\text{g}/\text{m}^3$) ^{3,(2)}
Benzene	0.51	25	NA	NA
Cis-1,2-Dichloroethylene	13	626	43	10727
Trans-1,2-Dichloroethylene	13	626	NA	NA
Trichloroethylene	0.27	14	0.40	100
Vinyl Chloride	0.13	6.3	0.41	102
Xylenes	146	7300	NA	NA
Naphthalene	0.77	39	NA	NA
Mercury	0.019	0.94	NA	NA
PHC F1				
Aliphatic C6-C8	9594	479714	NA	NA
Aliphatic C>8-C10	521	26071	NA	NA
Aromatic C>8-C10	104	5214	NA	NA
PHC F2				
Aliphatic C>10-C12	521	26071	1788	446939
Aliphatic C>12-C16	521	26071	1788	446939
Aromatic C>10-C12	104	5214	358	89388
Aromatic C>12-C16	104	5214	358	89388

Notes:

- NA Parameter is only a concern for residential receptors; and therefore, is not applicable for commercial land use.
- $\mu\text{g}/\text{m}^3$ Micrograms per cubic metre.
- (1) Health Based Indoor Air Criteria (HBIAC) were obtained from the Ontario Ministry of the Environment, Conservation and Parks (MECP) Modified Generic Risk Assessment (MGRA) Model (MOECC, 2016).
For cis-1,2-dichloroethylene, trans-1,2-dichloroethylene was applied as a surrogate.
- (2) Health based soil vapour criteria were calculated by dividing the HBIAC by MECP default soil vapour attenuation factors of 0.02 and 0.004 for residential and commercial land use, respectively.

G HD 11201680 6)



Schedule 'D'
CERTIFICATE OF REQUIREMENT
s.197(2)
Environmental Protection Act

This is to certify pursuant to Item 4.8 of the Certificate of Property Use number **566-C82HQ4** issued by Chris Hyde, Director of the Ministry of the Environment, Conservation and Parks, under sections 168.6 and 197 of the *Environmental Protection Act* on xxxx, 2022 being a Certificate of Property Use and order under subsection 197(1) of the *Environmental Protection Act* relating to the property municipally known as **51, 53, 55, and 75 Bradford Street and 20 Checkley Street, Barrie, Ontario**, being all of Property Identifier Number (PIN) 58795-0643 (LT) (the "Property") with respect to the Risk Assessment and certain Risk Management Measures and other preventative measure requirements on the Property,

Greenwin Barrie Inc.

And

2714708 Ontario Inc.

and any other persons having an interest in the Property, are required before dealing with the Property in any way, to give a copy of the Certificate of Property Use, including any amendments thereto, to every person who will acquire an interest in the Property.

Under subsection 197(3) of the *Environmental Protection Act*, the requirement applies to each person who, subsequent to the registration of this certificate, acquires an interest in the real Property.