

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 **4212-DVHL8K**

Risk assessment number **6014-CKBLTB**

Owner: FS Orillia GP Inc. (Registered Owner)
141 Lakeshore Road East
Mississauga, Ontario
L5G 1E8

FS Orillia LP (Beneficial Owner)
by its general partner
FS Orillia GP Inc.
141 Lakeshore Road East
Mississauga, Ontario
L5G 1E8

Property: 70 Front Street North – South Parcel
Orillia, Ontario

with a legal description as follows:

Part of Water Lot in front of Lot 8, Concession 5 (South Orillia) designated
as Part 8, Plan 51R44546; City of Orillia

Being all of Property Identifier No. ("PIN") 58663-0090 (LT)

Part Lots 1, 2, 4, 5 and 6 East Side of Front Street Plan 8 (South Orillia), and
Part of Water Lot in front Lot 8 Concession 5 South Orillia, designated as
Parts 9, 10 and 11, Plan 51R44546; Subject to an easement over Part 10,
Plan 51R44546 as in R01368014; Subject to an easement over Part 11, Plan
51R44546 as in R0835075; City of Orillia

Being all of PIN 58663-0091 (LT)

All as outlined on Registered Plan 51R-44546 dated January 17, 2024 by
J.D. Barnes Limited, 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: Preparing and implementing a 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 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 Ground Water for as long as the Contaminants of Concern are present on the Property.
 - b. 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.

“Addendum #1” means the first addendum to the Risk Assessment as outlined in the email from Doug Foye, Senior Risk Assessor, Stantec Consulting Ltd. dated February 5, 2026.

“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 horizontal area of a Building at Grade within the outside surface of the exterior wall or walls.

“Building Code” means Ontario Regulation 163/24 (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.

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

“Certificate of Property Use” or “CPU” means this certificate of property use bearing the number **4212-DVHL8K** issued for the Property by the Director under section 168.6 of the Act, as it may be amended from time to time.

“Director” means a person in the Ministry appointed as a director for the purpose of issuing a certificate of property use under section 168.6 of the Act.

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

“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 6 “Generic Site Condition Standards for Shallow Soils in a Potable Ground Water Condition”** 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, sediment 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.

“Minister” means the minister of the Ministry.

“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, described in the “Owner” section on page 1 above, and any subsequent registered or beneficial owner 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 Risk Assessment and is described in the Property section on page 1 above, and as further shown in the Registered Plan 51R-44546 dated January 17, 2024 by J.D. Barnes Limited, Ontario Land Surveyors in Schedule B.

“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 requirements for the Property as set out in the Section 7 of the Risk Assessment, 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 are set out in Schedule A of this CPU.

“Provincial Officer” has the same meaning as in the Act, namely, a person who is designated by the Minister as a provincial officer for the purposes of the Act and the regulations.

“Qualified Person” means a person who meets the qualifications set out 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 **6014-CKBLTB** accepted by the Director on September 2, 2025 and set out in the following documents and information/correspondence:

- The report entitled “Narrative for Pre-Submission Form, South Parcel, 70 Front Street North Orillia, Ontario” by Stantec Consulting Ltd. (“Stantec”) dated October 13, 2022;
- The report entitled “Tier III Risk Assessment – South Parcel, 70 Front Street North, Orillia, Ontario” by Stantec dated April 14, 2023;
- The report entitled “Tier III Risk Assessment – South Parcel, 70 Front Street North, Orillia, Ontario” by Stantec dated June 6, 2024;
- The report entitled “Tier III Risk Assessment – South Parcel, 70 Front Street North, Orillia, Ontario” by Stantec dated February 12, 2025; and
- The report entitled “Tier III Risk Assessment – South Parcel, 70 Front Street North, Orillia, Ontario” by Stantec dated July 31, 2025.

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

“SVIMS” means soil vapour intrusion mitigation system.

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

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 of Concern 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 use: **residential, commercial and parkland use** as defined in O. Reg. 153/04.
- 3.2 The Contaminants on, in or under the Property that are present above the Residential/Parkland/Institutional Property Use Standards for ground water within **Table 6: Generic Site Condition Standards for Shallow Soils in a Potable Ground Water Condition** of the **Soil, Ground Water and Sediment Standards for Use under Part XV.1 of the Environmental Protection Act** published by the Ministry and dated April 15, 2011 for coarse textured soil or for which there are no such standards, are set out in the Risk Assessment and in Schedule A (Contaminants of Concern). The Property Specific Standards for these Contaminants of Concern are also set out in Schedule “A” which is attached to and forms part of the CPU.
- 3.3 The following Schedules form part of this CPU:

Schedule A – Property Specific Standards

- Table 1-1: Property Specific Standards (PSS) - Groundwater

Schedule B – Figures

- Registered Plan 51R-44546 dated January 17, 2024 by J.D. Barnes Limited, Ontario Land Surveyors.
- Drawing H-1 “Typical Layout and Details of Passive Soil Vapour Intrusion Mitigation System” by Stantec dated August 1, 2025
- Drawing H-2 “Typical Layout and Details of Passive Soil Vapour Intrusion Mitigation System with External Sampling Points” by Stantec dated August 1, 2025
- Drawing H-3 “Details of Sampling Pipe within a Passive Soil Vapour Intrusion Mitigation System” by Stantec dated August 1, 2025
- Drawing H-4 “Details of Utility Conduits Trench Dams and Anti-Seep Collars” by Stantec dated August 1, 2025
- Drawing H-5 “Details of Slab Penetrations” by Stantec dated August 1, 2025
- Drawing H-6 “Typical Layout and Details of Vapour Intrusion and Groundwater Controls for Elevation Pit” by Stantec dated August 1, 2025
- Drawing H-7 “Typical Layout and Details of Active Soil Vapour Intrusion Mitigation System with Aerated Subfloor” by Stantec dated March 13, 2026
- Drawing H-8 “Typical Layout and Details of Active Soil Vapour Intrusion Mitigation System with Aerated Subfloor and External Sampling Points” by Stantec dated February 5, 2026
- Drawing H-9 “Details of Sampling Pipe within Active Soil Vapour Intrusion Mitigation System with Aerated Subfloor” by Stantec dated March 13, 2026
- Figure No. 2a “Site Plan Showing Site Features” by Stantec

Schedule C – Tables

- Table 7-4: Recommended Sub-Slab Air Trigger Concentrations
- Table 7-5: Recommended Air Trigger Concentrations
- Table 7-7: Recommended Groundwater Trigger Concentrations

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 that has been identified in the Risk Assessment.
- 3.5 The Risk Assessment indicates the presence of Contaminants of Concern in groundwater 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 4.6 and 4.7 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:

4.2.1 BUILDING RESTRICTIONS

- 4.2.1.1 Refrain from constructing the following Building(s): No enclosed structures shall be constructed on the Property unless the Building is constructed as slab-on-grade with no below grade occupancy or below grade parking/storage structures and is equipped with a vapour mitigation system as per Item 4.2.5 "SOIL VAPOUR INTRUSION MITIGATION SYSTEM (SVIMS)".

- 4.2.1.2 The final floor slab elevation for the future lot-line townhome and live/work unit Building(s) at the Property shall be 221.15 metres above sea level or above.
- 4.2.1.3 The final floor slab elevation for the future multi-storey commercial/residential condominium Building at the Property shall be 221.30 metres above sea level or above (excluding the elevation pit).

4.2.2 LAND USE RESTRICTIONS

- 4.2.2.1 Refrain from planting any plants or vegetable gardens that are intended for human consumption on the Property where post-development grade is less than 1.5 m above the groundwater table except for those planted in above ground containers that have no contact with the soils on the Property.
- 4.2.2.2 Refrain from installing any geothermal wells at the Property without prior written approval by the Director. The design of any proposed geothermal system shall be prepared by a Qualified Person and shall be submitted to the Director for approval prior to implementation. The geothermal system shall be designed to mitigate any potential for downward migration of Contaminants of Concern and also be protective of the potential for vapour migration to indoor air at the Property. If approved, as-built drawings of the installation shall be provided to the Director within 90 days following installation.
- 4.2.2.3 Refrain from using the Property for any of the following use(s): "Agriculture or Other" Property Uses as defined in O. Reg. 153/04 and the ground water use restriction as per Item 4.2.8 of the CPU.

4.2.3 GROUND WATER MANAGEMENT PLAN

Upon issuance of the CPU, prior to initiating any Intrusive Activities, prepare and implement a written 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 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 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 manage storm water, ground water, and any water from dewatering at the Property to prevent the movement of 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 including sewer use by-laws, measures such as silt fences, filter socks for catch-basins and utility covers, and provision for pre-treatment of discharges, if needed; and

- c. recording, in writing, 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. characterization results any water from dewatering;
 - v. management activities for any ground water from dewatering;
 - vi. names and contact information for the Qualified Persons and on-site contractors involved in the Intrusive Activities;
 - vii. names and contact information for any haulers and receiving sites for any ground water removed from the Property; and
 - viii. any complaints received relating to the Intrusive Activities, including the soil, storm water and any ground water management activities;
- and which is,
- a) delivered to the Owner before any Intrusive Activities are undertaken at the Property; and
 - b) updated and delivered to the Owner within 30 days following making any alteration to the plan.

4.2.4 HEALTH AND SAFETY PLAN

Upon issuance of the CPU, 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, ground water ingestion and inhalation of vapour, 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/trenches 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,

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

4.2.5 SOIL VAPOUR INTRUSION MITIGATION SYSTEM (SVIMS)

In accordance with Item 4.2.1.1 of the CPU, 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 two generic vapour control systems for this Property is illustrated in the following figures:

- SVIMS Design Option 1:
 - Drawing H-1 “Typical Layout and Details of Passive Soil Vapour Intrusion Mitigation System” by Stantec dated August 1, 2025;
 - Drawing H-2 “Typical Layout and Details of Passive Soil Vapour Intrusion Mitigation System with External Sampling Points” by Stantec dated August 1, 2025;
 - Drawing H-3 “Details of Sampling Pipe within a Passive Soil Vapour Intrusion Mitigation System” by Stantec dated August 1, 2025;
 - Drawing H-6 “Typical Layout and Details of Vapour Intrusion and Groundwater Controls for Elevation Pit” by Stantec dated August 1, 2025;
- Drawing H-4 “Details of Utility Conduits Trench Dams and Anti-Seep Collars” by Stantec dated August 1, 2025;
- Drawing H-5 “Details of Slab Penetrations” by Stantec dated August 1, 2025;
- SVIMS Design Option 2:
 - Drawing H-7 “Typical Layout and Details of Active Vapour Soil Vapour Intrusion Mitigation System with Aerated Subfloor” by Stantec dated March 13, 2026;
 - Drawing H-8 “Typical Layout and Details of Active Vapour Soil Vapour

- Intrusion Mitigation System with Aerated Subfloor and External Sampling Points” by Stantec dated February 5, 2026; and
- Drawing H-9 “Details of Sampling Pipe within Active Vapour Soil Vapour Intrusion Mitigation System with Aerated Subfloor” by Stantec dated March 13, 2026.

4.2.5.1 DESIGN, INSTALLATION AND OPERATION

Design, install and operate a SVIMS for the Building, designed by an appropriately qualified 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 in accordance with either of the conceptual designs detailed in Section 7 of the Risk Assessment, Addendum #1 to the Risk Assessment and Drawings H-1 to H-9 in Schedule B, 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:

4.2.5.1.1 SYSTEM REQUIREMENTS

SVIMS Design Option #1: Should the Passive SVIMS detailed in Section 7.2.1 of the Risk Assessment be the preferred approach, the Passive SVIMS is to:

- i. be designed, installed and operated with the objective of achieving during all seasons a 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, to prevent potential depressurization induced back drafting and spillage of combustion products from vented combustion appliances that may be in the Building, in the event conversion to operation as an Active SVIMS is necessary.

SVIMS Design Option #2: Should the Active SVIMS with an aerated subfloor detailed in Addendum #1 be the preferred approach, the Active SVIMS with an aerated subfloor 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. have in place, measures, as appropriate based on an assessment carried out in accordance with ASTM E1998, to prevent potential depressurization induced back drafting and spillage of combustion products from vented combustion appliances that may be in the Building, due to the use of electrical fan powered vents.

4.2.5.1.2 SUB-SLAB FOUNDATION LAYER

Throughout the Building Area below the foundation floor slab, a sub-slab foundation layer, above media 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.

4.2.5.1.3 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.

4.2.5.1.4 SOIL VAPOUR BARRIER MEMBRANE

For the passive SVIMS (SVIMS Design Option #1), 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;
- ii. has a permeance factor of <0.1 perms as determined by ASTM standard E96, with consideration of the selection process discussed in ASTM standard E1643; and
- iii. 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.

Building(s) designed with an Active SVIMS and an aerated subfloor (SVIMS Design Option #2) do not require a continuous leak free soil vapour barrier membrane.

4.2.5.1.5 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 riser for a Passive SVIMS; or an electrical powered fan on each vent riser for an

Active SVIMS with an aerated subfloor, and an automated monitoring system of fan operation which remotely detects and indicates system malfunctions.

4.2.5.1.6 MONITORING DEVICES

Monitoring devices 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 qualified Licensed Professional Engineer that designed the SVIMS in consultation with the Qualified Person, taking into account factors such as the type of Building (such as external connections or remote sensors for the live/work units and residential townhomes in accordance with Sections 7.2.1.1 and 7.4.1.1 of the Risk Assessment), Building Area and the design and configuration of the Building foundation.

4.2.5.1.7 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.

4.2.5.1.8 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;
- 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;
- c. P-traps (water-filled U-bends) must be used where sewer pipes connect with the Building;
- d. watertight shoring must be used at trench walls, supplemented by lining the bottom of the trench with impermeable liner or low-permeability materials;
- e. gasketed pipe connections must be used for all open void utilities (e.g., storm sewer, sanitary sewer) on the Property to mitigate against vapour migration into and through the utility pipes;
- f. if a sump is required for dewatering purposes, the sump must be sealed to prevent vapours from entering the building and should be housed within a room that can be directly ventilated to the exterior of the building. Should access to the sump require removal of seals, the room shall be actively ventilated on a continuous basis;

- g. concrete structure(s) or box culvert(s) must be used as a utility corridor. Entry to the concrete culvert or box culvert will require confined space entry equipment however would provide a corridor for utility installation and maintenance free of COCs; and
- h. if an elevator pit is installed at an elevation below the floor slab, the elevator pit shall be designed to meet the waterproofing requirements in Section 7.2.1.1 of the Risk Assessment.

4.2.5.2 QUALITY ASSURANCE / QUALITY CONTROL

Prepare and implement a quality assurance and quality control program, prepared by the Licensed Professional Engineer that designed the SVIMS in consultation with 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 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;
- ii. daily inspections of the installation of the SVIMS, including of the quality assurance and quality control measures and procedures undertaken by the installer;
- iii. leak testing (via a shut-in test) of the sampling tubes of all external sub-slab vapour probes that are to be installed within the residential townhomes or live/work units in accordance with Section 7.4.1.1 of the Risk Assessment. This leak testing is required during the construction phase of the SVIMS and prior to the installation of the sub-slab vapour probes;
- iv. for the passive SVIMS (i.e., SVIMS Design Option #1), undertaking, at a minimum, 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;
 - 2. smoke testing of the soil vapour barrier membrane, or equivalent alternative testing method that provides comparable results;
 - 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;
 - 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;

- v. noting any deficiencies in the materials or installation of the SVIMS;
 - vi. ensuring the prompt repair of any deficiencies, to the design specifications; and
 - vii. 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,
- a) delivered to the Owner before installation of the SVIMS begins; and
 - b) updated and delivered to the Owner within 30 days of making any alteration to the program.

4.2.5.3 AS CONSTRUCTED PLANS

Prepare as constructed plans and detailed design specifications of the SVIMS, including any verification and QA/QC reports, prepared by the Licensed Professional Engineer that designed the SVIMS, along with a statement from the qualified Licensed Professional Engineer that the vapour mitigation system has been installed in accordance with the design requirements/specifications in Section 7 of the Risk Assessment and Addendum #1, 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.

4.2.5.4 INSPECTION AND MAINTENANCE

Prepare and implement a written inspection and maintenance program, prepared by the Licensed Professional Engineer that designed the SVIMS 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;
- ii. maintenance and calibration of operational, monitoring and other equipment, as appropriate. Where applicable, remote monitoring equipment will be maintained and calibrated in accordance with manufacturer's requirements and will be installed with a design that allows access and calibration from a location external to residentially occupied areas;
- iii. details regarding access agreements to residential townhomes and live/work units in which indoor components of the SVIMS are located, should access to the building interior be required to inspect, calibrate, replace or maintain operational or monitoring equipment;
- iv. inspections of the SVIMS including:
 1. inspections 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 at the following frequencies:
 - a) pre-occupancy and semi-annual for the multi-storey commercial/residential condominium; and
 - b) pre-occupancy for the residential townhomes and live/work units, and semi-annually thereafter for any areas that are visible outside of the Building(s) only;
 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;
 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;
- v. noting any deficiencies with the floor slab and SVIMS identified during any inspection, or at any other time;
- vi. repairing promptly any deficiencies, including under the supervision of a Licensed Professional Engineer for a deficiency referred to in part iii above;
- vii. factors and considerations for determining if additional inspections or monitoring should be undertaken;

- viii. 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
- ix. 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,

- a) 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
- b) updated and delivered to the Owner within 30 days following making any alteration to the program.

4.2.5.5 OPERATIONAL MONITORING

Prepare and implement a written program for monitoring of the operation of the installed SVIMS, prepared by the Licensed Professional Engineer that designed the SVIMS 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;
- ii. locations and description of the devices and equipment used, or tested, for each monitoring event, in accordance with the minimum requirements set out in Sections 7.2.1.1 and 7.4.1.1 of the Risk Assessment and Addendum #1. Internal sampling devices must be installed in the multi-storey commercial/residential condominium building but external sampling devices (refer to Drawings H-3 and H-9) may be used for the residential townhomes and live/work units;
- iii. procedures for undertaking the testing, measurement and evaluation during a monitoring event, including calibration of operational, monitoring and other equipment, as appropriate and in accordance with the minimum requirements set out in Section 7.4.1.1 of the Risk Assessment and Addendum #1 (i.e., different procedures for external sampling devices and internal sampling devices);
- iv. undertaking operational monitoring, including recording of the monitoring results, in accordance with the following:

- 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
 - at least once before occupancy, quarterly during the first year 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 Item 4.2.5.1.6 of the CPU;
- v. In the event that the pressure differential target outlined in Item 4.2.5.5 iv. is not achieved, but the sub-slab or indoor air concentrations are below the trigger concentrations, the frequency of sub-slab and/or indoor air sampling under Item 4.2.6.1 and the frequency of the pressure differential monitoring under Item 4.2.5.5 iv. shall be reset to quarterly for one year and semi-annual thereafter;
- vi. In the event that the pressure differential target outlined in Item 4.2.5.5 iv. is not achieved and all maintenance issues have been addressed, the Owner shall notify the Director in writing within three (3) business days of assessing the pressure differential and provide to the Director within thirty (30) days a mitigation plan, which may include one or more of the following: a full inspection and repair, confirmatory sampling, additional indoor air/sub-slab monitoring, recommendations for modifying the vapour mitigation systems such as converting to an active system and/or recommendations on whether further contingency measures are needed; and
- vii. 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;
2. changes to the frequency or nature of the monitoring;

3. the need to make repairs or changes to the design or operation of the SVIMS;
4. the need to make repairs or changes to the design or operation of any pressure differential monitoring devices and sub-slab vapour probes. All external sub-slab sampling devices that fail and cannot be repaired shall be replaced with internal sampling devices and/or indoor air monitoring;
5. 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,

- a) 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
- b) updated and delivered to the Owner within 30 days of following making any alteration to the program.

4.2.5.6 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.

4.2.5.7 BUILDING CODE

Construct the Building in accordance with all applicable requirements of the Building Code, including the requirements governing the following:

- i. soil gas control as set out in Division B, subsection 9.13.4. (Soil Gas Control) of the Building Code;
- 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 9.32.3.13. (Outdoor Intake and Exhaust Openings) of the Building Code.

4.2.6 INDOOR AIR/SUB-SLAB MONITORING PROGRAM

Prior to occupancy of any future Building(s) and following occupancy, 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 Ground Water located beneath the Buildings into the indoor air environment. A copy of the monitoring programs shall be provided to the Director prior to implementation.

The monitoring program shall include the following:

- 4.2.6.1 Subject to Item 4.2.7, the frequency of the indoor air/sub-slab monitoring events shall be as follows:
 - Upon completion of construction of the Building(s) but prior to occupancy, one (1) round of indoor air/sub-slab vapour monitoring shall be completed;
 - After occupancy, the indoor air/sub-slab vapour monitoring program shall be completed quarterly for the first year, and semi-annual thereafter.
- 4.2.6.2 Indoor air/Sub-slab vapour samples shall be obtained utilizing TO-15 methodology or equivalent (collection of gas into prepared canisters) or TO-17 methodology or equivalent (collection of gas into absorbent tubes) over a 24-hour duration and analyzed for the volatile COCs outlined in Table 7-4 "Recommended Sub-Slab Air Trigger Concentrations" in Schedule "C". The monitoring shall be completed during periods that are reflective of seasonal variability (i.e. spring, summer, fall, and winter) with at least one sample being obtained during the winter and the summer periods during the quarterly and semi-annual monitoring events.
- 4.2.6.3 If the indoor air/sub-slab vapour sample concentrations obtained under Item 4.2.6.1, 4.2.7.3 or 4.2.7.5 exceed the respective criteria outlined in Tables 7-4 and 7-5 of Schedule "C", the Owner shall: notify the Director in writing within three (3) business days of receipt of the analytical results; complete an evaluation to determine if there are confounding factors not associated with vapour intrusion from the subsurface that may have influenced the results; and if no confounding factors are identified, complete two additional sampling rounds within the building(s) with the first re-sampling event to be completed within ten (10) business days of receipt of the original analytical results. The second follow up sampling event shall be completed within ten

(10) business days of receipt of the analytical results for the first re-sampling event. The Director is to be provided notice of the results of each sampling event within three (3) business days of receipt of the analytical results. Note that live/work units are considered residential for the purposes of sub-slab vapour and indoor air monitoring.

- 4.2.6.4 If confounding factors are identified during the assessment identified in Item 4.2.6.3, the Owner shall notify the Director of the results of the assessment and provide recommendations on how to address the elevated indoor air/sub-slab vapour sampling results, including resampling following any mitigation measures.
- 4.2.6.5 If the results of the second re-sampling event for the indoor air and/or sub-slab vapour confirm an exceedance of the respective criteria in Tables 7-4 and 7-5 of Schedule "C", the Owner shall notify the Director in writing within three (3) business days of receipt of the analytical results and provide to the Director within fourteen (14) days 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 to an active system and/or recommendations on whether further contingency measures are needed.
- 4.2.6.6 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.

4.2.7 GROUND WATER MONITORING PROGRAM

Upon issuance of the CPU, a ground water monitoring program shall be prepared and implemented by a Qualified Person in order to assess any potential changes in the groundwater elevations and concentrations of Contaminants of Concern, and to assess the potential for off-site migration of COCs to cause an off-site Adverse Effect.

- 4.2.7.1 Ground water monitoring shall be implemented on a quarterly basis for the first year, and semi-annually thereafter at the following monitoring wells: MW12-18, MW16A-18, and MW22-08C, as shown on Figure No. 2a "Site Plan Showing Site Features" by Stantec in Schedule B.
- 4.2.7.2 Ground water samples shall be analyzed for the ground water COCs as identified in Table 1-1 "Proposed Property Specific Standard (PSS) – Groundwater" in Schedule "A" of the CPU and the analytical results shall be compared to the Property Specific Standards as identified in Table 1-1.
- 4.2.7.3 If the analytical results for the ground water monitoring program exceed the groundwater trigger concentrations as identified in Table 7-7 "Recommended Groundwater Trigger Concentrations" of Schedule "C", the Owner shall notify the Director in writing of the exceedance(s) within 3 business days of receipt of the analytical results and a round of sub-slab vapour and/or indoor air

sampling will be conducted within 10 days. In addition, the frequency of groundwater monitoring and sampling program under Item 4.2.7.1 and the sub-slab and/or indoor air sampling under Item 4.2.6.1 shall be reset to quarterly for one year and semi-annual thereafter. If the round of sub-slab vapour and/or indoor air sampling meets applicable trigger concentrations in Tables 7-4 and 7-5 of Schedule "C", no further action is required. If the additional round of sub-slab vapour and/or indoor air sampling exceeds a trigger concentration in Tables 7-4 and 7-5 of Schedule "C", the Owner shall notify the Director in writing of the exceedance(s) within 3 business days of receipt of the analytical results and carry out the actions required by Items 4.2.6.3 to 4.2.6.5, as applicable.

- 4.2.7.4 Groundwater elevations shall be measured at each monitoring well listed in Item 4.2.7.1.
- 4.2.7.5 If a groundwater elevation is measured to be shallower than the trigger groundwater elevation of 1.40 metres below ground surface and one or more of the corresponding groundwater COC concentration's exceeds **Table 6 "Generic Site Condition Standards for Shallow Soils in a Potable Ground Water Condition"** 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, the Owner shall notify the Director in writing of the exceedance within 3 business days of the measurement and a round of sub-slab vapour and/or indoor air sampling will be conducted within 10 days. In addition, the frequency for the groundwater monitoring and sampling program and the sub-slab and/or indoor air sampling will be reset to quarterly for one year, and semi-annually thereafter. If the round of sub-slab vapour and/or indoor air sampling meets applicable trigger concentrations in Tables 7-4 and 7-5 of Schedule "C", no further action is required. If the additional round of sub-slab vapour and/or indoor air sampling exceeds a trigger concentration in Tables 7-4 and 7-5 of Schedule "C", the Owner shall notify the Director in writing of the exceedance(s) within 3 business days of receipt of the analytical results and carry out the actions required by Items 4.2.6.3 to 4.2.6.5, as applicable.
- 4.2.7.6 Should any monitoring well listed in Item 4.2.7.1 become damaged or destroyed or require decommissioning to accommodate building construction, that monitoring well will be repaired or replaced by a newly constructed monitoring well in a similar location and of similar construction as the original monitoring well. The replacement well will maintain the same identification with the addition of "-R" as a suffix to designate "replacement". Based on the proposed development plan, MW22-08C may be inside the condominium footprint, and the proposed location of a replacement well MW22-08C-R is shown on Figure No. 2a "Site Plan Showing Site Features" by Stantec in Schedule B.
- 4.2.7.7 Any proposed changes to the ground water monitoring program shall be submitted to the Director for approval prior to implementation.

4.2.8 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,

- 4.2.8.1 Refrain from using ground water in or under the Property as a source of water; and
- 4.2.8.2 Except, as may be required for continued use as a monitoring well, as defined in the OWRA:
 - 4.2.8.2.1 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,
 - 4.2.8.2.2 Refrain from constructing on the Property any wells as described or defined in the OWRA.

4.2.9 FUTURE SITE DEVELOPMENT

All Impacted Ground Water encountered during future site development that was not addressed under the Risk Assessment must be delineated and mitigated/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:

- 4.2.9.1 The dates and duration of work completed;
- 4.2.9.2 A summary of the work completed;
- 4.2.9.3 A site plan showing the location of the work; and
- 4.2.9.4 Material characterization results and confirmatory sampling results, including copies of the laboratory certificates of analysis.

4.2.10 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.

4.2.11 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:

- 4.2.11.1 A copy of all records relating to the ground water management plan.
- 4.2.11.2 A copy of all records relating to the health and safety plan.
- 4.2.11.3 A copy of any signed as constructed plans for the Building with Soil Vapour Intrusion Mitigation System RMM, including a copy of the sign-off by the professional engineer confirming the suitability of the design.
- 4.2.11.4 A copy of all records related to the Soil Vapour Intrusion Mitigation System RMM, including pressure monitoring results, inspection and maintenance programs.
- 4.2.11.5 A copy of all records related to the on-going Indoor Air/Sub-slab Vapour Quality Monitoring Program, and the Ground Water Monitoring Program, including a summary of all notifications to the Director of any exceedances and any follow up actions.
- 4.2.11.6 An evaluation and interpretation of the results of all monitoring programs.
- 4.2.11.7 A copy of signed site plans as required under Item 4.2.10 of the CPU, including any alterations.
- 4.2.11.8 Any recommendations on changes to the monitoring programs and risk management measures.
- 4.2.11.9 Any recommendations on changes to Financial Assurance, including a copy of the Financial Assurance re-evaluation completed in accordance with Item 4.11 of the CPU, if required.

Notice of Restrictions

- 4.3 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 Item 4.2. 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.

Site Changes

- 4.4 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

- 4.5 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

- 4.6 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

- 4.7 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

- 4.8 Within five (5) days after registering 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

- 4.9 While the CPU is in effect, the Owner shall forthwith report in writing by email, to the Director 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

- 4.10 Within fifteen (15) days of the date of the CPU, the Owner shall provide financial assurance to the Crown in right of Ontario in the amount of **\$327,000** in a form satisfactory to the Director and in accordance with Part XII of the Act to cover costs for the performance of the Risk Management Measures required to be carried out under the CPU.
- 4.11 The Owner shall re-evaluate the financial assurance required under Item 4.10 every three (3) years from the date of this CPU. The re-evaluation of the amount of financial assurance required shall include an assessment based on any new information relating to the environmental conditions of the Property and shall include any costs of additional monitoring and/or implementation of contingency plans. If the re-evaluation of the amount of financial assurance indicates that more than the amount in Item 4.10 is required, the Owner shall forthwith provide a copy of the re-evaluation to the Director.

Property Management

- 4.12 Upon the construction of any new Building(s) on the Property, establish Property Management Oversight of the building.

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, such finding does not invalidate or render unenforceable the requirement in other circumstances nor does it invalidate or render unenforceable the other requirements of the CPU.
- 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 amend 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.
- 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 relieve 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.
- 5.10 Where there is more than one Owner of the Property or part of the Property each person is jointly and severally liable to comply with any requirements of the CPU relating to that owned Property unless otherwise indicated.
- 5.11 Where the CPU requires that the Director must be notified or receive a report this should be done by email at Environment.Barrie@Ontario.ca.
- 5.12 The provisions of the CPU shall take precedence in the event of a conflict between the provisions of the CPU and the Risk Assessment.

Part 6: Information regarding a 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

Barrie District Manager, Central Region
Ministry of the Environment, Conservation and Parks
54 Cedar Pointe Road, Unit 1201
Barrie, Ontario
L4N 5R7
Fax: 705-739-6440
Email: Environment.Barrie@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:

- a. two (2) days after the day on which the appeal before the Tribunal was commenced; and
 - b. 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:
- a. fifteen (15) days after the day on which notice of the issuance of the CPU is given in the Environmental Registry of Ontario; and
 - b. if you appeal, fifteen (15) days after the day on which your notice of appeal is given in the Environmental Registry of Ontario.
- 6.8 The procedures and other information provided in this Part 6 are intended as a guide. The legislation should be consulted for additional details and accurate reference. Further information can be obtained from e-Laws at www.ontario.ca/laws.

Issued this xrd day of xxx 2026.

Draft

Chris Hyde
Director, section 168.6 of the Act

Schedule 'A'
Property Specific Standards

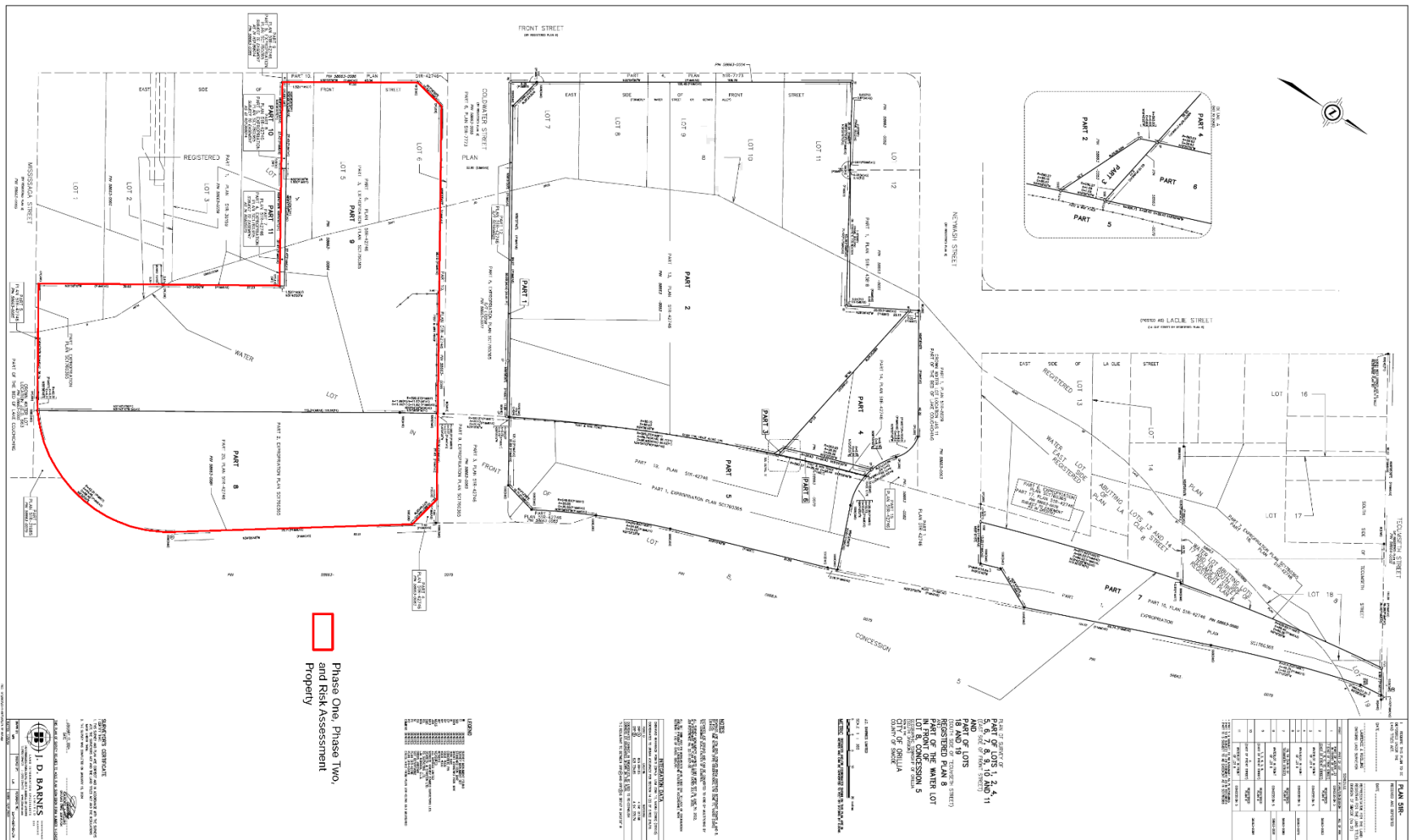
Table 1-1: Property Specific Standards - Groundwater

Contaminant of Concern	Property Specific Standard (µg/L)
Barium	2796
Cobalt	38
Vanadium	11
Chloroform (Trichloromethane)	4.4
1,1-Dichloroethene	0.68
cis-1,2-Dichloroethene	74.9
Tetrachloroethene (PCE)	80
Trichloroethene (TCE)	276
Vinyl Chloride (Theoretical)	50.9

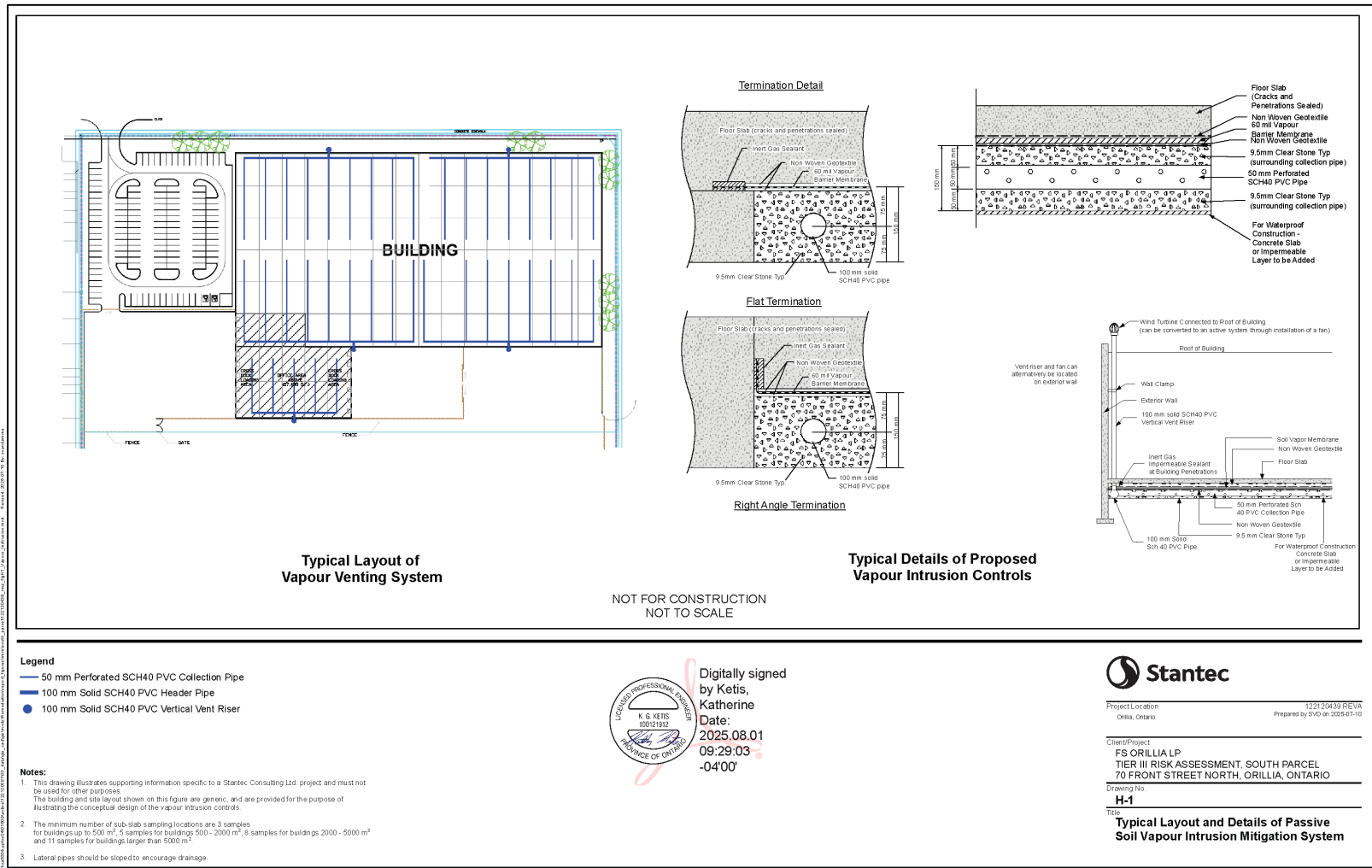
Schedule 'B'

FIGURES

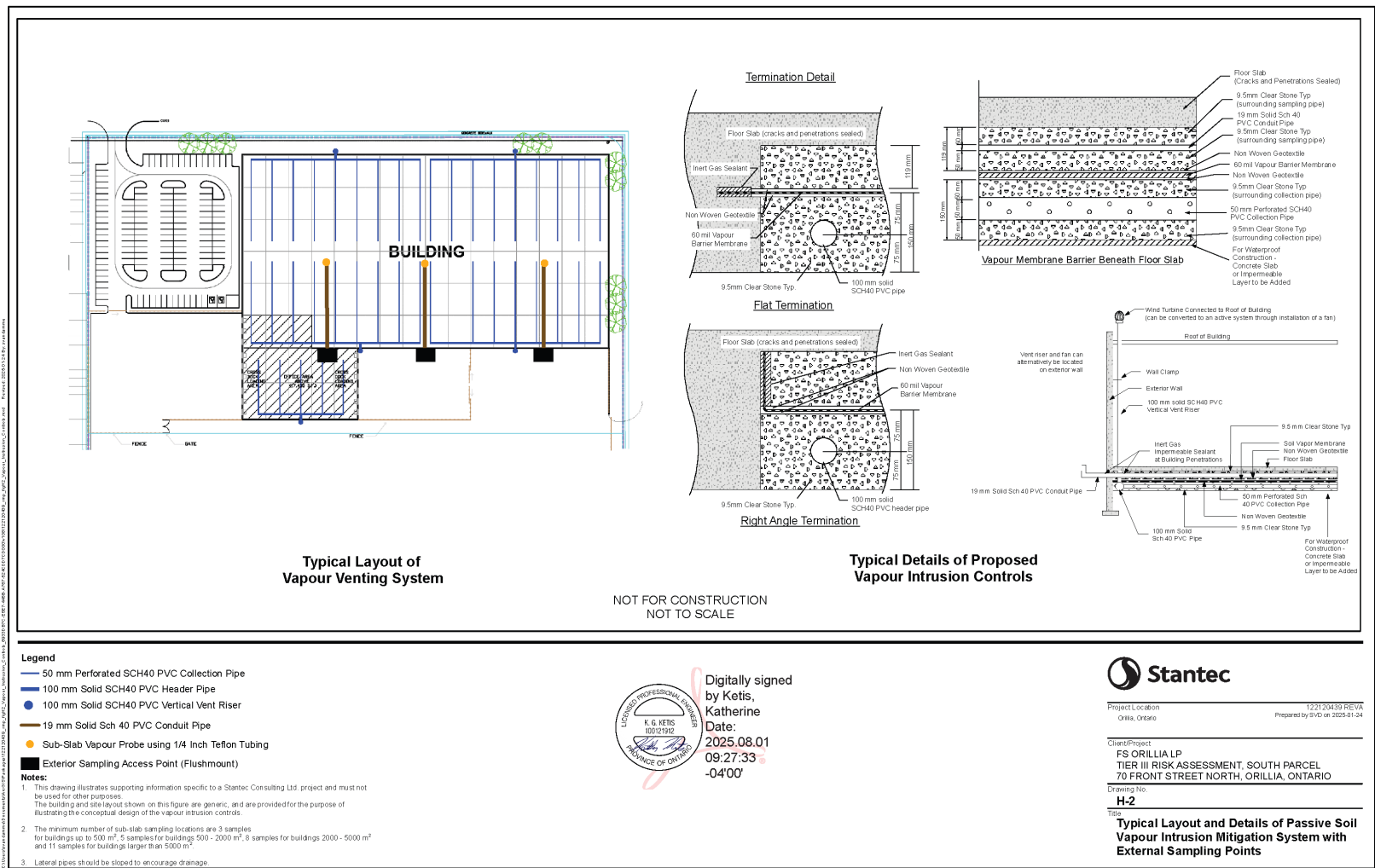
- Registered Plan 51R-44546 dated January 17, 2024 by J.D. Barnes Limited, Ontario Land Surveyors.
- Drawing H-1 "Typical Layout and Details of Passive Soil Vapour Intrusion Mitigation System" by Stantec dated August 1, 2025
- Drawing H-2 "Typical Layout and Details of Passive Soil Vapour Intrusion Mitigation System with External Sampling Points" by Stantec dated August 1, 2025
- Drawing H-3 "Details of Sampling Pipe within a Passive Soil Vapour Intrusion Mitigation System" by Stantec dated August 1, 2025
- Drawing H-4 "Details of Utility Conduits Trench Dams and Anti-Seep Collars" by Stantec dated August 1, 2025
- Drawing H-5 "Details of Slab Penetrations" by Stantec dated August 1, 2025
- Drawing H-6 "Typical Layout and Details of Vapour Intrusion and Groundwater Controls for Elevation Pit" by Stantec dated August 1, 2025
- Drawing H-7 "Typical Layout and Details of Active Soil Vapour Intrusion Mitigation System with Aerated Subfloor" by Stantec dated March 13, 2026
- Drawing H-8 "Typical Layout and Details of Active Soil Vapour Intrusion Mitigation System with Aerated Subfloor and External Sampling Points" by Stantec dated February 5, 2026
- Drawing H-9 "Details of Sampling Pipe within Active Soil Vapour Intrusion Mitigation System with Aerated Subfloor" by Stantec dated March 13, 2026
- Figure No. 2a "Site Plan Showing Site Features" by Stantec



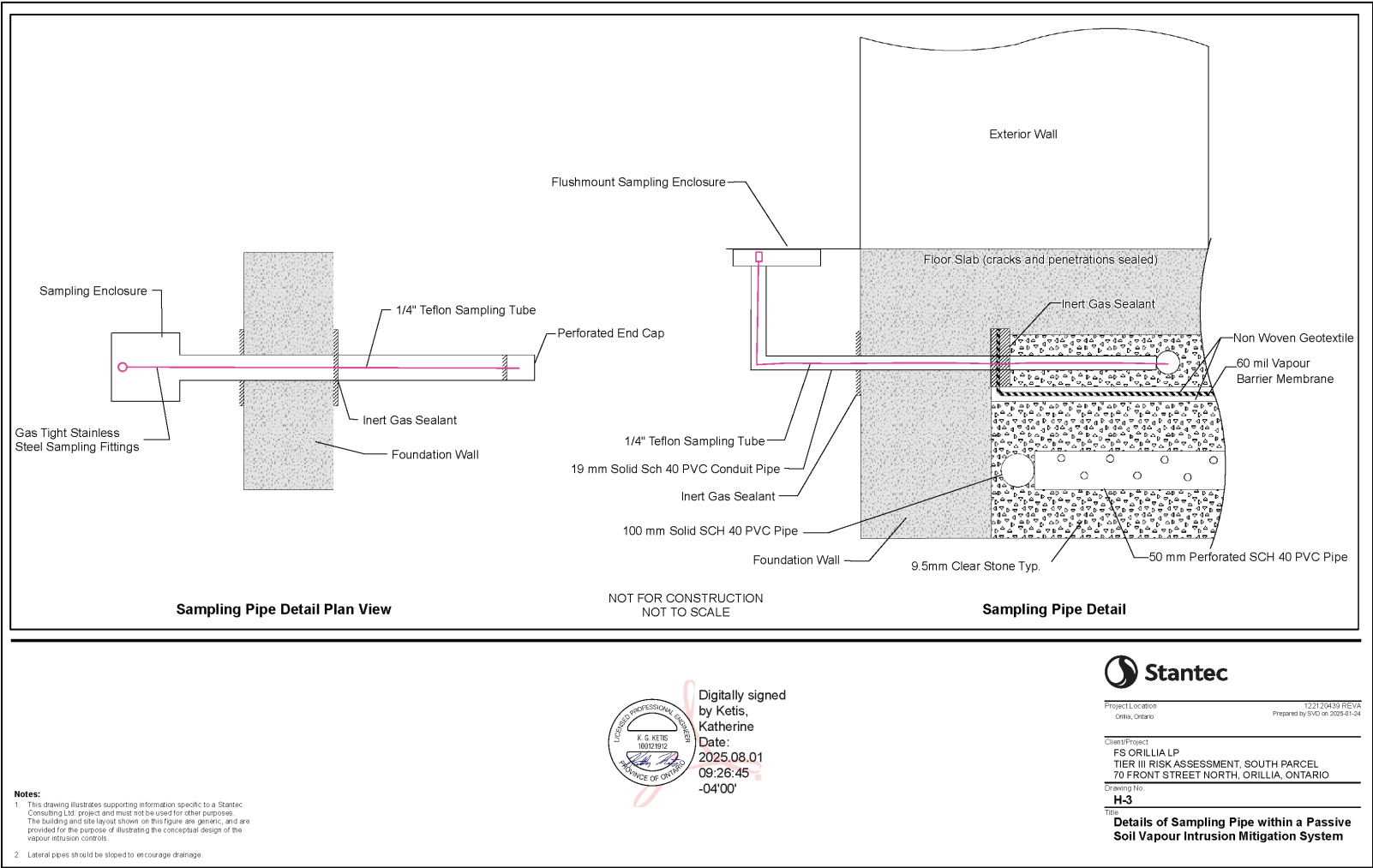
Drawing H-1 “Typical Layout and Details of Passive Soil Vapour Intrusion Mitigation System” by Stantec dated August 1, 2025



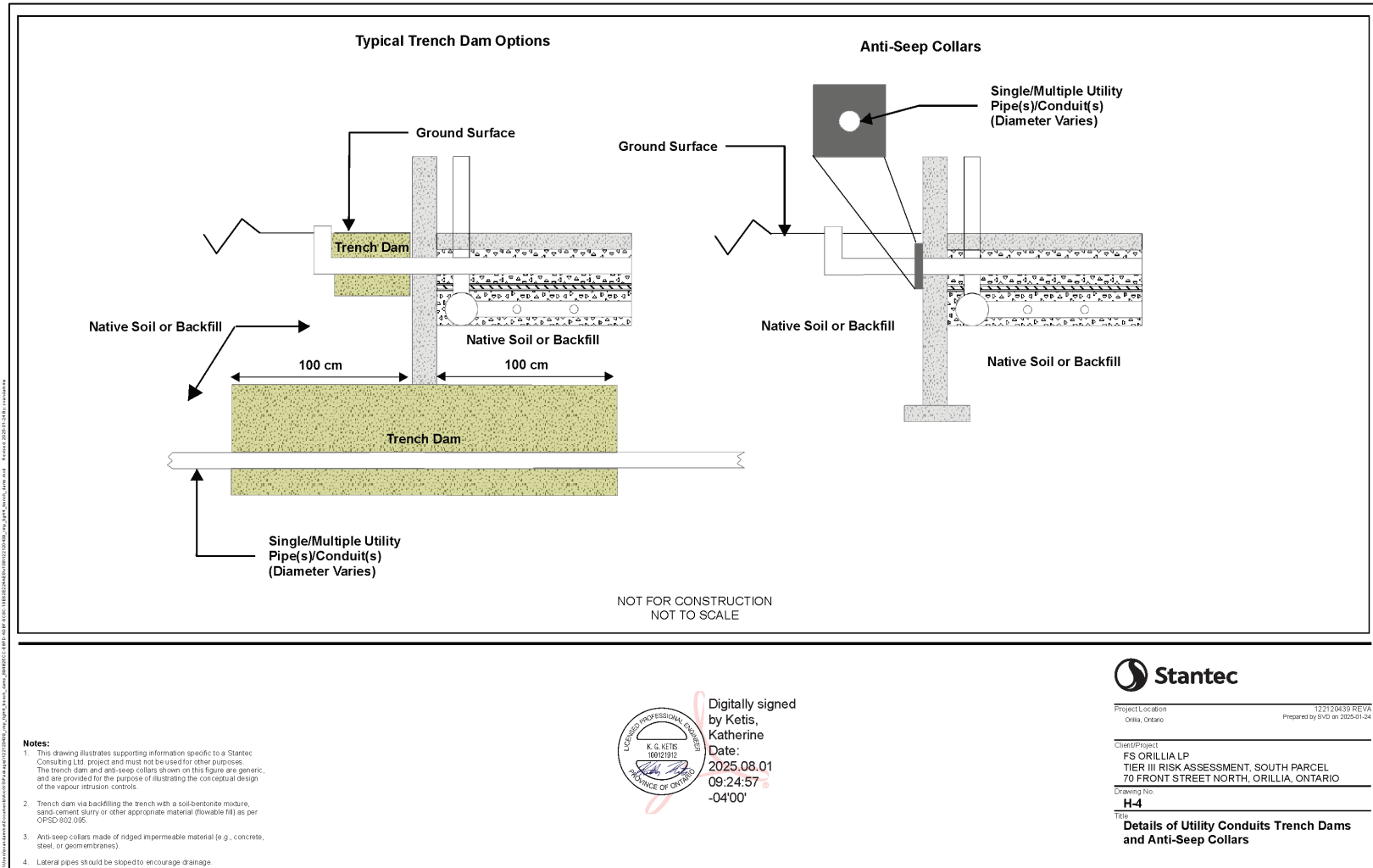
Drawing H-2 “Typical Layout and Details of Passive Soil Vapour Intrusion Mitigation System with External Sampling Points” by Stantec dated August 1, 2025



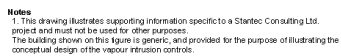
Drawing H-3 “Details of Sampling Pipe within a Passive Soil Vapour Intrusion Mitigation System” by Stantec dated August 1, 2025



Drawing H-4 "Details of Utility Conduits Trench Dams and Anti-Seep Collars" by Stantec dated August 1, 2025



C:\Users\vandamme\OneDrive - Startec Documents\ArcGIS\Packages\12120439_mmp_figH5_slab_penetrations_E4E60A1B-1B08-4781-B70D-D0C9B94F6640\12120439_mmp_figH5_slab_penetrations.mxd Revised: 2025-07-31 By: vandamme



Disclaimer: Startec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Startec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.



Project Location
Orillia, Ontario

122120439
Prepared by SVD on 7/31/2025

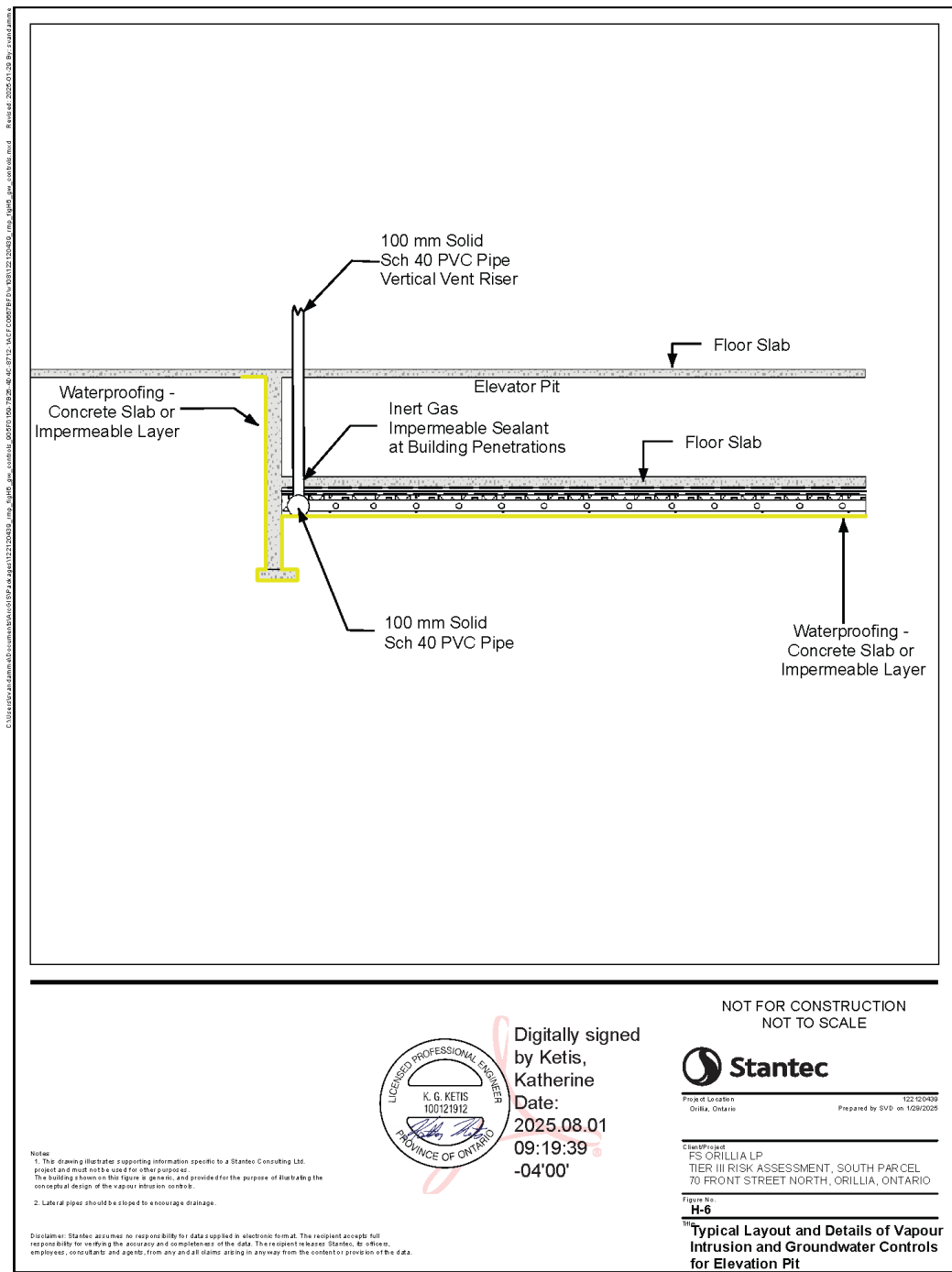
Client/Project
FS ORILLIA LP
TIER III RISK ASSESSMENT, SOUTH PARCEL
70 FRONT STREET NORTH, ORILLIA, ONTARIO

Figure No. **H. E.**

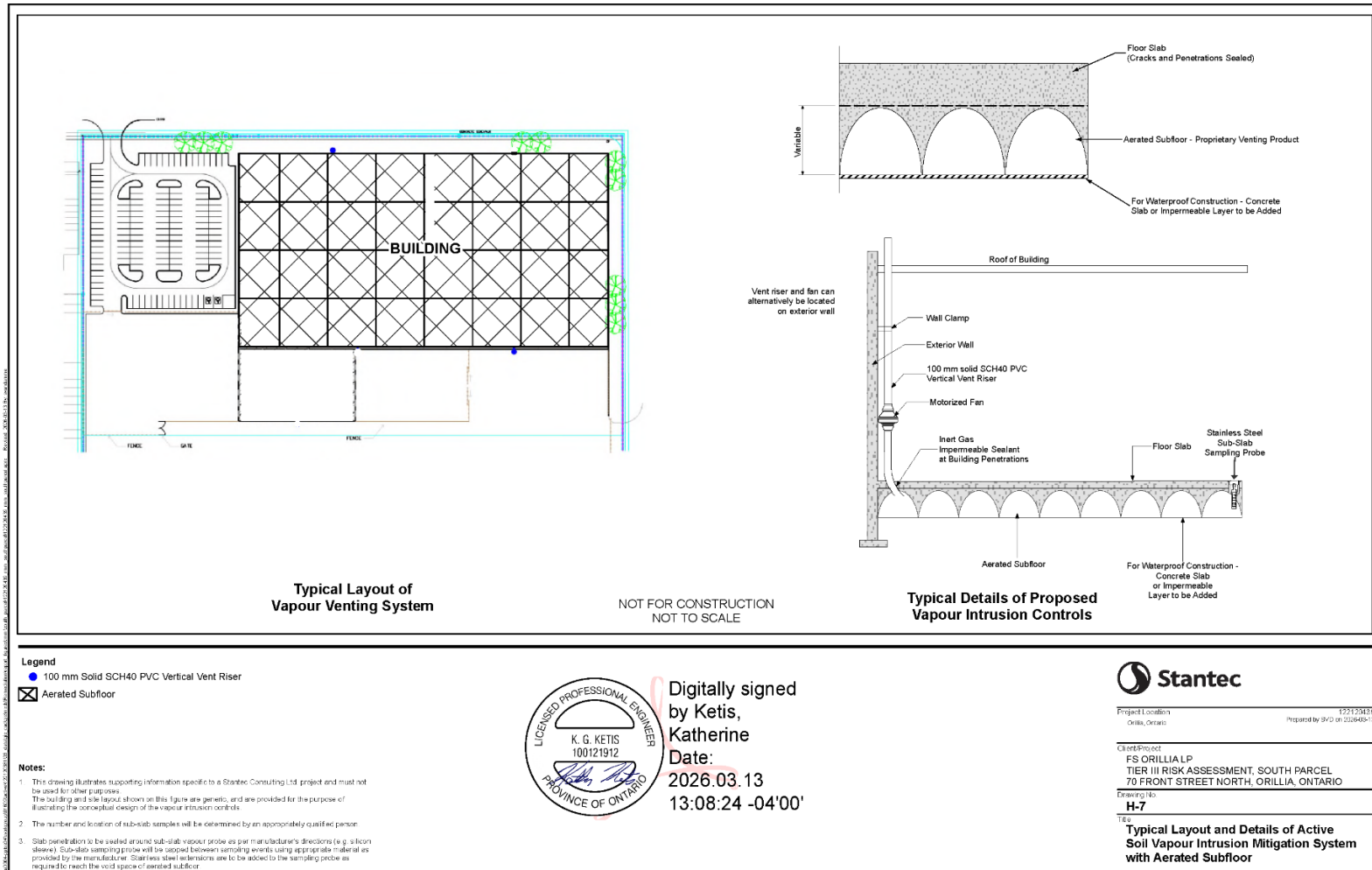
Time

Title

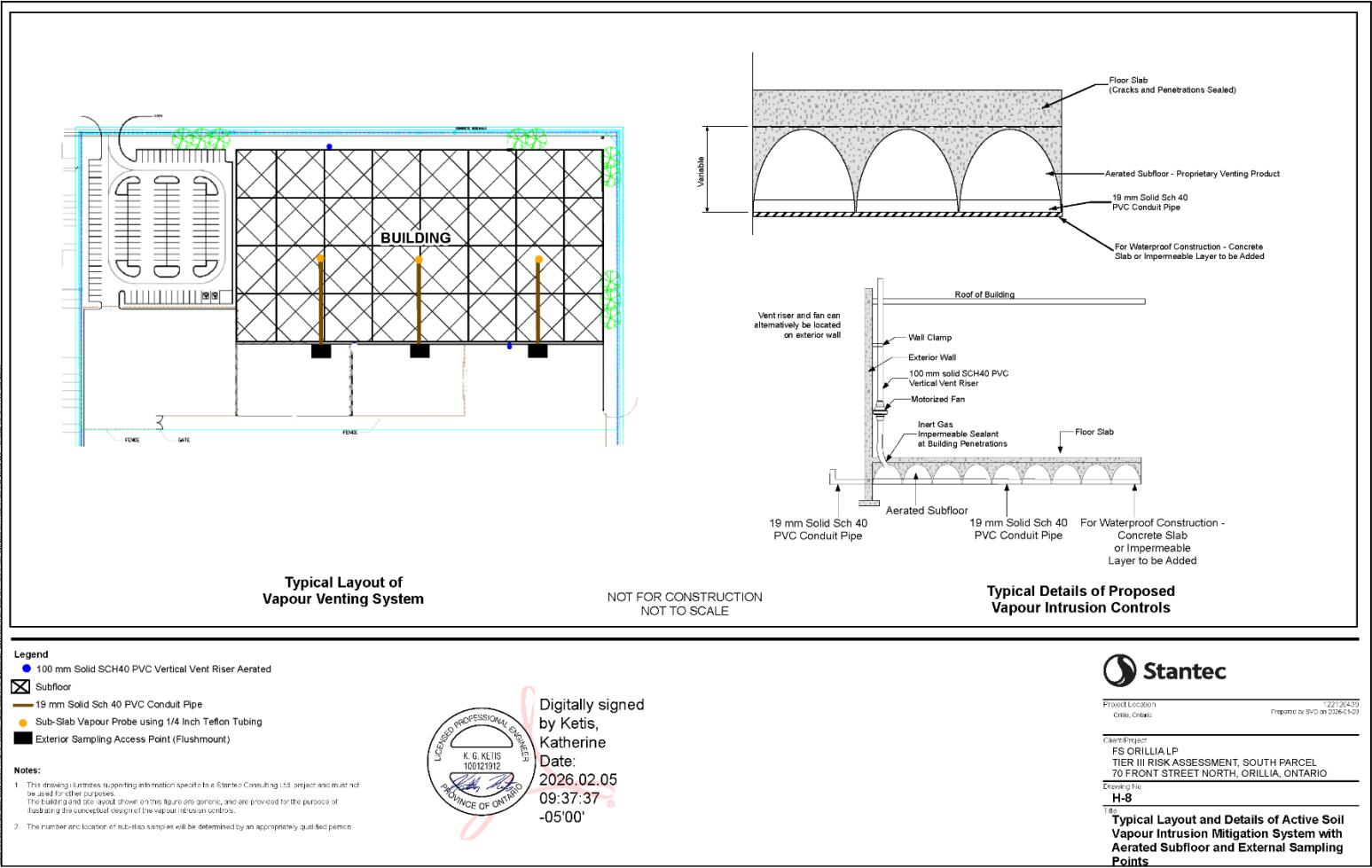
Drawing H-6 “Typical Layout and Details of Vapour Intrusion and Groundwater Controls for Elevation Pit” by Stantec dated August 1, 2025



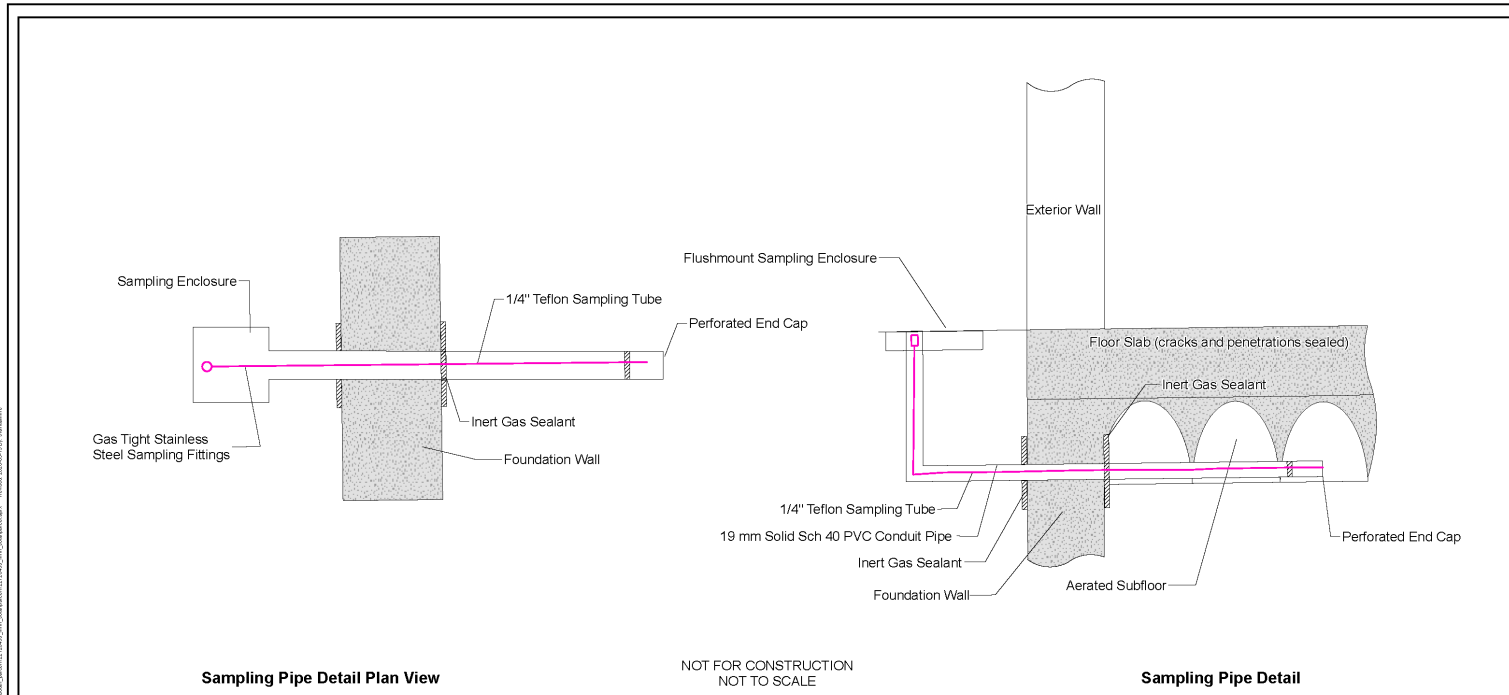
Drawing H-7 "Typical Layout and Details of Active Soil Vapour Intrusion Mitigation System with Aerated Subfloor" by Stantec dated March 13, 2026



Drawing H-8 “Typical Layout and Details of Active Soil Vapour Intrusion Mitigation System with Aerated Subfloor and External Sampling Points” by Stantec dated February 5, 2026



Drawing H-9 “Details of Sampling Pipe within Active Soil Vapour Intrusion Mitigation System with Aerated Subfloor” by Stantec dated March 13, 2026



Notes:

1. This drawing illustrates supporting information specific to a Stantec Consulting Ltd. project and must not be used for other purposes. The building and site layout shown on this figure are generic, and are provided for the purpose of illustrating the conceptual design of the vapour intrusion controls.
2. Lateral pipes should be sloped to encourage drainage.



Digitally signed
by Ketis,
Katherine
Date: 2026.03.13
13:09:30 -04'00'

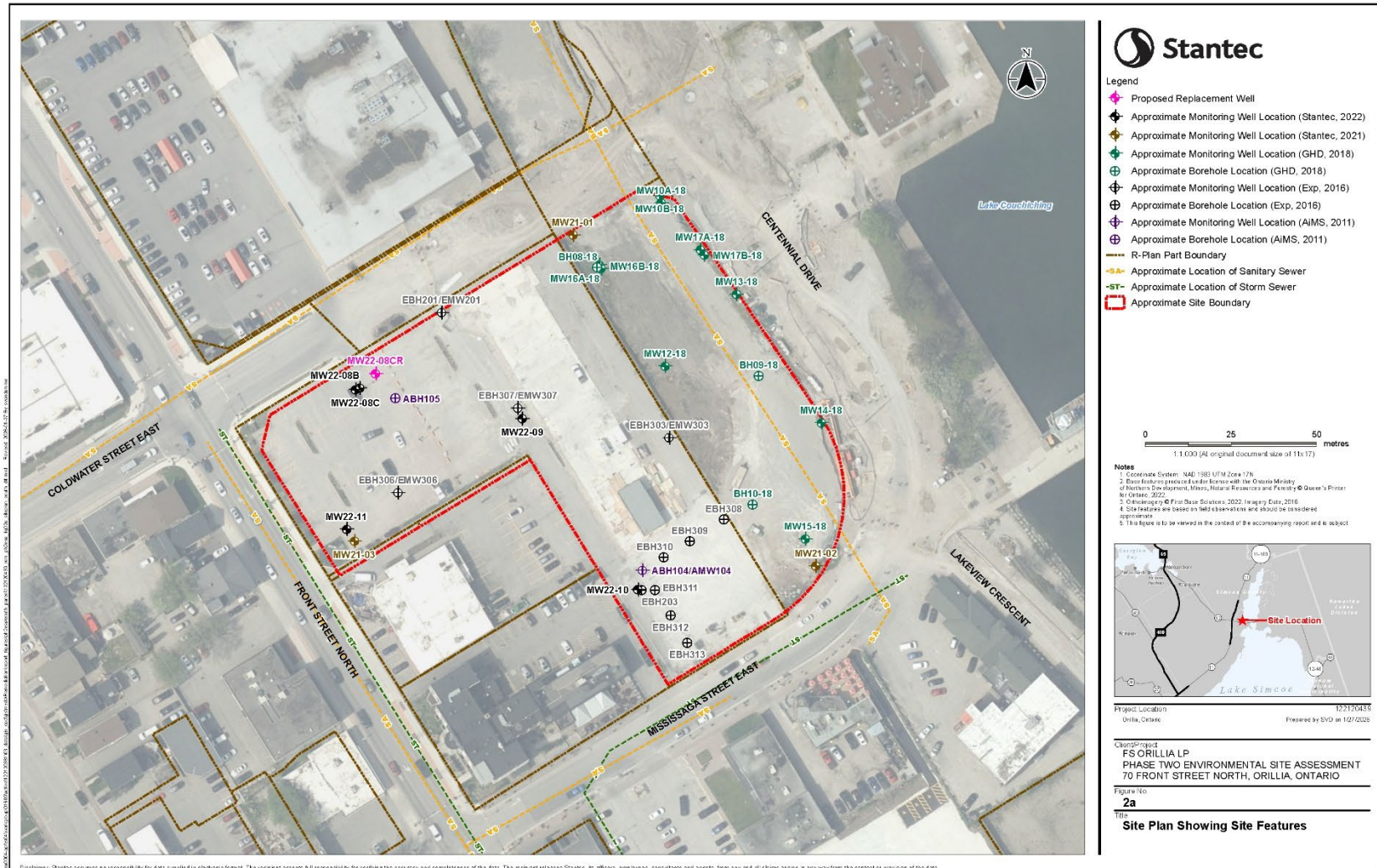


Project Location: Orillia, Ontario
Prepared by: SVD on 2026-03-13

Client/Project:
FS ORILLIA LP
TIER III RISK ASSESSMENT, SOUTH PARCEL
70 FRONT STREET NORTH, ORILLIA, ONTARIO

Drawing No:
H-9
Title:
Details of Sampling Pipe within Active Soil Vapour Intrusion Mitigation System with Aerated Subfloor

Figure No. 2a "Site Plan Showing Site Features" by Stantec



Schedule 'C'

Table 7-4: Recommended Sub-Slab Air Trigger Concentrations

Contaminant of Concern	Target Sub-Slab Vapour Concentration ^a (µg/m ³)	
	Residential Ground Floor	Commercial Ground Floor
1,1-dichloroethene	2.09E+03	3.58E+04
Cis-1,2-dichloroethene	1.57E+03	2.68E+04
Trans-1,2-dichloroethene	6.25E+02	1.07E+04
Tetrachloroethene (PCE)	2.14E+02	3.45E+03
Trichloroethene (TCE)	1.36E+01	1.00E+02
Vinyl Chloride	6.30E+00	1.02E+02

Note(s):

^a Target Sub-Slab Vapour Concentration based on HBIAC (MECP MGRA - MECP, 2016) divided by the MECPs default attenuation factor (i.e., 0.02 for residential land use, and 0.004 for commercial land use).

N/A Not Applicable

Table 7-5: Recommended Air Trigger Concentrations

Contaminant of Concern	Target Indoor Air Concentration ^a (µg/m ³)	
	Residential Ground Floor	Commercial Ground Floor
1,1-dichloroethene	4.17E+01	1.43E+02
Cis-1,2-dichloroethene	3.13E+01	1.07E+02
Trans-1,2-dichloroethene	1.25E+01	4.29E+01
Tetrachloroethene (PCE)	4.28E+00	1.38E+01
Trichloroethene (TCE)	2.71E-01	4.01E-01
Vinyl Chloride	1.26E-01	4.06E-01

Note(s):

^a Target Indoor Air Concentration based on Health Based Indoor Air Criteria (HBIAC) - Lowest Risk Level (MECP MGRA - MECP, 2016).

N/A Not Applicable

Table 7-7: Recommended Groundwater Trigger Concentrations

Contaminant of Concern	Target Shallow Groundwater Concentration ^a (µg/L)	Source
1,1-dichloroethene	0.68	PSS
Cis-1,2-dichloroethene	74.9	PSS
Trans-1,2-dichloroethene	1.6	Table 6 SCS
Tetrachloroethene (PCE)	80	PSS
Trichloroethene (TCE)	276	PSS
Vinyl Chloride	26.7	Shallow theoretical vinyl chloride concentration assumed in limited quantitative calculations in Appendix H.4.

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

This is to certify pursuant to Item 4.6 of the Certificate of Property Use number **4212-DVHL8K** 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 **xxxxx, 2024** being a Certificate of Property Use and order under subsection 197(1) of the *Environmental Protection Act* relating to the property municipally known as **70 Front Street North, Ontario**, and being all of PIN 58663-0090 (LT) and all of PIN 58663-0091 (LT) (the "Property"), with respect to the Risk Assessment and certain Risk Management Measures and other preventative measure requirements on the Property,

FS Orillia GP 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.