Ontario

Ministry of the Environment, Conservation and Parks
Ministère de l'Environnement et
de la Protection de la nature et des Parcs

Certificate of Property Use

Environmental Protection Act, R.S.O. 1990, c.E.19, s.168.6

Certificate of property use number: 0708-DFCNS5
Risk assessment number: 4656-C2WM38

Owner: **The Corporation of the Municipality of Port Hope**
56 Queen Street
Port Hope, Ontario L1A 3Z9 **(Owner)**

Site: **1 Hayward Street, Port Hope, Ontario** **(Property)**

With a Legal Description of:

PT LT 357-360 PL Smith Estate Port Hope; PT Gage St PL Stewart Port Hope (closed by PH7601) as in PH7677, PH7602; Port Hope

PT LT 6 Con Broken Front Hope; PT Harbour Lands PL Smith Estate Port Hope S/T C5594, C6753, C8884; Port Hope

Bed of Lake Ontario Hope (Lying in Front of LT 150-153, 418-429 & Lane lying Btn LT 146- 150 & 151 PL Smith Estate & King St, PT Smith St, John St, Harbour Lands & PT LT 5 Con Broken Front); PT LT 6 Con Broken Front Hope; PT Harbour lands PL Smith Estate; Part of Lots 423, 424, 425, 426, 427, 428 & 429 Smith Estate Plan and PT John St Part Original Road Allowance Between Lots 6 & 7 Con BF (Pine St) Port Hope; PT 1, 6, 7, 8, 9 39R9770, Except PT 1, 39R12377; T/W C5912, C5594, C6753, C8884; Port Hope; Subject to an Easement Over PT 2 39R12377 In Favour of PTS 6-9, 16-17, 19-20 9R1273, PT 1-5 9R2236 EX PTS 1,10 39R12674 and PT 1 39R12641 as in ND11365

LT 256 PL Smith Estate Port Hope; Port Hope

being all of:

PIN: 51072-0193 (R), PIN: 51072-0183 (R), PIN: 51072-0246 (LT), PIN: 51072-0200(LT)

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 (definition of 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) Risk Management Measures (RMMs) that are required to be implemented are found in Part 4 of the CPU, Director Requirements. Key RMMs specified in Part 4 include, but are not limited to:

- Installing, inspecting and maintaining any new hard cap or soil cap barriers at the Property as per Section 4.2 (a) of this CPU;

- Prohibiting the construction of any Building(s) on the Property unless the new Building(s) is constructed as specified in Section 4.2 (h) of this CPU;
- Installing, monitoring and maintaining any vapour mitigation systems as specified in Section 4.2 (j), (l) and (m) of this CPU;
- Implementing soil and groundwater management plans during any intrusive activities undertaken on the Property potentially in contact with COCs in soil or groundwater that have been identified in the RA at concentrations that exceed the applicable site condition standards as per Section 4.2 (u) of this CPU.
- Implementing a health and safety plan during any intrusive activities undertaken on the Property potentially in contact with COCs in soil that have been identified in the RA at concentrations that exceed the applicable site condition standards as specified in Section 4.3 of this CPU;
- Implementing a groundwater monitoring program (including non-aqueous phase liquid (NAPL) monitoring) at the Property per Section 4.9 of this CPU;
- Conducting targeted excavations at the Property per Section 4.14 of the CPU;
- Registering a certificate on the Property title in accordance with Section 197 of the *Environmental Protection Act* and that before dealing with the Property in any way, a copy of the CPU is to be given to any person who will acquire an interest in the Property as per Section 4.17, 4.18 and 4.19 of this CPU.

ii) Duration of Risk Management Measures identified in Part 4 of the CPU is summarized as follows:

a. The soil and groundwater management plans and the health and safety plan shall be required for the Property during any activities potentially in contact with or exposing site soil or groundwater that have been identified in the RA at concentrations that exceed the applicable site condition standards 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:

"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;

"Act" means the *Environmental Protection Act*, R.S.O. 1990, c. E. 19;

"Applicable Site Condition Standards" and "ASCS" means soil and groundwater that meets the soil or groundwater criteria identified in Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Ground Water Condition (coarse textured soils) (Residential/Parkland/Institutional use) 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;

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

“Competent Person” as defined in the Ontario *Occupational Health and Safety Act*.

“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 may cause an Adverse Effect;

“Contaminants of Concern” & “COC” has the meaning as set out in section 3.2 of the CPU;

“CPU” means this Certificate of Property Use as it may be altered from time to time and bearing document # 0708-DFCNS5;

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

“Granular A” means a set of requirements for dense graded aggregates intended for use as granular base within the pavement structure, granular shouldering, and backfill, as specified in Ontario Provincial Standard Specification 1010 (OPSS.MUNI 1010);

“Impacted Soil” is soil in which one or more contaminants are present at a concentration greater than the Property Specific Standard for the contaminant as specified in Table 1A – Schedule A of this CPU without incorporation of risk management measures;

“Licensed Professional Engineer” means a person who holds a license, limited licence or temporary licence under the *Professional Engineers Act*, R.R.O. 1990, c.P.28;

"Ministry" means Ontario Ministry of the Environment, Conservation and Parks;

“O. Reg. 153/04” means *Ontario Regulation 153/04 Records of Site Condition – Part XV.1 of the Act* under Environmental Protection Act, R.S.O. 1990, c. E.19.

“Reg. 347” means *R.R.O. 1990, Regulation 347: General - Waste Management* under Environmental Protection Act, R.S.O. 1990, c. E.19.

“O. Reg. 406” means *Ontario Regulation 406/19*: On-Site and Excess Soil Management under Environmental Protection Act, R.S.O. 1990, c. E.19.

“Owner” means **The Corporation of the Municipality of Port Hope,** the current owner of the Property, and any future Property Owner(s);

“Property” means the property that is the subject of the CPU and described in the “Site” section on page 1 above, and illustrated in Figure 1 of Schedule A which is attached to and forms part of this CPU;

“Property Specific Standards” or “PSS” means the property specific standards established for the Contaminants of Concern set out in the Risk Assessment and in section 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;

"Risk Assessment" (RA) means the Risk Assessment No. **4656-C2WM38** accepted by the Director on October 1, 2024, and set out in the following documents:

- **"Risk Assessment, 1 Hayward Street, Port Hope, Ontario", report prepared by Golder Associates Ltd., dated May 2022;**

- **"Risk Assessment Submission #2: 1 Hayward Street, Port Hope, Ontario" report prepared by WSP Canada Inc., dated February 2023;**

- **"Risk Assessment Submission #3, 1 Hayward Street, Port Hope, Ontario", report prepared by WSP Canada Inc., dated April 11, 2024;**

- **"RE: Risk Assessment for 1 Hayward Street, Port Hope, Ontario; RA1955-21c; IDS#4656-C2WM38", email from Sharon Guin, WSP Canada Inc., received by TASDB on May 3, 2024, with the following documents attached:**

    - *1783264 (1000) REP 2024'04'12 Risk Assessment - Centre Pier Appendices B-G.pdf*
    - *1783264 (1000) REP 2024'04'12 Risk Assessment - Centre Pier Appendices H-Q.pdf*
    - *1783264 (1000) REP 2024'04'12 Risk Assessment - Centre Pier Appendix A.pdf*
    - *1783264 (1000) REP 2024'04'12 Risk Assessment - Centre Pier Text Tables Figs.pdf*
- **"RE: Risk Assessment for 1 Hayward Street, Port Hope (Centre Pier); RA1955-21c; IDS# 4656-C2WM38", email from Ruwan Jayasinghe, WSP Canada Inc., rec'd by TASDB on August 14, 2024, with following documents attached:**
    - *RA cover letter; file name: 1783264 (1000) REP 2024'08'14 RA Cover letter -Centre-Pier.pdf*
    - *Updated RA report; file name: 1783264 (1000) REP 2024'08'14 Risk Assessment - Centre Pier.pdf*
- **"RE: 1 Hayward (Center Pier) - draft CPU and updated RMP", email from Leanne Burns, WSP Canada Inc., rec'd by TASDB on February 11, 2026, with the following documents attached:**
    - *1783264 (1000) APX L 2026'02'06 Risk Management Plan - Centre Pier*

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

"Risk Management Plan" or "RMP" means the risk management plan specific to the Property detailed in Appendix L and dated February 2026 and/or Part 4 of the CPU;

"SVIMS" means a soil vapour intrusion mitigation system.

"Tribunal" has the same meaning as in the Act; namely, the Ontario Land Tribunal;

"Unimpacted Soil" means soil that meets the soil criteria identified in Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Ground Water Condition of the Ministry's *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.

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 the Director accepts a risk assessment relating to a property, he or she may, when giving notice under clause 168.5 (1)(a), issue a certificate of property use to the owner of the property, requiring the owner to do any of the following things:

a. Take any action specified in the certificate that, in the Director's opinion, is necessary to prevent, eliminate or ameliorate any adverse effect on the property, including installing any equipment, monitoring any contaminant or recording or reporting information for that purpose.
b. 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 the 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 196(1) of the Act states that the authority to make an order under the Act includes the authority to require the person or body to whom the order is directed to take such intermediate action or such procedural steps or both as are related to the action required or prohibited by the order and as are specified in the order.

2.8 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.

2.9 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.

2.10 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.

2.11 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 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 use: Parkland as defined in O. Reg. 153/04.

3.2 The Contaminants on, in or under the Property that are present either above **Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-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 soils and groundwater or for which there are no such standards, are defined as the Contaminants of Concern. The Property Specific Standards for these Contaminants of Concern are set out in **Table 1A and Table 1B of Schedule "A",** which is attached to and forms part of the CPU.

3.3 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.

3.4 I am further of the opinion for the reasons set out in the Risk Assessment that it is necessary to restrict the use of the Property and/or the construction of Buildings at the Property as outlined in Part 4 of the 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 Section 4.1, carry out or cause to be carried out the following Risk Management Measures:

Barriers to Soil:

a. Subject to section 4.2(b), fill cap and hard cap barriers shall be installed over the Property in accordance with the RMP and Figure L-1, wherever there is less than 0.5 m of Unimpacted Soil below ground surface, so as to prevent exposure to the COCs identified on the Property and shall be maintained for as long as the COCs are present on the Property.

b. In relation to Section 4.2(a) of this CPU, areas of the Property that are not in use nor under development, hard cap and soil cap barriers are not required as long as exposure to the COCs at concentrations that exceed the ASCS (as determined by a Qualified Person) is prevented by a fence barrier that restricts access to those areas of the Property and a dust control plan is implemented as may be necessary to prevent surface soil from impacting adjacent areas.

c. The fill cap and hard cap barriers shall consist of the following, at minimum:

(i) Subject to subsection (ii) fill cap barrier(s) shall consist of a minimum 0.5 metre of Unimpacted Soil (Table 9) material underlain by an indicator layer placed immediately on top of the Impacted Soil where the barrier is less than 1.0 metre depth, as per Section 1.2.1.1 and Figure L-2A of the RMP.

(ii) In designated children's play areas, the fill cap barrier(s) shall consist of a minimum 1.0 metre of Unimpacted Soil material (which may also include non-soil material) placed immediately on top of the Impacted Soil, as per Section 1.2.1.1 and Figure L-2B of the RMP.

(iii) For deep rooted vegetation, the tree shall be placed in an excavation with a minimum areal dimension of 300 mm between the root ball and existing site soils and extending to a depth of 1500 mm, per Section 1.2.1.1 and illustrated in Figure L-3 of the RMP.

(iv) The hard cap barrier(s) shall have a minimum total thickness of 225 millimetres consisting of a cover of asphalt, concrete, a building slab, or building foundation and floor slab, underlain by granular fill or aggregate, as per Section 1.2.1.1 and illustrated in Figure L-4 of the RMP.

(v) For the non-aqueous phase liquid (NAPL) area (illustrated on Figure L-9 of the RMP), the fill cap barrier per Item 4.2(c)(i) or hard cap barrier per Item 4.2(c)(iv) is required, underlain by compacted select subgrade material to a minimum depth of 1 metre, as per Section 1.2.1.1 of the RMP. Deep-rooted vegetation shall not be planted within the NAPL area.

d. Prior to occupancy and following the installation of any new Barriers to Soil on the Property, the Owner shall submit to the Director written confirmation signed by a qualified Licensed Professional Engineer that the barriers have been installed in accordance with the requirements of Section 1.2.1.1 of the RMP and Section 4.2(c) of this CPU along with final design specifications/drawings and/or as-built drawings.

e. Prior to occupancy and following the installation of any new Barriers to Soil on the Property, the Owner shall submit to the Director a site plan that clearly identifies the final location(s) of each of the different barriers.

f. An inspection and maintenance program shall be prepared and implemented to ensure the continuing integrity of the fill and hard cap barriers, including the rip rap revetment as long as the COCs are present on the Property at concentrations that exceed the ASCS. The inspection program shall include semi-annual inspections (spring and fall) of the barriers' integrity in accordance with Section 1.2.1.2 of the RMP. Any barrier deficiencies shall be repaired within a reasonable period of time in accordance with Section 1.2.1.2 of the RMP. If cracks, breaches or any loss of integrity in the barriers cannot be repaired or addressed in a timely manner, contingency measures, in accordance with Section 1.2.1.2 of the RMP, shall be implemented to ensure that no exposure to the COCs occurs. The restoration of any damaged portions of the barriers shall, at minimum, meet the original design specifications and Section 4.2(c) of this CPU. The Owner shall keep records of the inspections, maintenance and repairs and make them available for review by a Provincial Officer upon request.

g. An inspection and maintenance program, as described in Section 4.2(f), with respect to any fencing on the Property or any part thereof shall be implemented so long as fencing is required.

New Enclosed Building(s):

h. Refrain from constructing any new Building(s) on, in or under any portion of the Property, unless the requirement for a SVIMS is evaluated using a staged approach, as detailed in Section 1.2.2 of the RMP, along with Section 4.2(j) of this CPU or the Building is of Raised Building Construction, as detailed in Section 1.2.2 of the RMP, along with Section 4.2(s) of the CPU.

i. The need for a SVIMS shall be evaluated beginning with a soil vapour monitoring program, designed in accordance with Section 1.4.2.1 of the RMP, in the area of the proposed Building. Should the results of the soil vapour monitoring program indicate that a SVIMS is not required, a report summarizing the methodology, quality assurance/quality control measures implemented, the results of the investigation and a recommendation from a Professional Engineer shall be submitted to the Director. Should the results of the soil vapour monitoring program suggest that soil vapour impacts may be present in the area of the proposed Building, a SVIMS must be incorporated into the design of the proposed Building, in accordance with Section 4.2(j) or the Building is of Raised Building Construction, in accordance with Section 4.2(s).

j. The construction of any new Building(s) is permitted on the Property provided that the soil vapour monitoring program of Section 4.2(i) concludes that a SVIMS is not required, the Building is of Raised Building Construction as identified in Section 1.2.2 of the RMP and Section 4.2(s) of the CPU, or the new Building includes, and is constructed with, a SVIMS as identified in Section 1.2.2 of the RMP. The SVIMS shall be designed by an appropriately qualified Licensed Professional Engineer in consultation with a Qualified Person in accordance with the conceptual design detailed in Sections 1.2.2.1 of the RMP and shall also include the following components:

   (i) The Owner shall obtain an Environmental Compliance Approval, as necessary, and any other permits or approvals as may be required;

   (ii) The installation of the SVMIS shall be completed under the supervision of an appropriately qualified Licensed Professional Engineer and a Qualified Person;

   (iii) Should the passive vapour mitigation system detailed in Section 1.2.2 of the RMP be the preferred approach for any new Building, the passive vapour mitigation system shall be designed and constructed such that the passive venting system can easily be converted to an active venting system with all applicable approvals and permits as may be necessary; and,

   (iv) A quality assurance/quality control (QA/QC) program shall be undertaken during the installation of the vapour mitigation system and shall be completed by, and clearly documented in a report prepared by, a qualified contractor and overseen by an appropriately qualified Licensed Professional Engineer and Qualified Person.

k. Within 90 calendar days of the completion of the construction of any Building(s) as specified in Section 4.2(i) of this CPU and prior to first occupancy, the Owner shall submit to the Director as-built drawings and detailed design specifications of the vapour mitigation system, as applicable, including any verification and QA/QC reports, prepared by the qualified Licensed Professional Engineer along with a statement from the qualified Licensed Professional Engineer that the vapour mitigation system has been installed in accordance with the original design specifications and that it has been designed to meet the requirements and objectives specified in Section 1.2.2 of the RMP along with Section 4.2(i) of this CPU.

l. The vapour mitigation system detailed in Section 1.2.2 of the RMP and 4.2(j) of this CPU shall be operated, monitored and maintained by the Owner for as long as the COCs are present on the Property. The qualified Licensed Professional Engineer that designed the vapour mitigation system shall prepare an operation, monitoring, and maintenance program consistent with Section 1.4.2.2 of the RMP at minimum, that is to be implemented by the Owner, prior to first occupancy, and shall be made available by the Owner to the Ministry upon request.

m. The inspection, monitoring and maintenance program as specified in Section 4.2(l) of this CPU shall be implemented to ensure the continued integrity of the building floor slab and vapour mitigation system for as long as the COCs are present on the Property. The inspection program shall include, at minimum, semi-annual inspections of the integrity of the Building floor slab(s) and monitoring of the vapour mitigation system in accordance with the monitoring and maintenance program specified in Section 4.2(l) of this CPU. Any major cracks, breaches or loss of integrity observed in the Building floor slab or any observed deficiencies or necessary maintenance requirements with the vapour mitigation system shall be repaired forthwith to the original design specification, at minimum. Repairs or maintenance shall be made by an appropriately qualified contractor, under the supervision of a qualified Licensed Professional Engineer as necessary. If repairs to the Building floor slab or the vapour mitigation system cannot be completed in a timely manner, the Owner shall ensure that the contingency measures prepared by a qualified Licensed Professional Engineer, as specified in Section 4.2(l) of this CPU, are implemented. All repairs are to be inspected by an appropriately qualified Licensed Professional Engineer, and signed documentation shall be provided to the Owner that states that the repairs meet the original design specifications, at a minimum. In the event of repairs to the floor slab or vapour mitigation system, the Owner shall submit to the Director, written confirmation, prepared and signed by a qualified Licensed Professional Engineer, that all repairs have been made to meet the original design specifications, at a minimum. The written confirmation shall also include a description of any contingency measures that were put in place and shall be submitted to the Director within 30 days of the completion of any repairs to the vapour mitigation system. The Owner shall keep records of

the inspections, monitoring and maintenance program, along with documentation of all repairs that were required to be undertaken, and these records shall be made available by the Owner to the Ministry for review upon request.

n. The Owner shall ensure that all individuals/contractors intending to undertake work which could potentially come into contact with or interfere with the vapour barrier installed as part of the vapour mitigation system as specified in Section 1.2.2 of the RMP along with Section 4.2 (j) of this CPU are made aware of the presence of the vapour mitigation system and the need to take appropriate precautions to ensure the integrity of the vapour mitigation system at all times. If the vapour mitigation system is damaged at any time, the Owner shall ensure that it is repaired forthwith by a qualified contractor, under the supervision of a qualified Licensed Professional Engineer as necessary, to the original design specifications, at a minimum. If repairs to the vapour mitigation system cannot be completed in a timely manner, the Owner shall ensure that the contingency measures prepared by a qualified Professional Engineer are implemented. All repairs to the vapour mitigation system are to be inspected by a qualified Licensed Professional Engineer and signed documentation shall be provided to the Owner that states that the repairs meet the original design specifications, at a minimum. The Owner shall submit to the Director the written confirmation, prepared and signed by a qualified Licensed Professional Engineer, that the vapour mitigation system has been repaired to meet the original design specifications, at a minimum. The written confirmation shall also include a description of any contingency measures that were put in place and shall be submitted to the Director within 30 calendar days of the completion of any repairs to the vapour mitigation system. The Owner shall maintain records of all activities and repairs in relation to the vapour mitigation system and these records shall be made available by the Owner to the Ministry for review upon request.

o. Once the final design of the vapour mitigation system is completed as specified in Section 4.2(j) of this CPU, the Owner shall submit to the Director, for review and acceptance, a performance monitoring program. The performance monitoring program shall be prepared by a qualified Licensed Professional Engineer in consultation with an appropriately Qualified Person, which consists of pressure differential monitoring, as detailed in Section 1.4.2.2 of the RMP. Specifically, the performance monitoring program shall include the following key components:

(i) Be overseen by a qualified Licensed Professional Engineer.

(ii) The collection of pressure differential measurements from an appropriate number of representative locations that is adequate for the size and configuration of any new Building(s) as determined appropriate by the qualified Licensed Professional Engineer at the following frequency:

a) Prior to first occupancy;

b) Quarterly (spring, summer, fall and winter) for a minimum of two (2) years; and,

c) Semi-annually thereafter, until written approval to discontinue the performance monitoring program by the Director is received by the Owner.

An annual report documenting the performance monitoring program and the inspection, monitoring and maintenance program shall be prepared by a qualified Licensed Professional Engineer on or before March 31st following each year of monitoring for a minimum of two years and until written approval to discontinue the program is received by the Owner from the Director. A copy of this report shall be maintained on file by the Owner and shall be made available upon request by a Provincial Officer.

p. Upon completion of the installation of the vapour mitigation system as specified in Section 4.2(j) of this CPU, and prior to first occupancy, the Owner shall implement the performance monitoring program, that has been accepted in writing by the Director, as required by Section 4.2(o) of this CPU and detailed in Section 1.4.2.2 of the RMP for a minimum of two years and until the Owner receives written direction from the Director to discontinue the program. Any changes to the performance monitoring program that has been accepted by the Director, as required by Section 4.2(o) of this CPU, (i.e. monitoring frequency, locations, methodology, etc.) must be requested in writing by an appropriately qualified Licensed Professional Engineer and these changes shall only

be implemented upon the Owner receiving written acceptance from the Director.

q. In the event that the performance monitoring program detailed in Section 4.2(o) of this CPU identifies that the passive SVIMS does not achieve a lower air pressure below the foundation floor slab relative to the indoor air pressure, or that the sub-slab pressure differential is less than 6 Pascal (in the event that conversion to operation as an active SVIMS is necessary) across at least 90% of the building area and has been sustained through two successive monitoring events, the Owner shall implement the contingency measures detailed in Section 1.4.2.2 of the RMP, and as follows:

(i) Written notice shall be submitted to the Director by the Owner within 7 calendar days of the pressure monitoring. This written notice shall include the pressure results. Confirmatory monitoring shall occur within 14 calendar days from the date of the initial pressure monitoring.

(ii) In the event that the confirmatory monitoring program verifies that the passive SVIMS does not achieve a lower air pressure below the foundation floor slab relative to the indoor air pressure, or that the sub-slab pressure is less than 6 Pascal (in the event that conversion to operation as an active SVIMS is necessary) across at least 90% of the building area, the Owner shall:

a) Submit written notice to the Director within 7 calendar days of the pressure monitoring. This written notice shall include the pressure differential results and the anticipated timeline to implement contingency measures. The implementation of contingency measures (such as enhancements to the mitigation system design as described in Section 1.4.2.2 of the RMP) shall occur within 30 calendar days of the Owner's submission of the written notice of the exceedance to the Director or such time frame as approved by the Director;

b) Within 30 calendar days of the implementation of the contingency measures, the Owner shall submit to the Director a report prepared by a qualified Licensed Professional Engineer documenting the implementation of contingency measures. The report shall include, but not be limited to:

i. Field logs, leak testing (as necessary), and documentation of QA/QC;

ii. Conclusions and recommendations with respect to the performance of the Building's vapour mitigation system along with the need for additional work and/or continued monitoring as may be deemed warranted.

r. In the event that any new equipment is added to the SVIMS, the quarterly pressure monitoring program must be resumed for a minimum of two years post-construction and until written direction to discontinue the program is received by the Owner from the Director.

s. An enclosed occupied Building does not require a SVIMS if it is of Raised Building Construction that is consistent with the conceptual design as described in Section 1.2.2 of the RMP, Figure L-10, and meets the following requirements:

(i) The maximum Raised Building size is 20 m by 15 m.

(ii) A minimum clearance of 500 mm is required between the underside of the Building floor slab and the elevation of the ground surface at grade.

(iii) The space beneath the Raised Building is required to be clear of obstructions that prevent free flow of air and may be bordered by a barrier such as a lattice or fencing or other materials that allows free flow of air (at least 30% of the building's perimeter wall area beneath the Raised Building are open to the outdoors in a manner that will provide free flow of air).

t. An inspection and maintenance program shall be prepared and implemented to ensure the continuing integrity the space beneath a Raised Building. The inspection program shall include semi-annual inspections (winter and summer) of the space beneath a Raised Building in

accordance with Section 1.2.2 of the RMP. Any deficiencies (vegetation or snow build up or any other loss of integrity in the space beneath the Raised Building) shall be repaired within a reasonable period of time in accordance with Section 1.2.2 of the RMP. The Owner shall keep records of the inspections, maintenance and repairs and make them available for review by a Provincial Officer upon request.

Soil and Groundwater Management Plan:

u. A property-specific soil and groundwater management Plan (SGWM Plan) shall be developed for the Property and implemented during all intrusive activities potentially in contact with or exposing COCs in soil or groundwater on the Property. A copy of the SGWM Plan shall be maintained on the Property for the duration of all planned intrusive activities. Any short-term intrusive activities required for the purposes of emergency repairs (i.e., for repairs to underground utilities, etc.) will not require the submission of the SGWM Plan prior to undertaking the short-term emergency repairs. For planned intrusive activities, this SGWM Plan shall be submitted to the Director by the Owner at least 14 calendar days prior to any such intrusive activities being undertaken. The SGWM Plan shall include, but not be limited to, the following key components as deemed necessary by a Qualified Person:

(i) oversight by a Qualified Person;

(ii) include dust control measures and prevention of soil tracking by vehicles and personnel from the Property;

(iii) management of excavated soils including cleaning equipment, placement of materials for stockpiling on designated areas lined and covered with polyethylene sheeting, bermed and fenced to prevent access, runoff control to minimize contact and provisions for discharge to sanitary sewers or other approved treatment;

(iv) storm water management measures to control the potential transport of COCs off-site during on-site construction/redevelopment activities. This may include, but is not limited to, silt fences and filter socks on catch-basins and utility covers as necessary;

(v) characterization of excavated excess soils, not intended for on-site use, to determine if the excavated excess soils exceed the Property Specific Standards listed in Table 1A of Schedule “A” attached to this CPU (Table 1A) and/or the Applicable Site Condition Standards for parameters other than those identified in Table 1A and require off-site disposal in accordance with the provisions of Reg. 347 and O. Reg. 406/19 made under the Act;

(vi) de-watering trenches. Any trenches that may be constructed on the Property shall be dewatered prior to entry;

(vii) characterization and management of groundwater as a result of dewatering activities. This shall include the management of and proper characterization of groundwater prior to and during any dewatering activities to ensure proper disposal of the groundwater in accordance with all applicable acts, regulations, permits and approvals;

(viii) record keeping. Record keeping is to include, but is not limited to:

a) dates and duration of work,

b) weather and site conditions,

c) location and depth of excavation activities/dewatering activities,

d) dust control measures,

e) stockpile management and drainage,

f) all soil and groundwater characterization results obtained as part of the soil and groundwater management plan,

g) names of the Qualified Persons, contractors, haulers, and receiving sites for any excavated excess soil and groundwater (as a result of dewatering activities)

removed from the property, and

h) any complaints received relating to site activities; and,

(iv) a copy of the SGWM Plan and any amendments and the records kept thereunder shall be made available for review by the Ministry upon request.

Health and Safety Plan:

4.3 A property-specific health and safety plan (H&S Plan) shall be developed for the Property, in accordance with Sections 1.2.3 of the RMP, and implemented during all planned intrusive activities undertaken that may potentially be in contact with COCs in soil and groundwater that have been identified in the RA or that may be potentially in contact with NAPL. A copy of the H&S Plan shall be maintained on the Property for the duration of all intrusive activities. The Owner shall ensure that the H&S Plan takes into account the presence of the COCs and is implemented prior to any intrusive activities being undertaken on the Property or portion(s) of the Property in order to protect workers from exposure to the COCs. The H&S Plan shall be prepared in accordance with applicable Ministry of Labour health and safety regulations, along with all potential risks identified in the RA and must include, but not be limited to, occupational hygiene requirements, personal protective equipment, contingency plans and contact information. Prior to initiation of any Project as defined under O.Reg. 213/91 (on the Property or portion(s) of the Property), the local Ministry of Labour office shall be notified, where so prescribed under the OHSA, of the proposed activities and that COCs have been identified in soil on the Property. The plan shall be overseen by a Competent Person to review the provisions of the plan with respect to the proposed site work and conduct daily inspections. The Owner shall retain a copy of the plan to be available for review by the Ministry upon request.

Prohibition of potable ground water wells:

4.4 The Owner shall,

(i) refrain from using the ground water beneath the Property as source of potable water;

(ii) properly abandon any wells on the Property, in accordance with Regulation 903: Wells, made under the OWRA when no longer in use; and

(iii) refrain from constructing on the Property any wells as defined in Regulation 903: Wells, made under the OWRA.

4.5 Further to Section 4.4 (c) of this CPU, the installation of ground water monitoring wells for environmental testing purposes is permitted.

Prohibition of Garden Products:

4.6 The Owner shall refrain from planting any garden products for consumption on the Property unless planted in above-ground containers such that the plants are isolated from the subsurface conditions. The planting of garden products for consumption on the Property is prohibited for as long as the COCs in soil and ground water remain present unless the plants are isolated from the subsurface conditions.

Property Use Restrictions:

4.7 Refrain from using the Property for Residential Use as defined in O. Reg. 153/04.

4.8 Retrain from construction the following building(s): No building construction unless construction is in accordance with Item 4.2(h) of the CPU.

Groundwater and NAPL Monitoring Program:

4.9 The groundwater and NAPL monitoring program shall commence upon completion of the redevelopment of the Site as parkland and shall be carried out on a semi-annual basis (once every six months) for a minimum of two years as per Section 1.4.4 of the RMP and thereafter until such time as the Director, upon application by the Owner, has reviewed the data available and either amends or revokes the CPU. The groundwater and NAPL monitoring shall be carried out as follows:

(i) The groundwater monitoring program shall consist of 11 well locations labelled as MW-CP-1, MW-CP-2, MW-CP-3A, MW-CP-3B, MW-CP-4, MW-CP-5, MW-CP-6A, MW-CP-6B, MW-CP-7, MW-CP-8A, and MW-CP-8B as indicated on Figure L-8 of the CPU and RMP at the indicated screen depths as per Section 1.4.4 of the RMP. NAPL monitoring shall be conducted at MW-CP-7.

4.10 The Contaminants of Concern to be monitored for each monitoring well are listed on Schedule 'B' of the CPU;

(i) Water from the monitoring wells shall be sampled according to Ministry's Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act (MECP, 2020) as amended from time to time.

(ii) The Owner shall keep a copy of the sampling data available for inspection by a Provincial Officer upon request.

4.11 Should a measured groundwater concentration exceed the Property Specific Standards listed in Schedule 'A' – Table 1B, the Owner shall immediately notify the Director in writing of the exceedance(s).

(i) If the groundwater concentration for the Contaminants of Concern exceeds the Property Specific Standards listed in Schedule 'A' – Table 1B; then groundwater monitoring shall recommence within thirty (30) days of receipt of the analytical results and be carried out as follows:

a) If the concentrations of the Contaminants of Concern in the recommenced groundwater monitoring event meet the Property Specific Standards listed in Schedule 'A' – Table 1B, no further action is required; or

b) If any of the concentrations of the Contaminants of Concern exceeds the Property Specific Standards listed in Schedule 'A' – Table 1B on the recommenced groundwater monitoring event; then within 45 days of the receipt of the analytical results, a contingency plan will be developed and submitted to the Director.

4.12 If the NAPL is measured at any monitoring well other than MW-CP-7; then NAPL monitoring shall recommence within thirty (30) days of the original measurement.

(i) If NAPL is measured at any other monitoring well other than MW-CP-7 during the recommenced NAPL monitoring, the following is to the carried out:

a) Notify the Director of the results of the NAPL monitoring in writing within five (5) business days of the recommenced NAPL monitoring.

b) Within 45 days of the recommenced NAPL monitoring, a contingency plan will be developed and submitted to the Director.

4.13 An annual report documenting the groundwater and NAPL monitoring program shall be prepared by a Qualified Person on or before March 31st following each year of monitoring. A copy of this report shall be maintained on file by the Owner and shall be made available upon request by a Provincial Officer. The annual report shall include, but not be limited to:

(i) Laboratory results and laboratory certificates of analysis;

(ii) Groundwater level monitoring and NAPL monitoring results;

(iii) Documentation of QA/QC;

(iv) Discussion and interpretation of the results in comparison to the Property Specific Standards listed in Schedule 'A' – Table 1B;

(v) Conclusions and recommendations with respect to the need for additional and/or continued monitoring, as may be warranted.

Targeted Excavations:

4.14 The targeted excavations of polychlorinated biphenyls (PCBs) and NAPL shall commence prior to occupancy of the Property and shall be conducted per Section 1.5 of the RMP in the areas identified on Figure L-9 of the RMP. The targeted excavations shall be carried out as follows:

(i) Excavation and remedial verification of the PCBs in the area identified on Figure L-9 of the RMP shall be conducted per O. Reg. 153/04 with verification samples meeting the minimum sampling requirement of Table 3 of Schedule E of O. Reg. 153/04.

(ii) Reporting on the targeted excavation of the PCBs in the area identified on Figure L-9 of the RMP shall be prepared by a Qualified Person and meet the "remediation" and "soil excavated at or brought to the Phase Two Property" requirements per Table 1 of Schedule E of O. Reg. 153/04. A copy of this report shall be maintained on file by the Owner and shall be made available upon request by a Provincial Officer.

(iii) Excavation of NAPL in the area identified on Figure L-9 on the RMP shall be conducted to the extent practicable and shall be carried out as follows:

a) Excavation and removal of impacted soil and groundwater shall be conducted to a depth of 1.5 m across the NAPL area;

b) Where NAPL or heavy sheen is observed in the 0 to 1.5 m interval within the NAPL area, additional targeted excavation shall be conducted to the extent practicable.

(iv) Reporting on the targeted excavation of the NAPL area identified on Figure L-9 of the RMP shall be prepared by a Qualified Person and describe the extent of NAPL that was practicable to be excavated from the Property. A copy of this report shall be maintained on file by the Owner and shall be made available upon request by a Provincial Officer. The report shall include a survey of the NAPL area.

Site Changes

4.15 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 may 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

4.16 Retain a copy of any reports required under the CPU, the Risk Assessment and any reports referred to in the Risk Assessment (until otherwise notified by the Director) 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

4.17 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

4.18 Within fifteen (15) days from the date of receipt of a certificate of requirement, issued under subsection 197(2) of the Act, register the certificate of requirement on title to the Property in the appropriate land registry office.

4.19 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 for the Property confirming that registration has been completed.

Owner / Occupant Change

4.20 While the CPU is in effect, forthwith report in writing to the Director any changes of ownership, of the Property.

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 provided, 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 you 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 absolve you from compliance with the requirement. The obligation to complete the requirement shall continue each day thereafter.

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 Tribunal, if within fifteen (15) days after being served 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 in respect of which the hearing is required, and the grounds on which you intend to rely at the hearing. Except by with 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. The contact information for the Director and the Tribunal are:

Registrar
Ontario Land Tribunal
655 Bay Street, Suite 1500
Toronto, ON, M5G 1E5

Email: OLT.Registrar@ontario.ca

and

Courtney Redmond, Director
Ministry of the Environment and Climate Change
300 Water Street, 2nd Floor South Tower
Peterborough, ON
K9J 3C7

Email: Courtney.Redmond@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, this CPU is effective from the date of issue.

6.5 If you commence an appeal before the Tribunal, under section 47 of EBR, you must give notice to the public in the Environmental Registry of Ontario. The notice must include a brief description of this 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 Ministry of the Environment, Conservation and Parks, College Park 5th Flr, 777 Bay St, Toronto, ON 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 this 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 For your information, under section 38 of the EBR, any person resident in Ontario with an interest in this CPU may seek leave to appeal this CPU. Under 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 decision to issue 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 at Peterborough, Ontario this ___ day of _____, 2026.

_____
Courtney Redmond
Director, section 168.6 of the Act

Schedule 'A': Figure 1

(not to scale)

PLAN OF SURVEY OF

PART OF LOTS 256, 357, 358, 359 and 360, and PART OF GAGE STREET and PART OF QUEEN STREET

(Both Closed by By-Law 2323. INST No, PH7601)

PART OF THE HARBOUR LANDS, SMITH ESTATE PLAN (BEING PART OF LOT 6, BROKEN FRONT CONCESSION), and

(FORMERLY TOWN OF PORT HOPE)

MUNICIPALITY OF PORT HOPE

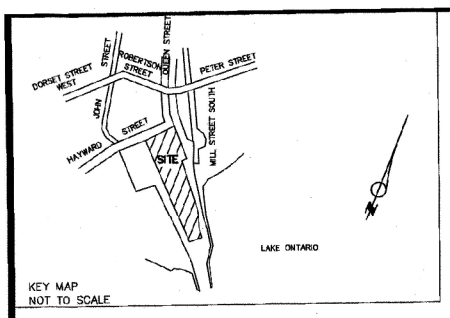
COUNTY OF NORTHUMBERLAND

IVAN B. WALLACE O.L.S. LTD.

SCALE: 1 : 750

0 50 100 150 200 250 METRES

KEY MAP
NOT TO SCALE



PART 18, PLAN 39R – 12181

PART 1, PLAN 39R – 12858

PIN 51072-0183(R)

PIN 51072 – 0177 (LT)

PIN 51072 – 0175 (LT)

PIN 51072 – 0183 (R)

PIN 51072 – 0193(R)

PIN 51072 – 0200 (LT)

PIN 51072-0201 (LT)

PIN 51072 – 0198(R)

LOT 357

LOT 358

LOT 359

LOT 360

LOT 256

LOT 257

LOT 6, BROKEN FRONT CONCESSION

PROPERTY 1

PROPERTY 2

PROPERTY 3

PROPERTY 4

HAYWARD STREET

QUEEN STREET

GAGE STREET

ROBERTSON STREET

CANNAPASKA RIVER

SMITH ESTATE PLAN

HARBOUR LANDS OF SMITH ESTATE PLAN BEING PART OF LOT 6, BROKEN FRONT CONCESSION

BED OF LAKE ONTARIO

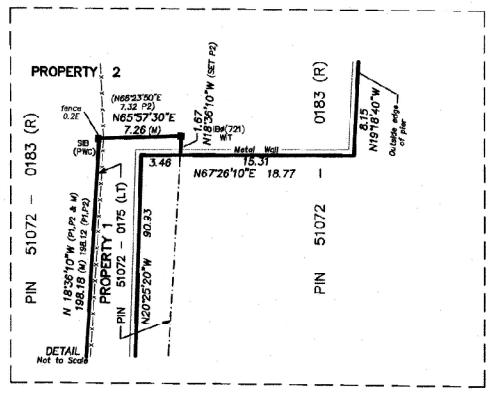
BLOCK BUILDING

BRICK BUILDING

CONCRETE STORAGE AREA

ALUM. & BRICK BUILDING

SEE DETAIL



PROPERTY SCHEDULE

	PIN	AREA sq m.
PROPERTY 1	PART OF 51072-0175(LT)	5976.2
PROPERTY 2	PART OF 51072-0183(R)	39682.9
PROPERTY 3	PART OF 51072-0193(R)	3539±
PROPERTY 4	PART OF 51072-0200(LT)	204±

SURVEYOR'S CERTIFICATE

I CERTIFY THAT:

1. This survey and plan are correct and in accordance with the Surveys Act and the Surveyors Act and the regulations made under them.
2. The survey was completed on February 13, 2014.

March 25/14 — C. Cranch
Date — Crystal Cranch, O.L.S.

LEGEND

- ■ denotes survey monument found
- □ denotes survey monument set
- SSIB denotes short standard iron bar
- SIB denotes standard iron bar
- IB denotes iron bar
- CC denotes cut cross
- ⌀ denotes round
- WIT denotes witness
- M denotes measured
- denotes control point
- UP/LS denotes utility pole/Light standard
- P1 denotes Plan of Survey by J.L. Sylvester Limited dated 4th December 1975.
- P2 denotes Plan 39R-9770
- P3 denotes Plan 39R-12181
- P4 denotes Smith Estate Plan
- 721 denotes J.L. Sylvester O.L.S.
- 1293 denotes Sylvester & Brwon, OLS
- PWC denotes Public Works Canada
- MSM denotes Municipal Survey Monument

PHASE ONE ESA PROPERTY =
PHASE TWO ESA PROPERTY =
RA PROPERTY = RSC PROPERTY

BEARING NOTES

Bearings are UTM Grid, derived from observed reference points A and B, by Real Time Network observations, UTM Zone 17, NAD83(CSRS)(1997).

For bearing comparisons, the following rotation was applied:

P1 1°50'40" counter-clockwise
P2,P3 1°52'40" counter-clockwise

DISTANCE NOTES – METRIC

Distances and coordinates are in metres and can be converted to feet by dividing by 0.3048.

Distances are ground and can be converted to grid by multiplying by the combined scale factor of 1.000175

INTEGRATION DATA

Observed reference points derived from GPS observations using a Real Time Network and are referred to UTM Zone 17 (81° west longitude) NAD83(CSRS)(1997).

Urban accuracy per Sec. 14(2), O.Reg. 216/10.

POINT ID	NORTHING	EASTING	COMBINED SCALE FACTOR
A	4869443.81	717177.38	1.000175
B	4869001.42	717374.57	1.000175

CAUTION: COORDINATES CANNOT, IN THEMSELVES, BE USED TO RE-ESTABLISH CORNERS OR BOUNDARIES SHOWN ON THIS PLAN

ASSOCIATION OF ONTARIO LAND SURVEYORS
PLAN SUBMISSION FORM
1894481
THIS PLAN IS NOT VALID UNLESS IT IS AN EMBOSSED ORIGINAL COPY ISSUED BY THE SURVEYOR
In accordance with Regulation 1026, Section 29(8).

IVAN B. WALLACE
ONTARIO LAND SURVEYOR LTD.
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cobourg@ibwsurveyors.com

CHECKED BY: CC

FILE: 4-4356_PWGSC

drawn by FR/MSJ — dessiné par

PROJECT No. R.023276.117 — no. du projet

Public Works and Government Services Canada
Real Property Services
Real Property Geomatics Services

Travaux publics et Services gouvernement aux Canada
Services immobiliers
Services géomatiques immobiliers

S.G.C. 14-025 — C.G.T. — Item no. 12-114-02 — Item no.

Schedule "A" – Table 1A: Property Specific Standards – Soil

Parameter	*Units*	*Maximum Soil Concentration*	*Site Condition Standard*[1]	*Property Specific Standard*
Acenaphthene	µg/g	37	0.072	44
Acenaphthylene	µg/g	2.3	0.093	2.8
Acetone	µg/g	<5 (2.5)	0.5	6.0
Anthracene	µg/g	86	0.22	103
Antimony	µg/g	1,080	1.3	1,296
Arsenic	µg/g	3,700	18	4,440
Barium	µg/g	3,700	220	4,440
Benzene	µg/g	2.3	0.02	2.8
Benz(a)anthracene	µg/g	94	0.36	113
Benzo(a)pyrene	µg/g	70	0.3	84
Benzo(b,j)fluoranthene	µg/g	98	0.47	118
Benzo(g,h,i)perylene	µg/g	33	0.68	40
Benzo(k)fluoranthene	µg/g	31	0.48	37
Beryllium	µg/g	3.8	2.5	4.6
Boron (Hot Water Soluble)	µg/g	260	1.5	312
Boron (Total)	µg/g	1,186	36	1,423
Cadmium	µg/g	5.1	1.2	6.1
Calcium [2]	µg/g	128,11 0	NV	153,732
Chromium Total	µg/g	810	70	972
Chromium VI	µg/g	3.5	0.66	4.2
Chrysene	µg/g	78	2.8	94
Cobalt	µg/g	50	22	60
Copper	µg/g	13,700	92	16,440
Cyanide (CN-)	µg/g	0.09	0.05	0.11
Dibenz(a,h)anthracene	µg/g	12	0.1	14
Ethylbenzene	µg/g	5.3	0.05	6.4
Fluoranthene	µg/g	252	0.69	302
Fluorene	µg/g	69	0.19	83
Fluoride [2]	µg/g	985	NV	1,182
Hexane (n-)	µg/g	5.4	0.05	6.5
Indeno (1,2,3-c,d)pyrene	µg/g	30	0.23	36
Iron [1]	µg/g	38,611	NV	46,333
Lead	µg/g	52,400	120	62,880

Parameter	*Units*	*Maximum Soil Concentration*	*Site Condition Standard[1]*	*Property Specific Standard*
Mercury	µg/g	1.1	0.27	1.3
Methyl Ethyl Ketone	µg/g	<5 (0.6)	0.5	6.0
Methyl Isobutyl Ketone	µg/g	<5 (1.7)	0.5	6.0
Methylnaphthalene, 2-(1-)	µg/g	87	0.59	104
Molybdenum	µg/g	42	2	50
Naphthalene	µg/g	63	0.09	76
Nickel	µg/g	98	82	118
Nitrate [2]	µg/g	15	NV	18
Nitrite [2]	µg/g	<2	NV	2.4
PHC F1	µg/g	230	25	276
PHC F2	µg/g	5,850	10	7,020
PHC F3	µg/g	12,400	240	14,880
PHC F4	µg/g	3,150	120	3,780
Phenanthrene	µg/g	314	0.69	377
Pyrene	µg/g	180	1	216
Selenium	µg/g	5.5	1.5	6.6
Silver	µg/g	5.8	0.5	7.0
Sulphate [2]	µg/g	805	NV	966
Thallium	µg/g	1.2	1	1.4
Thorium [2]	µg/g	31	NV	37
Toluene	µg/g	16	0.2	19
Uranium	µg/g	18,200	2.5	21,840
Xylene Mixture	µg/g	37	0.05	44
Zinc	µg/g	13,400	290	16,080
Electrical Conductivity	mS/cm	2.6	0.7	3.1

Notes:

1 MECP (2011) Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Ground Water Condition for Residential/Parkland/Institutional/Industrial/Commercial/Community Use

2 Contaminant is not regulated under Ontario Regulation 153/04 and therefore there is no value (NV)

Schedule "A" – Table 1B: Property Specific Standards – Groundwater

Parameter	*Units*	*Maximum Groundwater Concentration*	*Site Condition Standard[1]*	*Property Specific Standard*
Anthracene	µg/L	0.31	1	0.37
Benzene	µg/L	25.4	44	30
Benzo(g,h,i)perylene	µg/L	0.31	0.2	0.37
Boron (Total)	µg/L	250,000	36,000	300,000
Bromodichloromethane	µg/L	5	67,000	6.0
Copper	µg/L	106	69	127
Cyanide (CN-)	µg/L	3	52	3.6
Dibromochloromethane	µg/L	2.5	65,000	3.0
1,4-Dichlorobenzene	µg/L	1.6	8	1.9
Dichloroethane, 1,1-	µg/L	1,200	320	1,440
Dichloroethane, 1,2-	µg/L	2.3	1.6	2.8
Dichloroethylene, 1,1-	µg/L	3.8	1.6	4.6
Dichloroethylene, 1,2- cis-	µg/L	11	16	13
Dichloroethylene, 1,2- trans-	µg/L	2.9	1.6	3.5
Fluorene	µg/L	1.9	290	2.3
Indeno(1,2,3-c,d)pyrene	µg/L	0.32	0.2	0.38
Lead	µg/L	322	20	386
Methylnaphthalene, 2-(1)-	µg/L	31	1,500	37
PHC F2	µg/L	1,440	150	1,728
PHC F3	µg/L	1,400	500	1,680
PHC F4	µg/L	2,230	500	2,676
Phenanthrene	µg/L	1.3	380	1.6
Silver	µg/L	2.8	1.2	3.4
Tetrachloroethylene	µg/L	0.7	1.6	0.84
Trichloroethane, 1,1,1-	µg/L	36	640	43
Trichloroethane, 1,1,2-	µg/L	0.6	4.7	0.72
Trichloroethylene	µg/L	2.2	1.6	2.6
Uranium	µg/L	2,300	330	2,760
Vinyl Chloride (degradation)	µg/L	80	0.5	96

Notes:

[1] MECP (2011) Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Ground Water Condition for Residential/Parkland/Institutional/Industrial/Commercial/Community Use

Schedule "A" – Table 1C: Indoor Air Trigger Values for Future Buildings

Target Analyte	*Residential Target Indoor Air Vapour Concentrations ($\mu g/m^3$)*	*Commercial Target Indoor Air Vapour Concentrations ($\mu g/m^3$)*
Benzene	0.506	1.63
Ethylbenzene	209	715
Toluene	1040	3580
Xylene Mixture	146	501
PHC F1	2490	8540
PHC F2	471	1610
Naphthalene	0.772	2.65
Mercury	0.0188	0.0644
1,1-Dichloroethane	34.4	118
Hexane (n-)	521	1790
1,1,2-Trichlorothane	0.0695	0.223
Trichloroethylene	0.271	0.872
Vinyl Chloride	0.126	0.406
Total PCBs	0.0111	0.0358

Schedule “B”: Contaminants of Concern for Groundwater Analysis

Groundwater Monitoring Well ID	Screen Interval Location	COCs for Analysis
MW-CP-1	Overburden	Benzo(a,h,i)perylene, Boron (total), Copper, Indeno(1,2,3-c,d)pyrene, Lead, PHC F2, PHC F3, PHC F4, Silver, Uranium
MW-CP-2	Overburden	Benzo(a,h,i)perylene, Boron (total), Copper, Indeno(1,2,3-c,d)pyrene, Lead, PHC F2, PHC F3, PHC F4, Silver, Uranium
MW-CP-3A	Overburden	Benzo(a,h,i)perylene, Boron (total), Copper, Indeno(1,2,3-c,d)pyrene, Lead, PHC F2, PHC F3, PHC F4, Silver, Uranium
MW-CP-3B	Bedrock	1,1-Dichloroethane, 1,2-Dichloroethane, 1,1-Dichloroethylene, cis-1,2-Dichloroethylene, trans-1,2-Dichloroethylene, Trichloroethylene, Vinyl chloride
MW-CP-4	Overburden	Benzo(a,h,i)perylene, Boron (total), Copper, Indeno(1,2,3-c,d)pyrene, Lead, PHC F2, PHC F3, PHC F4, Silver, Uranium
MW-CP-5	Bedrock	1,1-Dichloroethane, 1,2-Dichloroethane, 1,1-Dichloroethylene, cis-1,2-Dichloroethylene, trans-1,2-Dichloroethylene, Trichloroethylene, Vinyl chloride
MW-CP-6A	Overburden	Benzo(a,h,i)perylene, Boron (total), Copper, Indeno(1,2,3-c,d)pyrene, Lead, PHC F2, PHC F3, PHC F4, Silver, Uranium
MW-CP-6B	Bedrock	1,1-Dichloroethane, 1,2-Dichloroethane, 1,1-Dichloroethylene, cis-1,2-Dichloroethylene, trans-1,2-Dichloroethylene, Trichloroethylene, Vinyl chloride
MW-CP-7	Overburden	Benzo(a,h,i)perylene, Boron (total), Copper, Indeno(1,2,3-c,d)pyrene, Lead, PHC F2, PHC F3, PHC F4, Silver, Uranium
MW-CP-8A	Overburden	Benzo(a,h,i)perylene, Boron (total), Copper, Indeno(1,2,3-c,d)pyrene, Lead, PHC F2, PHC F3, PHC F4, Silver, Uranium
MW-CP-8B	Bedrock	1,1-Dichloroethane, 1,2-Dichloroethane, 1,1-Dichloroethylene, cis-1,2-Dichloroethylene, trans-1,2-Dichloroethylene, Trichloroethylene, Vinyl chloride

Appendix: RMP Figures

(Figures L-1 to L-10)

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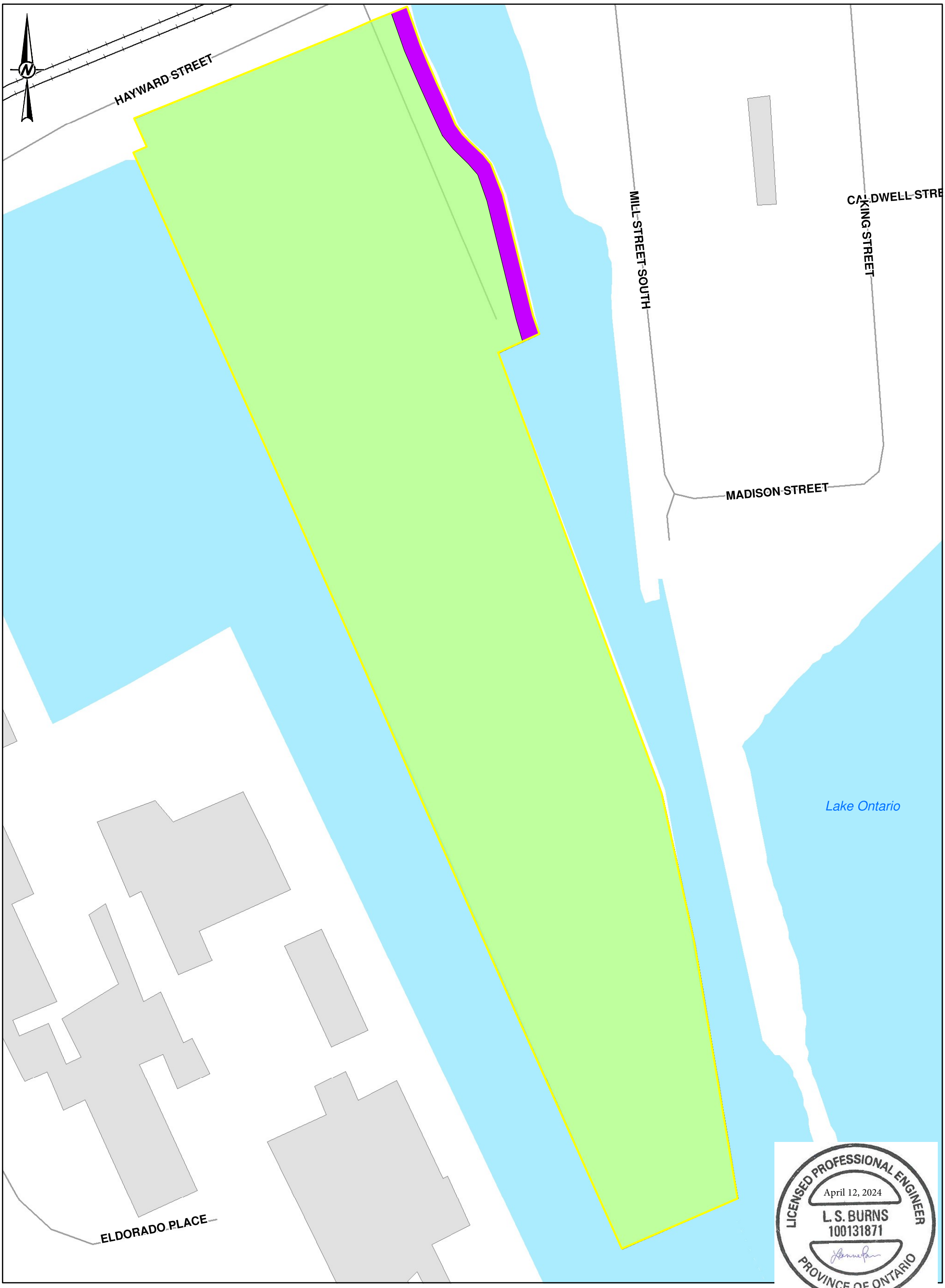

LEGEND

- ROAD
- RAILWAY
- WATERBODY
- BUILDING TO SCALE
- PHASE TWO ESA PROPERTY BOUNDARY = RA PROPERTY BOUNDARY = RSC PROPERTY BOUNDARY; AREA WHERE BARRIER TO SITE SOILS RMM IS REQUIRED
- AREA WHERE BARRIER TO SITE SOILS RMM IS REQUIRED
- AREA WHERE RIPRAP REVETMENT INSPECTION RMM IS REQUIRED

0 25 50 75 100

1:1,500 METRES

LICENSED PROFESSIONAL ENGINEER
April 12, 2024
L. S. BURNS
100131871
PROVINCE OF ONTARIO

REFERENCE(S)

BASE DATA MNRF LIO 2020
PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83 COORDINATE SYSTEM: UTM ZONE 17N

CLIENT
CANADIAN NUCLEAR LABORATORIES

CONSULTANT
WSP GOLDER

YYYY-MM-DD	2022-04-08
DESIGNED	SO
PREPARED	SO
REVIEWED	LKB
APPROVED	LSB

PROJECT
ENVIRONMENTAL RISK MANAGEMENT PLAN
1 HAYWARD STREET, PORT HOPE, ONTARIO

TITLE
EXTENT OF BARRIER TO SITE SOILS RMM REQUIREMENT

PROJECT NO.	PHASE	REV.	FIGURE
1783264	(1000)	A	L-1

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B

0 25mm

Last Edited By: ddojcinovic Date: 2023-06-01 Time:9:55:48 AM | Printed By: ddojcinovic Date: 2023-06-01 Time:9:58:59 AM
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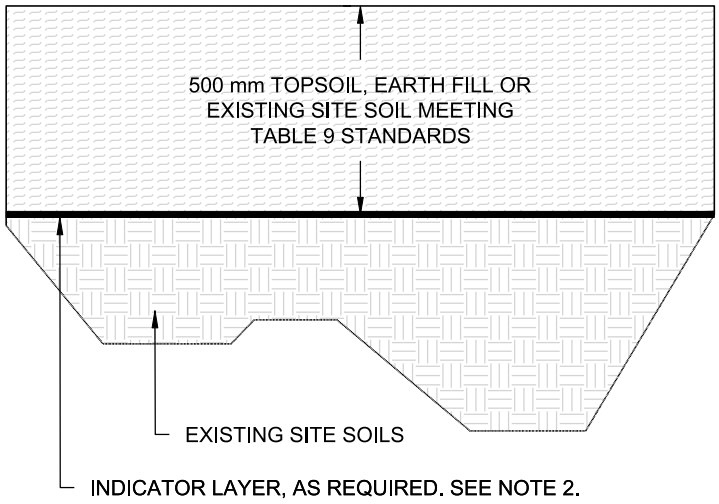
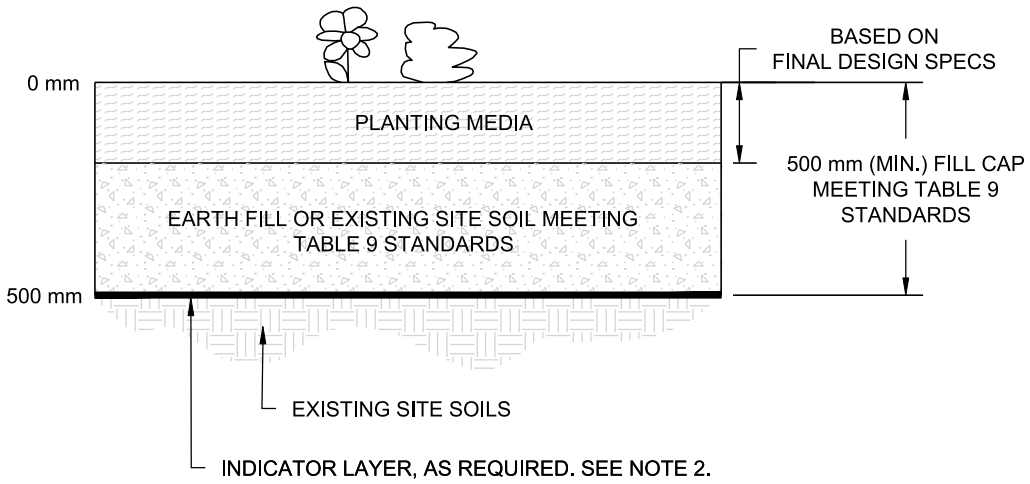
DETAIL 1: TYPICAL FILL CAP BARRIER



DETAIL 2: TYPICAL FILL CAP FOR PLANTING BEDS



LICENSED PROFESSIONAL ENGINEER
April 12, 2024
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100131871
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NOTE(S)

1. TABLE 9 STANDARDS = MINISTRY OF THE ENVIRONMENT, CONSERVATION, AND PARKS "SOIL, GROUND WATER, AND SEDIMENT STANDARDS FOR USE UNDER PART XV.1 ENVIRONMENTAL PROTECTION ACT, APRIL 2011" TABLE 9 STANDARDS: GENERIC SITE CONDITION STANDARDS FOR USE WITHIN 30 m OF A WATER BODY IN A NON-POTABLE GROUND WATER CONDITION FOR RESIDENTIAL / PARKLAND / INSTUTIONAL / INDUSTRIAL / COMMERCIAL / COMMUNITY PROPERTY USE FOR COARSE TEXTURED SOILS.
2. INDICATOR LAYER TO BE PLACED BELOW RMM FILL CAP BARRIER WHERE CONSTRUCTED DEPTH IS LESS THAN 1000 mm. INDICATOR LAYER NOT REQUIRED WHERE RMM FILL CAP BARRIER ABUTS PROPERTY PERIMETER (LATERAL DIMENSION APPROXIMATELY 500 mm).

NOT TO SCALE

CLIENT
CANADIAN NUCLEAR LABORATORIES

PROJECT
ENVIRONMENTAL RISK MANAGEMENT PLAN
1 HAYWARD STREET, PORT HOPE, ONTARIO

TITLE
FILL CAP BARRIER TO SITE SOILS – TYPICAL DETAILS

CONSULTANT
wsp

YYYY-MM-DD	2023-06-01
DESIGNED	
PREPARED	DD
REVIEWED	LKB
APPROVED	LSB

PROJECT NO.	PHASE	REV.	FIGURE
1783264	(1000)	A	L-2A

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI A
0 25 mm

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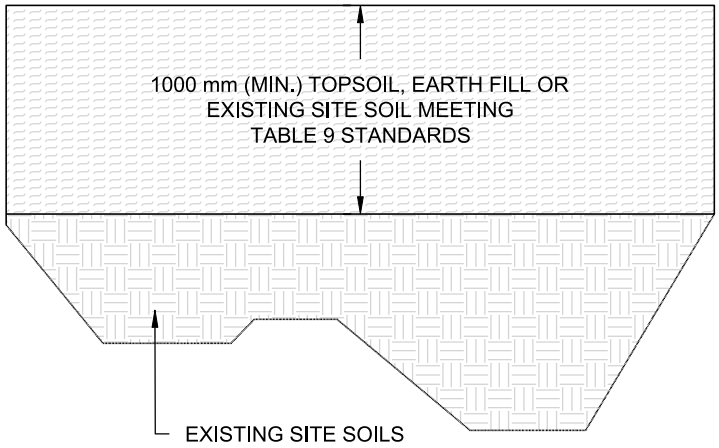
DETAIL 3: BARRIER TO SITE SOILS FOR CHILDREN'S PLAY AREAS



NOTE(S)

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NOT TO SCALE

CLIENT
CANADIAN NUCLEAR LABORATORIES

PROJECT
ENVIRONMENTAL RISK MANAGEMENT PLAN
1 HAYWARD STREET, PORT HOPE, ONTARIO

TITLE
FILL CAP BARRIER TO SITE SOILS – TYPICAL DETAILS

CONSULTANT

wsp

YYYY-MM-DD	2023-06-01
DESIGNED	
PREPARED	DD
REVIEWED	LKB
APPROVED	LSB

PROJECT NO.	PHASE	REV.	FIGURE
1783264	(1000)	A	L-2B

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI A

0 25 mm

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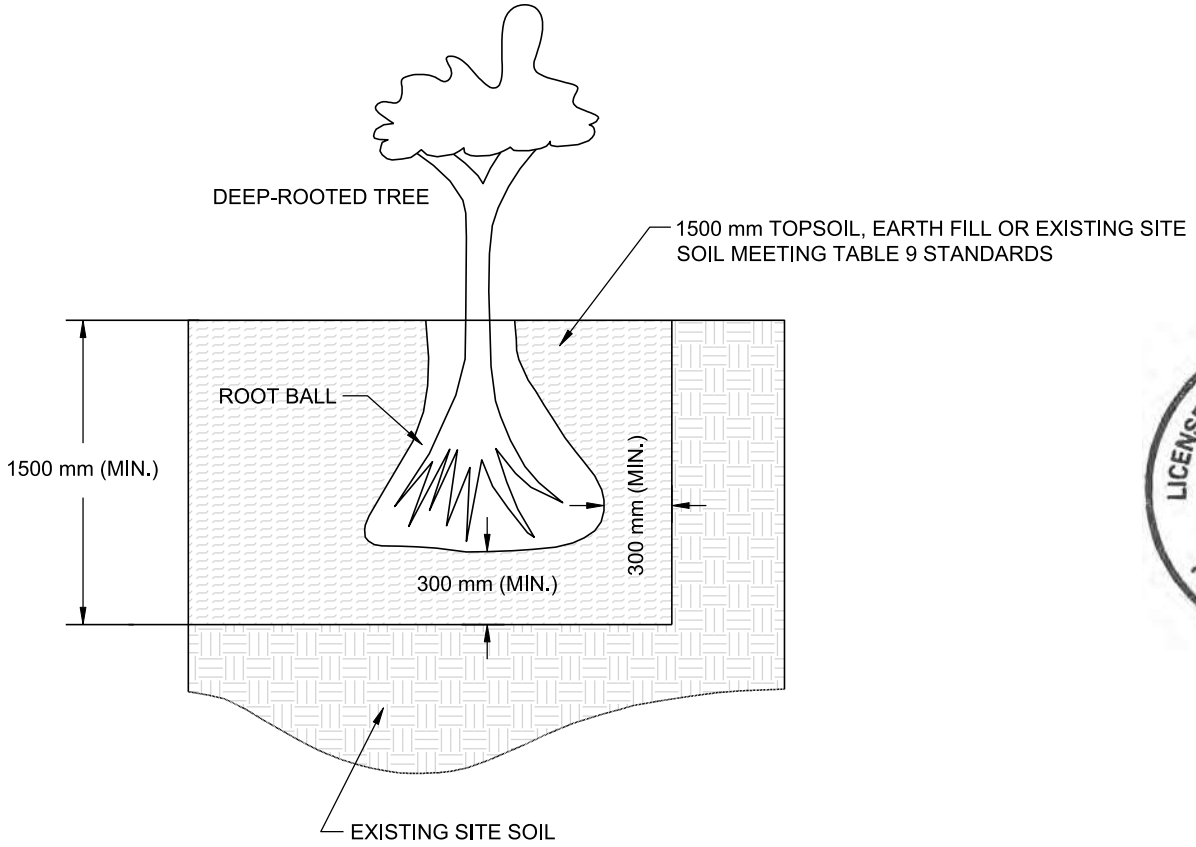

NOTE(S)

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NOT TO SCALE

CLIENT
CANADIAN NUCLEAR LABORATORIES

PROJECT
ENVIRONMENTAL RISK MANAGEMENT PLAN
1 HAYWARD STREET, PORT HOPE, ONTARIO

TITLE
FILL CAP BARRIER TO SITE SOILS IN AREAS OF DEEP-ROOTED TREES – TYPICAL DETAILS

CONSULTANT
WSP GOLDER

YYYY-MM-DD	2022-04-12
DESIGNED	
PREPARED	DD
REVIEWED	LKB
APPROVED	LSB

PROJECT NO.	PHASE	REV.	FIGURE
1783264	(1000)	A	L-3

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI A
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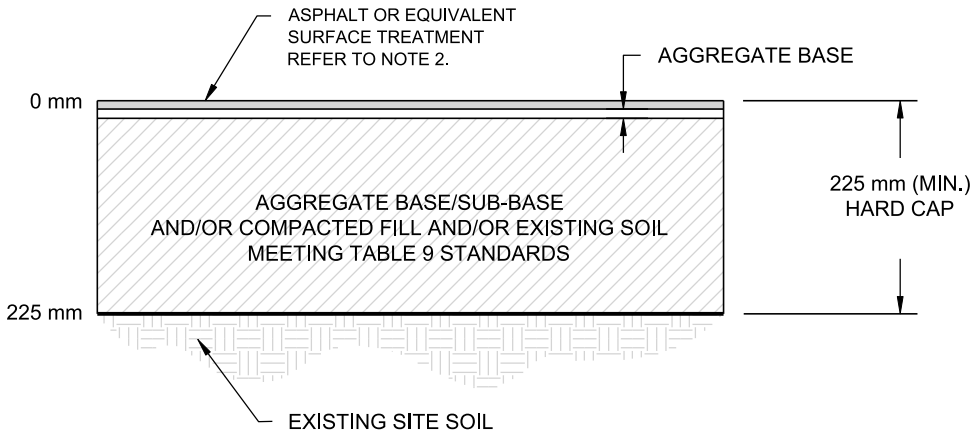


NOTE(S)

1. TABLE 9 STANDARDS = MINISTRY OF THE ENVIRONMENT, CONSERVATION, AND PARKS "SOIL, GROUND WATER, AND SEDIMENT STANDARDS FOR USE UNDER PART XV.1 ENVIRONMENTAL PROTECTION ACT, APRIL 2011" TABLE 9 STANDARDS: GENERIC SITE CONDITION STANDARDS FOR USE WITHIN 30 m OF A WATER BODY IN A NON-POTABLE GROUND WATER CONDITION FOR RESIDENTIAL / PARKLAND / INSTUTIONAL / INDUSTRIAL / COMMERCIAL / COMMUNITY PROPERTY USE FOR COARSE TEXTURED SOILS.
2. FINAL PAVEMENT AND SUBGRADE DESIGN REQUIREMENTS SHALL BE DETERMINED BY A LICENSED PROFESSIONAL ENGINEER, AND MEETING OR EXCEEDING THE MINIMUM HARD CAP DIMENSION SHOWN.

NOT TO SCALE

CLIENT
CANADIAN NUCLEAR LABORATORIES

PROJECT
ENVIRONMENTAL RISK MANAGEMENT PLAN
1 HAYWARD STREET, PORT HOPE, ONTARIO

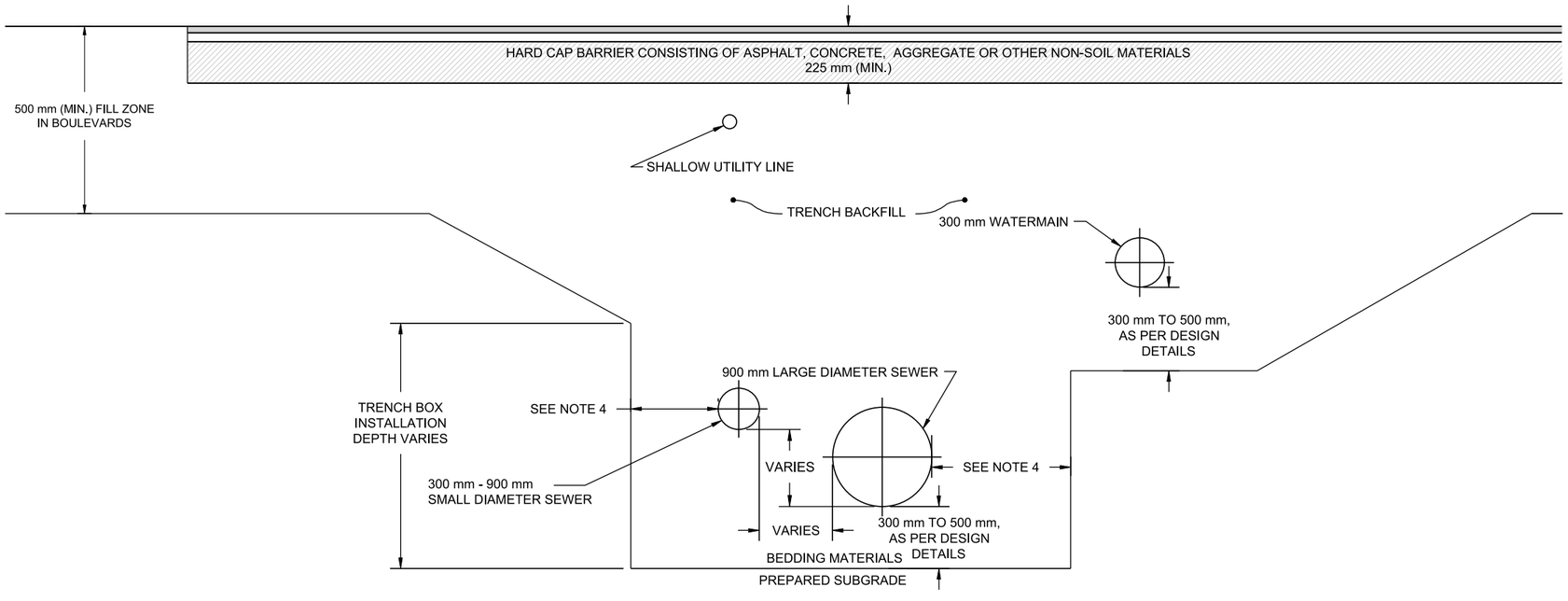
TITLE
HARD CAP BARRIER TO SITE SOILS – TYPICAL DETAILS

CONSULTANT
WSP GOLDER

YYYY-MM-DD	2022-04-12
DESIGNED	
PREPARED	DD
REVIEWED	LKB
APPROVED	LSB

PROJECT NO.	PHASE	REV.	FIGURE
1783264	(1000)	A	L-4

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI A
0 25 mm



NOTE(S)

1. VERTICAL AND NEAR VERITCAL UTILITY INSTALLATIONS MUST HAVE A ZONE OF NON-SOIL, OR FILL MATERIAL MEETING TABLE 9 STANDARD TO A DIAMETER OF AT LEAST 600 mm SURROUNDING THE PIPE OR SHAFT.
2. CLEAN FILL ZONES ARE NOT REQUIRED ADJACENT TO AUGERED OR DRILLED FOUNDATIONS SUCH AS FOR UTILITY POLES OR CAISSON FOUNDATIONS FOR SIGNS.
3. TRENCH BACKFILL TO CONSIST OF NON-SOIL, OR FILL MATERIAL MEETING TABLE 9 STANDARD.
4. MINIMUM DIMENSIONS TO BE DETERMINED BY EXCAVATION REQUIREMENTS AND MUNICIPALITY OF PORT HOPE REQUIREMENTS FOR INSTALLATIONS AND REPAIRS.
5. TABLE 9 STANDARDS = MINISTRY OF THE ENVIRONMENT, CONSERVATION, AND PARKS "SOIL, GROUND WATER, AND SEDIMENT STANDARDS FOR USE UNDER PART XV.1 ENVIRONMENTAL PROTECTION ACT, APRIL 2011" TABLE 9 STANDARDS: GENERIC SITE CONDITION STANDARDS FOR USE WITHIN 30 m OF A WATER BODY IN A NON-POTABLE GROUND WATER CONDITION FOR RESIDENTIAL / PARKLAND / INSTUTIONAL / INDUSTRIAL / COMMERCIAL / COMMUNITY PROPERTY USE FOR COARSE TEXTURED SOILS.

NOT TO SCALE

CLIENT
CANADIAN NUCLEAR LABORATORIES

PROJECT
ENVIRONMENTAL RISK MANAGEMENT PLAN
1 HAYWARD STREET, PORT HOPE, ONTARIO

TITLE
HARD CAP BARRIER TO SITE SOILS FOR ROADWAYS AND UTILITIES – TYPICAL DETAILS

CONSULTANT
WSP GOLDER

YYYY-MM-DD	2022-04-12
DESIGNED	
PREPARED	DD
REVIEWED	LKB
APPROVED	LSB

PROJECT NO.	PHASE	REV.	FIGURE
1783264	(1000)	A	L-5

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B
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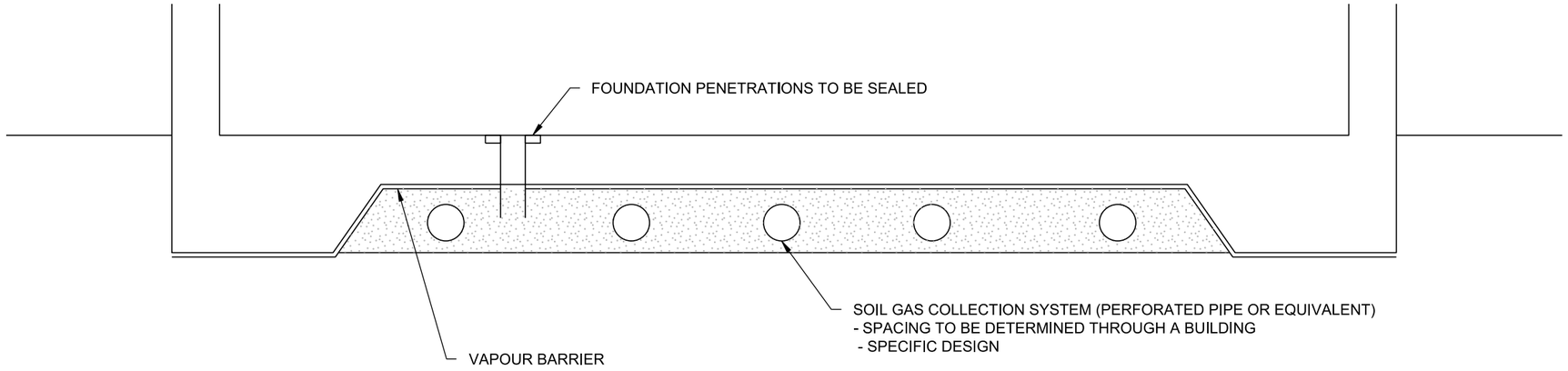
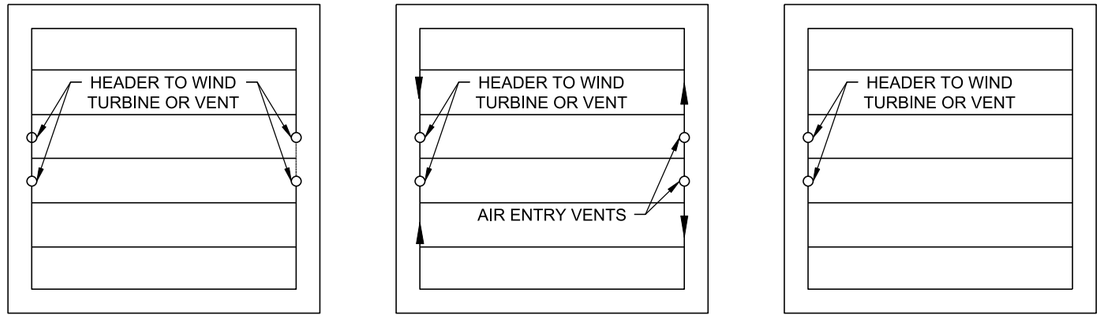
TYPICAL PROFILE VIEW FOR VENTING PIPES



TYPICAL PLAN VIEW LAYOUT TO VENTING PIPES



PERIMETER RING VENTING PIPE LAYOUT

VENTING PIPE LAYOUT WITH AIR ENTRY PIPES

VENTING PIPE LAYOUT WITHOUT AIR ENTRY PIPES

NOT TO SCALE

LICENSED PROFESSIONAL ENGINEER
Feb 3, 2023
L. S. BURNS
100131871
PROVINCE OF ONTARIO

NOTES

1. CRACKS, OPENINGS AND UTILITY PENETRATIONS TO BE SEALED WITH AN ELASTOMERIC SEALANT MATERIAL.
2. AS AN ALTERNATIVE TO VENT PIPE INSTALLATION, A PLASTIC DOMEWORK AERATED SUBFLOOR MAY BE INSTALLED.
3. VENT PIPES ARE TO BE CONNECTED TO HEADERS AND RISERS HAVING A DIAMETER LARGER THAN THE LATERALS.
4. NON-PERFORATED PORTIONS OF THE VENTING PIPE SYSTEM SHALL BE SLOPED DOWNWARD AT A CONTINUOUS GRADE OF 1% OR GREATER TOWARD THE PERFORATED LATERALS.
5. FLEXIBLE EXPANSIONS JOINTS OR CONNECTORS SHOULD BE INSTALLED TO ACCOMMODATE DIFFERENTIAL SETTLEMENT.
6. REFER TO FIGURE L-7 FOR CORRESPONDING VENTING DETAILS.
7. FINAL VAPOUR MITIGATION SYSTEM DESIGN TO BE PREPARED BY A PROFESSIONAL ENGINEER.

CLIENT
CANADIAN NUCLEAR LABORATORIES

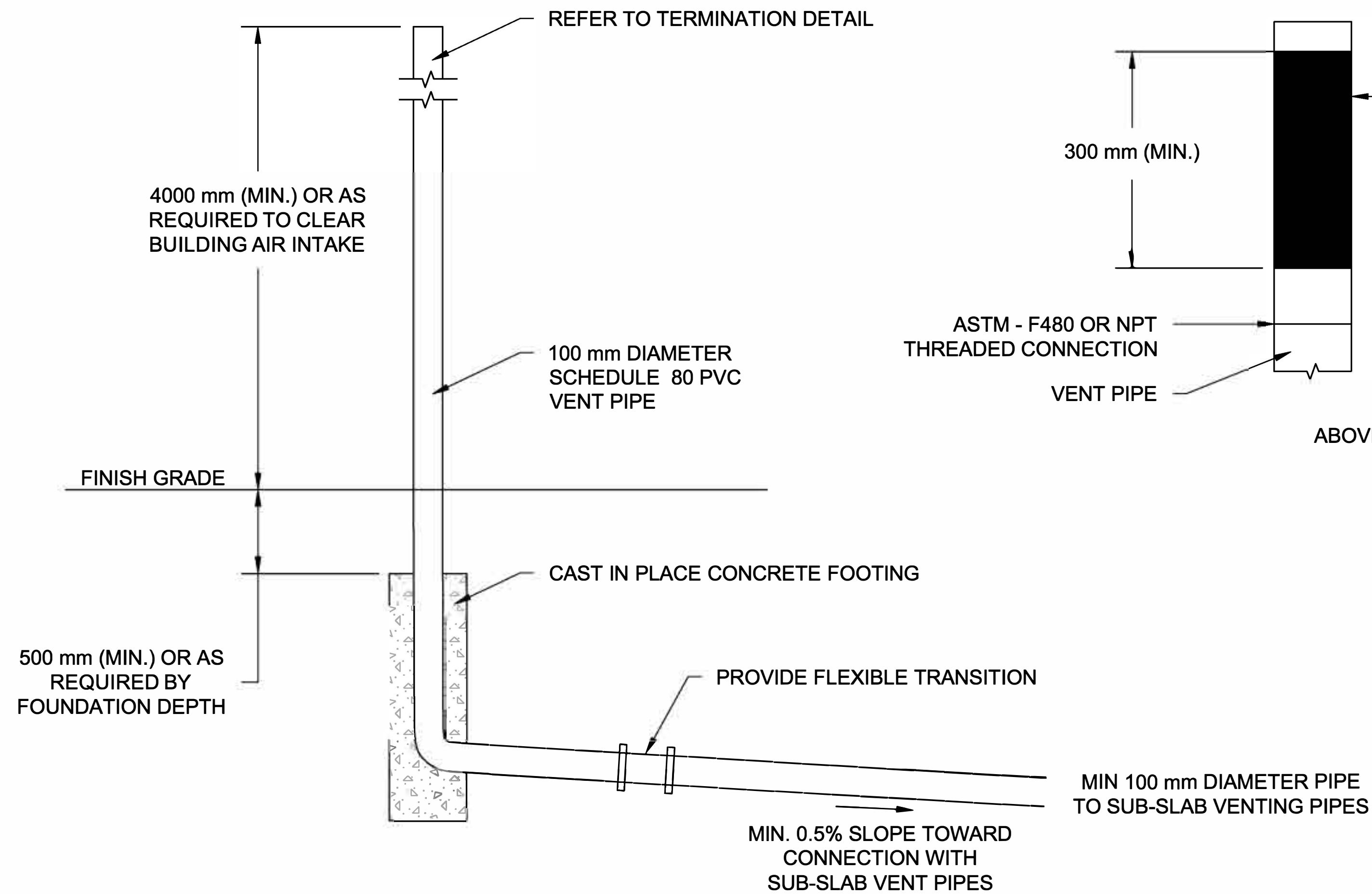
PROJECT
ENVIRONMENTAL RISK MANAGEMENT PLAN
1 HAYWARD STREET, PORT HOPE, ONTARIO

TITLE
CONCEPTUAL DESIGN FOR VENT PIPE AND RISER ON VAPOUR INTRUSION MITIGATION SYSTEM

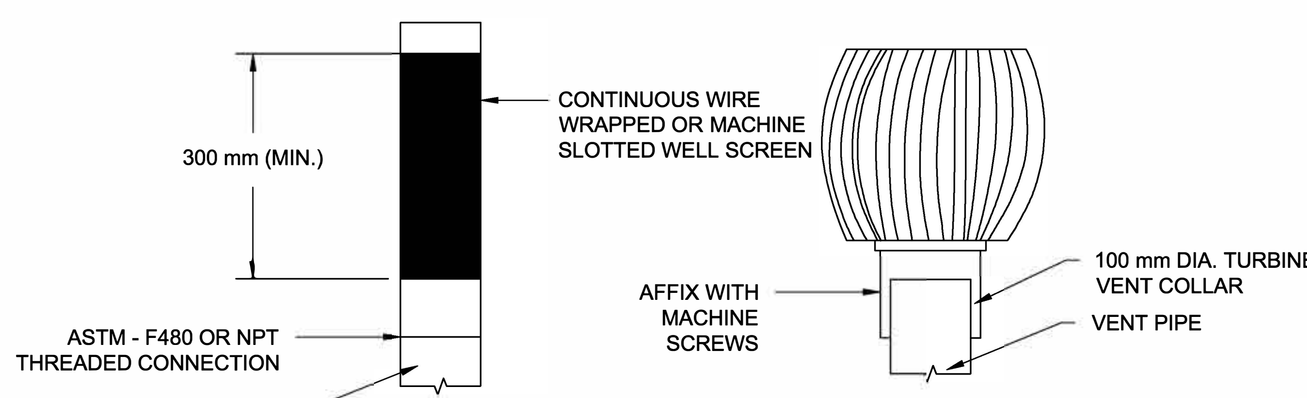
CONSULTANT
wsp GOLDER

YYYY-MM-DD	2022-04-12
DESIGNED	
PREPARED	DD
REVIEWED	LKB
APPROVED	LSB

PROJECT NO.	PHASE	REV.	FIGURE
1783264	(1000)	A	L-6



ABOVE GRADE PIPING CONFIGURATION FOR SUB-SLAB VAPOUR MITIGATION SYSTEM



ABOVE GRADE VENT PIPE TERMINATION DETAIL

NOT TO SCALE

LICENSED PROFESSIONAL ENGINEER
Feb 3, 2023
L.S. BURNS
100131871
PROVINCE OF ONTARIO

NOTES

1. REFER TO FIGURE L-6 FOR CORRESPONDING VENT PIPE AND RISER DETAILS.
2. FINAL VAPOUR MITIGATION SYSTEM DESIGN TO BE PREPARED BY A PROFESSIONAL ENGINEER.

CLIENT
CANADIAN NUCLEAR LABORATORIES

PROJECT
ENVIRONMENTAL RISK MANAGEMENT PLAN
1 HAYWARD STREET, PORT HOPE, ONTARIO

TITLE
CONCEPTUAL VENTING DETAILS FOR VAPOUR INTRUSION MITIGATION SYSTEM

CONSULTANT
wsp GOLDER

YYYY-MM-DD	2022-04-12
DESIGNED	
PREPARED	DD
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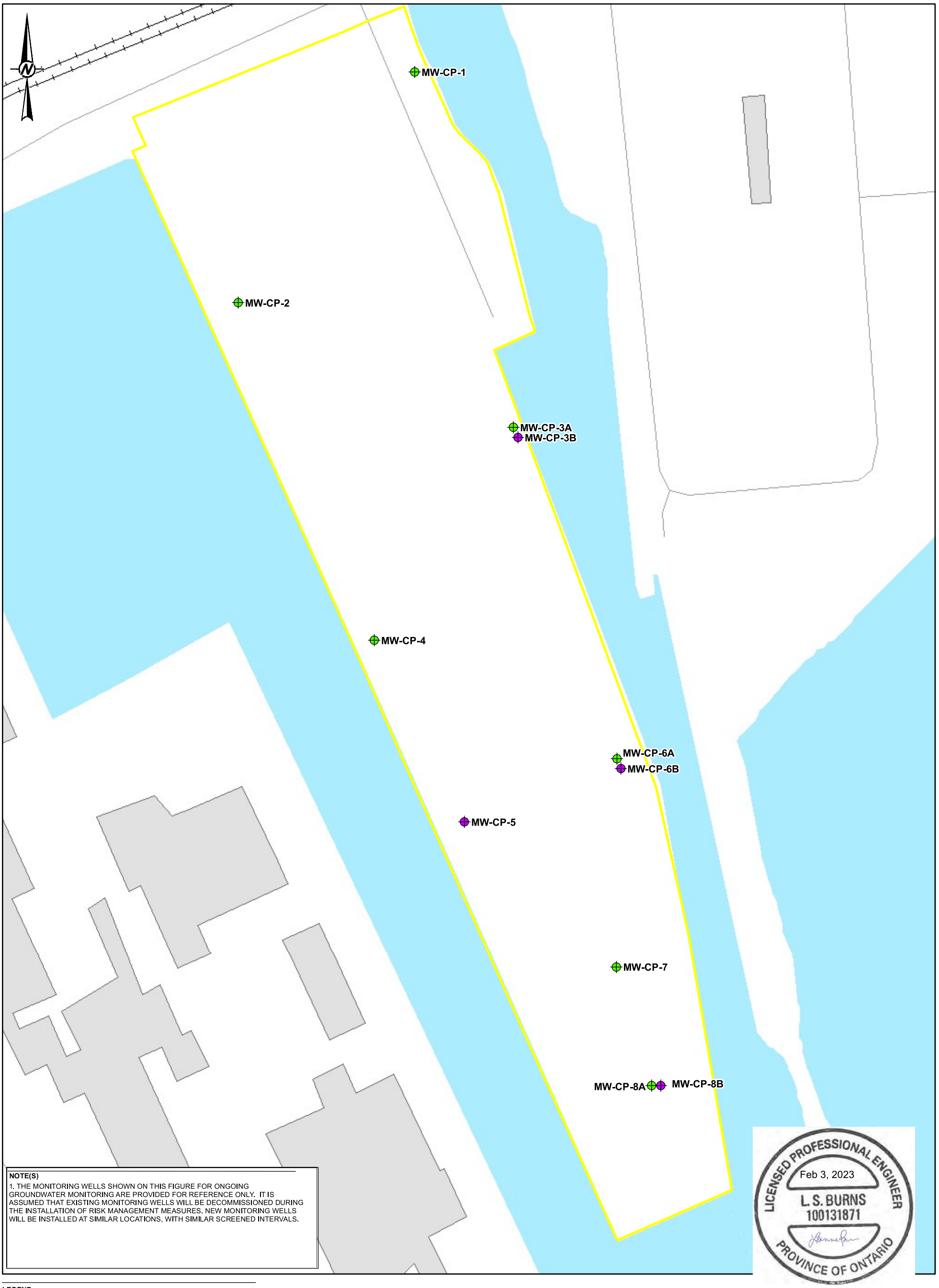
PROJECT NO.	PHASE	REV.	FIGURE
1783264	(1000)	A	L-7



NOTE(S)

1. THE MONITORING WELLS SHOWN ON THIS FIGURE FOR ONGOING GROUNDWATER MONITORING ARE PROVIDED FOR REFERENCE ONLY. IT IS ASSUMED THAT EXISTING MONITORING WELLS WILL BE DECOMMISSIONED DURING THE INSTALLATION OF RISK MANAGEMENT MEASURES. NEW MONITORING WELLS WILL BE INSTALLED AT SIMILAR LOCATIONS, WITH SIMILAR SCREENED INTERVALS.

LICENSED PROFESSIONAL ENGINEER
Feb 3, 2023
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PROVINCE OF ONTARIO

LEGEND

- MONITORING WELL SCREENED IN BEDROCK INCLUDED IN GROUNDWATER MONITORING RMM
- MONITORING WELL SCREENED IN OVERBURDEN INCLUDED IN GROUNDWATER MONITORING RMM
- ROAD
- RAILWAY
- WATERBODY
- BUILDING TO SCALE
- PHASE TWO ESA PROPERTY BOUNDARY = RA PROPERTY BOUNDARY = RSC PROPERTY BOUNDARY

0 25 50 75 100
1:1,500 METRES

REFERENCE(S)

BASE DATA MNRF LIO 2020
PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83 COORDINATE SYSTEM: UTM ZONE 17N

CLIENT
CANADIAN NUCLEAR LABORATORIES

CONSULTANT
WSP GOLDER

YYYY-MM-DD	2022-04-08
DESIGNED	SO
PREPARED	SO
REVIEWED	LKB
APPROVED	LSB

PROJECT
ENVIRONMENTAL RISK MANAGEMENT PLAN
1 HAYWARD STREET, PORT HOPE, ONTARIO

TITLE
GROUNDWATER MONITORING RMM REQUIREMENT

PROJECT NO.	PHASE	REV.	FIGURE
1783264	(1000)	A	L-8

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HAYWARD STREET

MILL STREET SOUTH

Ganaraska River

MAD

INSET

TP00-T
TPM-8
TPM-9
TPM-10
MW19-58
BH19-43
TP00-V
13-CP-MW03
BH19-39
MW18-17
BH20-80
CP-MMM2
BH20-75
TPM-17
MW19-61-R11
MW19-61-OB5
BH20-81
MW18-29
MW18-27
MW19-51
MW19-52
TPM-11
MW18-19 OB5
MW18-19 R11
MW18-18
BH20-73
BH20-82
13-CP-MW08
BH20-76
01-BH-01
MW19-44
19-45 GS
BH18-28
MW19-45
19-44 GS
BH20-74
BH20-83
BH20-78
BH18-21
TP4
BH20-77
BH20-79
BH20-69
BH18-20
BH18-24
01-BH-03
TP00-S
13-CP-MW02
BH19-40
BH20-84
MW19-53
BH18-23
19-62 R11
BH19-65
BH20-67
BH19-66
MW19-62-R16
BH19-64
BH20-68
MW19-62-R11
BH18-22
BH20-85
BH20-86

0 10 20 30 40
METRES

LICENSED PROFESSIONAL ENGINEER
Feb 3, 2023
L. S. BURNS
100131871
PROVINCE OF ONTARIO

LEGEND

- MONITORING WELL LOCATION
- BOREHOLE LOCATION
- TEST PIT LOCATION
- PRESENCE OF LNAPL OR SHEEN IN SOIL AND/OR GROUNDWATER
- ROAD
- RAILWAY
- WATERBODY
- BUILDING TO SCALE
- PHASE TWO ESA PROPERTY BOUNDARY = RA PROPERTY BOUNDARY = RSC PROPERTY BOUNDARY
- EXTENT OF TARGETED EXCAVATION OF NAPL (SEE NOTE 1)
- EXTENT OF TARGETED EXCAVATION FOR ELEVATED PCBs (SEE NOTE 2)

0 25 50 75 100
1:1,500 METRES

NOTE(S)

1. EXTENT OF PLANNED EXCAVATION SHOWN IN ORANGE IS BASED ON AREA OF LIMITED NAPL. PLANNED EXCAVATION DEPTH IS APPROXIMATELY 3.5 M BELOW GROUND SURFACE, PENDING SITE CONDITIONS.
2. EXTENT OF PLANNED EXCAVATION SHOWN IN BLUE IS BASED ON AREA OF LIMITED SOIL WITH A CONCENTRATION REPORTED ABOVE THE PCB WASTE CLASSIFICATION IDENTIFIED IN ONTARIO REGULATION 362. PLANNED EXCAVATION DEPTH IS APPROXIMATELY 1.5 M BELOW GROUND SURFACE.

REFERENCE(S)

BASE DATA MNRF LIO 2020
PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83 COORDINATE SYSTEM: UTM ZONE 17N

CLIENT
CANADIAN NUCLEAR LABORATORIES

CONSULTANT
WSP GOLDER

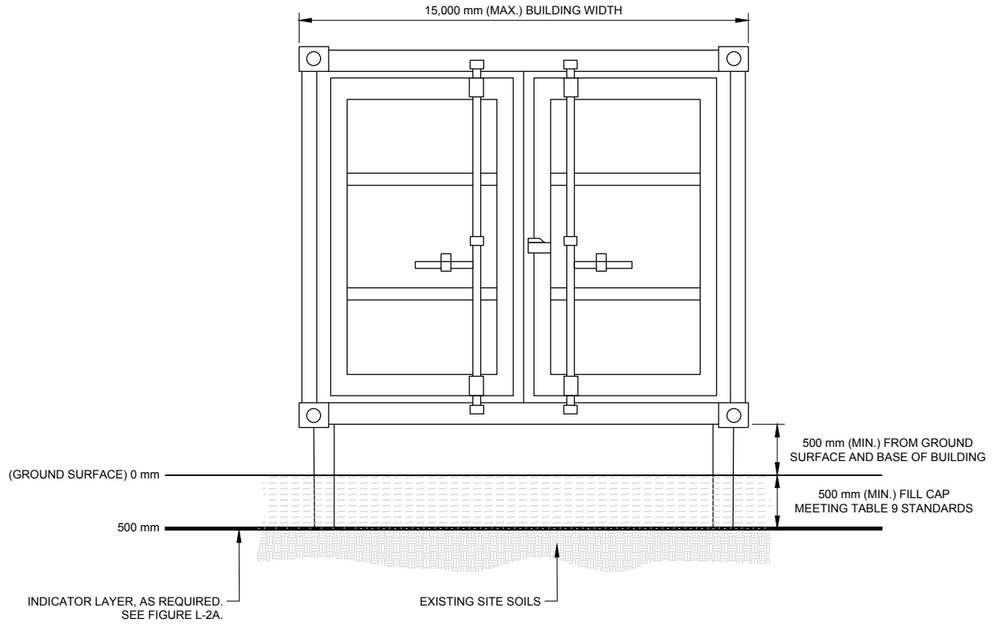
YYYY-MM-DD	2022-04-08
DESIGNED	SO
PREPARED	SO
REVIEWED	LKB
APPROVED	LSB

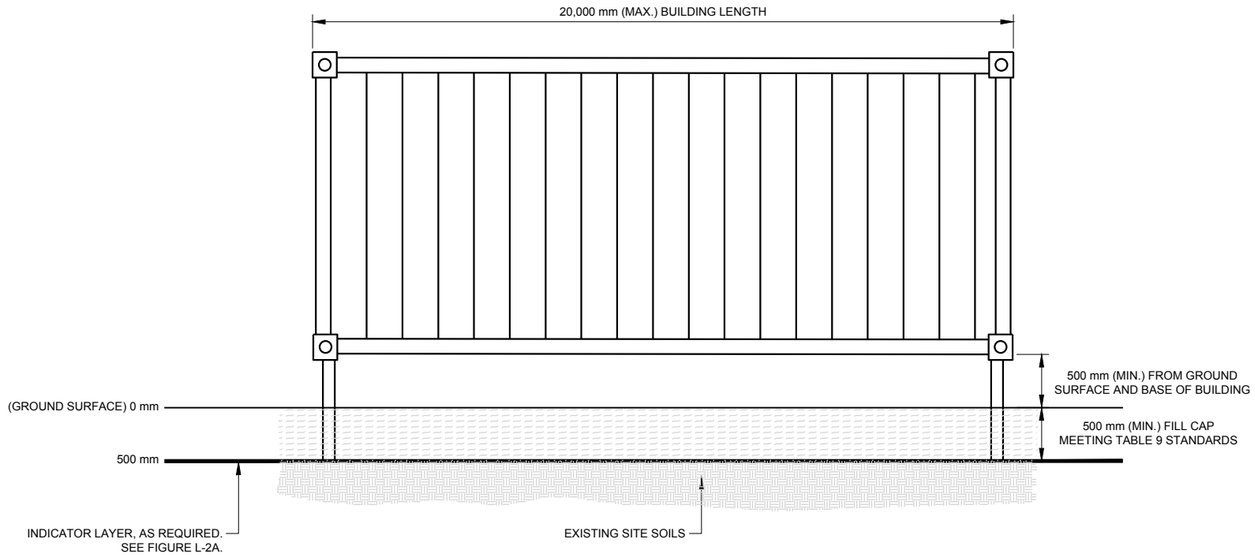
PROJECT
ENVIRONMENTAL RISK MANAGEMENT PLAN
1 HAYWARD STREET, PORT HOPE, ONTARIO

TITLE
EXTENT OF TARGETED EXCAVATIONS

PROJECT NO.	PHASE	REV.	FIGURE
1783264	(1000)	A	L-9

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B
0 25mm





NOTES

1. TABLE 9 STANDARDS = MINISTRY OF THE ENVIRONMENT, CONSERVATION, AND PARKS "SOIL, GROUND WATER, AND SEDIMENT STANDARDS FOR USE UNDER PART XV.1 ENVIRONMENTAL PROTECTION ACT, APRIL 2011" TABLE 9 STANDARDS: GENERIC SITE CONDITION STANDARDS FOR USE WITHIN 30 m OF A WATER BODY IN A NON-POTABLE GROUND WATER CONDITION FOR RESIDENTIAL/PARKLAND/INSTITUTIONAL/INDUSTRIAL/ COMMERCIAL/COMMUNITY PROPERTY USE FOR COARSE TEXTURED SOILS.
2. A MINIMUM CLEARANCE OF 500 mm IS REQUIRED BETWEEN THE UNDERSIDE OF THE FLOOR SLAB AND THE ELEVATION OF THE GROUND SURFACE AT GRADE. THE SPACE BENEATH THE RAISED BUILDING SHALL BE CLEAR OF OBSTRUCTIONS THAT PREVENT FREE FLOW OF AIR BUT MAY BE BORDERED BY A BARRIER SUCH AS A LATTICE OR FENCING OR OTHER MATERIALS THAT ALLOW FREE FLOW OF AIR (LEAST 30% OF THE BUILDING'S PERIMETER WALL AREA BENEATH THE RAISED BUILDING ARE OPEN TO THE OUTDOORS IN A MANINER THAT WILL PROVIDE FREE FLOW OF AIR).
3. FINAL RAISED BUILDING DESIGN REQUIREMENTS SHALL BE DETERMINED BY A LICENSED PROFESSIONAL ENGINEER, IN CONSIDERATION OF THE BUILDING DIMENSIONS SHOWN.

LICENSED PROFESSIONAL ENGINEER
Feb 9, 2026
L. S. BURNS
100131871
PROVINCE OF ONTARIO

NOT TO SCALE

CLIENT
CANADIAN NUCLEAR LABORATORIES

PROJECT
ENVIRONMENTAL RISK MANAGEMENT PLAN
1 HAYWARD STREET, PORT HOPE, ONTARIO

TITLE
RAISED BUILDING – TYPICAL DETAILS

CONSULTANT
wsp

YYYY-MM-DD	2025-12-16
DESIGNED	
PREPARED	MM
REVIEWED	LKB
APPROVED	LSB

PROJECT NO.	PHASE	REV.	FIGURE
1783264	(1000)	A	L-10

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B

0 25 mm

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